

<b>BOAT</b> Name <b>RIVAL</b> Sail Nr <b>USA 84002</b>	<b>GPH</b> <b>481.4</b>	<b>HULL</b> Length Overall <b>12.175m</b> Maximum Beam <b>3.801m</b> Displacement <b>4,040kg</b> Draft <b>2.981m</b> Plan Review IMS Reg. Division <b>Performance</b> Dynamic Allowance <b>0.000%</b> Hull Construction <b>Carbon, Aramid</b> Carbon Rudder <b>Yes</b> Crew Arm Extension <b>0.00</b>
<b>GENERAL</b> Class <b>CARKEEK HP 40</b> Designer <b>CARKEEK</b> Builder <b>McCONAGHY</b> Series <b>03/2012, CIN 1</b> Age <b>03/2012</b> Age Allowance <b>0.260%</b> Offset File <b>US42269.OFF - 03/06/2013 15:39:10</b> Measurement by - <b>25/04/2018</b>		IMSL <b>12.001m</b> VCGD <b>-0.914m</b> Sink <b>21.32kg/mm</b> RL <b>13.239m</b> VCGM <b>-0.922m</b> WS <b>27.15m<sup>2</sup></b> LSM0 <b>11.653m</b> Displacement/Length ratio <b>2.5531</b>



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<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>469.4</b>			<b>530.4</b>		
Time on Time	<b>1.2782</b>			<b>1.2726</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>543.0</b>	<b>432.6</b>	<b>369.8</b>	<b>696.5</b>	<b>539.8</b>	<b>456.7</b>
Time on Time	<b>1.2432</b>	<b>1.5603</b>	<b>1.8254</b>	<b>0.9692</b>	<b>1.2505</b>	<b>1.4779</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>771.8</b>	<b>643.2</b>	<b>599.5</b>	<b>580.3</b>	<b>567.7</b>	<b>555.0</b>	<b>549.8</b>
52°	<b>505.2</b>	<b>445.8</b>	<b>426.7</b>	<b>415.3</b>	<b>407.7</b>	<b>397.1</b>	<b>384.8</b>
60°	<b>479.2</b>	<b>432.9</b>	<b>409.2</b>	<b>395.2</b>	<b>386.4</b>	<b>378.2</b>	<b>361.2</b>
75°	<b>463.4</b>	<b>421.4</b>	<b>386.5</b>	<b>365.7</b>	<b>353.5</b>	<b>345.4</b>	<b>324.5</b>
90°	<b>466.9</b>	<b>424.4</b>	<b>384.6</b>	<b>350.0</b>	<b>328.1</b>	<b>315.4</b>	<b>299.0</b>
110°	<b>483.4</b>	<b>422.6</b>	<b>386.2</b>	<b>357.9</b>	<b>333.5</b>	<b>307.5</b>	<b>261.6</b>
120°	<b>497.5</b>	<b>427.1</b>	<b>378.5</b>	<b>347.9</b>	<b>325.0</b>	<b>300.8</b>	<b>260.0</b>
135°	<b>553.1</b>	<b>451.1</b>	<b>405.2</b>	<b>358.1</b>	<b>314.8</b>	<b>283.0</b>	<b>245.4</b>
150°	<b>662.7</b>	<b>524.4</b>	<b>452.8</b>	<b>410.1</b>	<b>369.6</b>	<b>326.5</b>	<b>252.1</b>
Run VMG	<b>765.3</b>	<b>605.5</b>	<b>525.1</b>	<b>475.8</b>	<b>426.7</b>	<b>377.0</b>	<b>291.1</b>

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<b>Selected Courses</b>							
Windward / Leeward	<b>768.5</b>	<b>624.4</b>	<b>562.3</b>	<b>528.1</b>	<b>497.2</b>	<b>466.0</b>	<b>420.4</b>
Circular Random	<b>655.4</b>	<b>534.2</b>	<b>468.7</b>	<b>428.6</b>	<b>400.4</b>	<b>378.4</b>	<b>344.0</b>
Coastal / Long Distance	<b>768.2</b>	<b>589.9</b>	<b>507.1</b>	<b>453.5</b>	<b>416.2</b>	<b>380.8</b>	<b>324.4</b>
Non Spinnaker	<b>716.3</b>	<b>578.7</b>	<b>503.4</b>	<b>457.1</b>	<b>425.8</b>	<b>402.4</b>	<b>367.9</b>

**Crew Weight**

Default 856kg  
Maximum **856kg**  
Minimum\* **642kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Non Spin GPH	<b>517.9</b>	<b>1.1585</b>
Non Spin OSN	<b>507.4</b>	<b>1.1826</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>42.8°</b>	<b>39.8°</b>	<b>37.5°</b>	<b>36.4°</b>	<b>35.4°</b>	<b>34.9°</b>	<b>35.1°</b>
Beat VMG	<b>4.66</b>	<b>5.60</b>	<b>6.01</b>	<b>6.20</b>	<b>6.34</b>	<b>6.49</b>	<b>6.55</b>
52°	<b>7.13</b>	<b>8.08</b>	<b>8.44</b>	<b>8.67</b>	<b>8.83</b>	<b>9.07</b>	<b>9.35</b>
60°	<b>7.51</b>	<b>8.32</b>	<b>8.80</b>	<b>9.11</b>	<b>9.32</b>	<b>9.52</b>	<b>9.97</b>
75°	<b>7.77</b>	<b>8.54</b>	<b>9.32</b>	<b>9.84</b>	<b>10.18</b>	<b>10.42</b>	<b>11.10</b>
90°	<b>7.71</b>	<b>8.48</b>	<b>9.36</b>	<b>10.28</b>	<b>10.97</b>	<b>11.41</b>	<b>12.04</b>
110°	<b>7.45</b>	<b>8.52</b>	<b>9.32</b>	<b>10.06</b>	<b>10.79</b>	<b>11.71</b>	<b>13.76</b>
120°	<b>7.24</b>	<b>8.43</b>	<b>9.51</b>	<b>10.35</b>	<b>11.08</b>	<b>11.97</b>	<b>13.85</b>
135°	<b>6.51</b>	<b>7.98</b>	<b>8.88</b>	<b>10.05</b>	<b>11.44</b>	<b>12.72</b>	<b>14.67</b>
150°	<b>5.43</b>	<b>6.87</b>	<b>7.95</b>	<b>8.78</b>	<b>9.74</b>	<b>11.03</b>	<b>14.28</b>
Run VMG	<b>4.70</b>	<b>5.95</b>	<b>6.86</b>	<b>7.57</b>	<b>8.44</b>	<b>9.55</b>	<b>12.37</b>
Gybe Angles	<b>142.0°</b>	<b>144.5°</b>	<b>151.5°</b>	<b>151.0°</b>	<b>145.0°</b>	<b>144.3°</b>	<b>143.5°</b>

**Sails Limitations**

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

**Class Division Length**

**CDL = 12.617**

**Storm Sails Areas**

Heavy Weather Jib **36.13**  
Storm Jib (JL=10.64) **13.38**  
Storm Trysail **16.47**

**Owner**

<b>BOAT</b>	
Name <b>RIVAL</b>	Sail Nr <b>USA 84002</b>
File <b>US6287</b>	Data in <b>meters/kilograms</b>

<b>RIG</b>	
Forestay Tension <b>Forward</b>	Spreaders <b>2</b>
Inner Stay <b>None Fitted</b>	Runners/Checkstays <b>1</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>16.800</b>	E <b>5.600</b>	MDT1 <b>0.125</b>	MW <b>0.233</b>
IG <b>16.234</b>	J <b>4.900</b>	MDL1 <b>0.247</b>	GO <b>0.270</b>
ISP <b>18.745</b>	SFJ <b>0.390</b>	MDT2 <b>0.091</b>	BD <b>0.290</b>
BAS <b>1.834</b>	SPL <b>0.000</b>	MDL2 <b>0.111</b>	MWT <b>132.00</b>
FSD <b>0.038</b>	TPS <b>7.475</b>	TL <b>2.400</b>	MCG <b>6.444</b>

<b>INCLINING TEST AND FREEBOARDS</b>			
Inclining Test <b>Boom Inclining</b>		LCFD	
Flotation date <b>25/04/2018</b>		SG <b>1.0100</b>	
FFM <b>1.327</b>	FF <b>1.331</b>	SFFP <b>0.366</b>	
FAM <b>0.930</b>	FA <b>0.932</b>	SAFP <b>12.200</b>	
W1 <b>142.4</b>	PD1 <b>276.0</b>	WD <b>4.360</b>	
W2 <b>142.4</b>	PD2 <b>275.0</b>	GSA <b>1.0</b>	
W3 <b>142.4</b>	PD3 <b>275.0</b>	RSA <b>1.0</b>	
W4 <b>142.4</b>	PD4 <b>271.0</b>	PLM <b>9000.0</b>	
LCF from stem on CL / on sheer		<b>6.741 / 7.050</b>	
Maximum beam station from stem		<b>8.845</b>	
RM Measured		<b>178.3kg-m</b>	
RM Default		<b>158.5kg-m</b>	
Limit of positive stability / Stab.Index		<b>138.3° / 134.5</b>	
Freeboard at mast at 5.290		<b>1.136</b>	



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

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

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<b>COMMENTS</b>	

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

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



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<b>SAILS (Maximum Areas)</b>									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	1.74	2.21	2.97	4.06	4.90	65.22	67.02	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		
	20.86	17.80	19.33	11.18	11.16	180.03	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	Flying	Meas.Date	Material	Comment
0.09	0.88	1.54	2.72	3.83	4.83	16.43	43.09	No				103% Code 1.5

<b>MEASUREMENT INVENTORY</b>				
Measurer	Date	Comment		
Internal Ballast total = 0.0				
Id	Item	Weight	Distance	VCG Description
a	Anchor	0.0	0.00	
Id	Item	Weight Description		

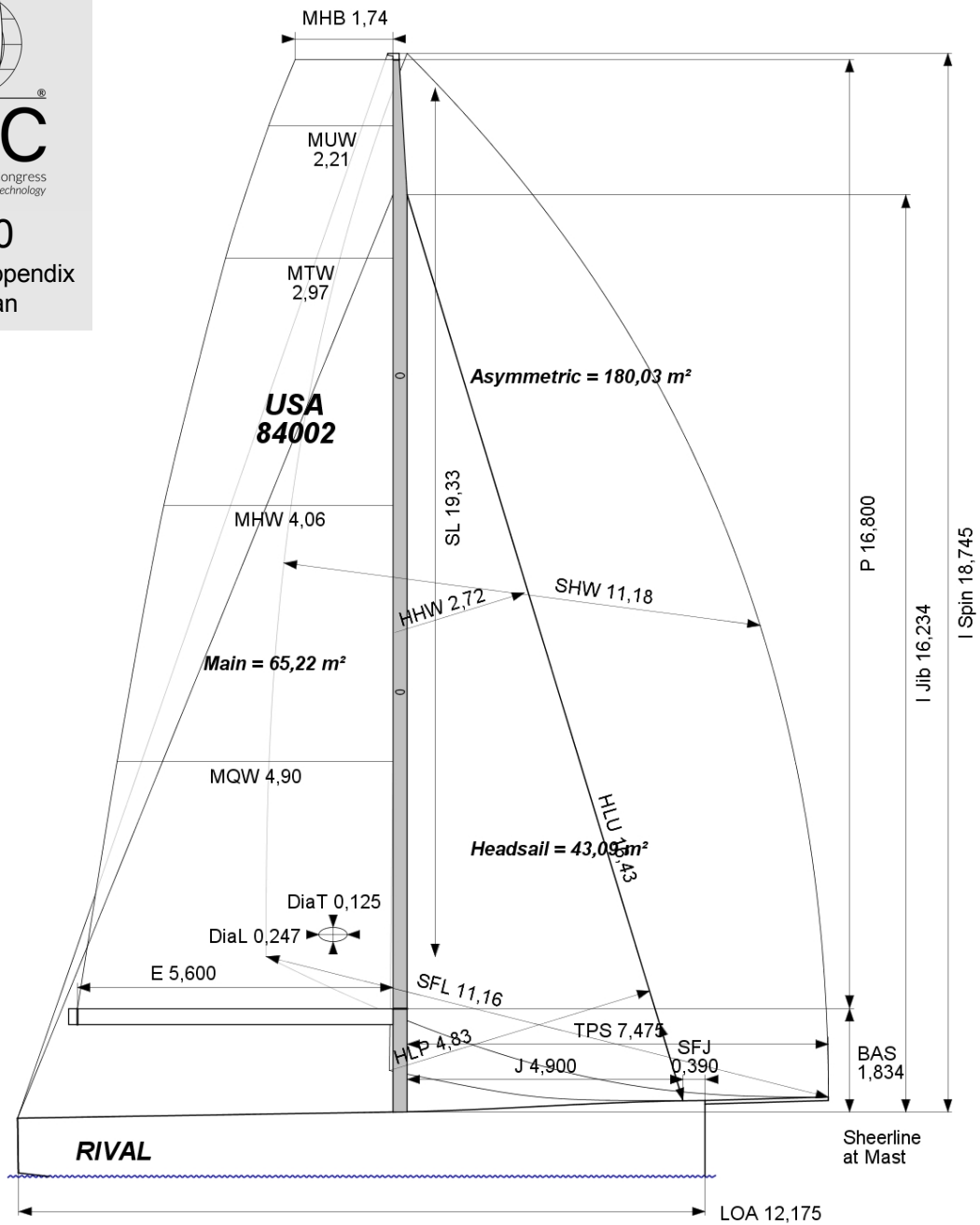
<b>MEASUREMENT INVENTORY</b>									
Id	Item	Tank	Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
	Tank					0.00	0.00	0-0	
Id	Item	Weight	Distance	VCG Description					



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**SAILS INVENTORY**

**MAINSAIL (1)**

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
2959709	1.74	2.21	2.97	4.06	4.90	65.22			Quantum		2020 CRBN MAIN

**HEADSAILS (1)**

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment
2959697	0.09	0.88	1.54	2.72	3.83	4.83	16.43	99%	43.09		No			Quantum		103% Code 1.5

**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
1775595	20.86	17.80	19.33	11.18	11.16	180.03	asym			North		A2