

<b>BOAT</b> Name <b>ZEPHYR</b> Sail Nr <b>70059</b>	<b>GPH</b> <b>525.7</b>	<b>HULL</b> Length Overall <b>12.411m</b> Maximum Beam <b>3.956m</b> Displacement <b>4,967kg</b> Draft <b>2.591m</b> IMS Reg. Division <b>Performance</b> Dynamic Allowance <b>0.001%</b> Fwd Accommodation <b>No</b> Hull Construction <b>Cored</b> Carbon Rudder <b>Yes</b> Crew Arm Extension IMSL <b>11.218m</b> VCGD <b>-0.367m</b> Sink <b>20.97kg/mm</b> RL <b>11.270m</b> VCGM <b>-0.364m</b> WS <b>27.67m<sup>2</sup></b> LSM0 <b>10.887m</b> Displacement/Length ratio <b>3.8492</b>
<b>GENERAL</b> Class <b>FARR 40 OD</b> Designer <b>FARR</b> Builder <b>CARROLL</b> Series <b>05/1997</b> Age <b>05/1998</b> Age Allowance <b>0.487%</b> Offset File <b>farr40.OD - 15/01/2019 18:33:02</b> Measurement by - <b>01/01/2000</b>		



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<b>SCORING OPTIONS</b>						
	<b>COASTAL / LONG DISTANCE</b>			<b>WINDWARD / LEEWARD</b>		
Time on Distance	<b>512.8</b>			<b>574.2</b>		
Time on Time	<b>1.1700</b>			<b>1.1755</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>584.2</b>	<b>472.4</b>	<b>419.3</b>	<b>749.2</b>	<b>579.6</b>	<b>507.2</b>
Time on Time	<b>1.1554</b>	<b>1.4288</b>	<b>1.6098</b>	<b>0.9010</b>	<b>1.1645</b>	<b>1.3309</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>843.0</b>	<b>698.2</b>	<b>649.0</b>	<b>629.0</b>	<b>615.7</b>	<b>602.2</b>	<b>601.3</b>
52°	<b>553.1</b>	<b>477.2</b>	<b>458.5</b>	<b>450.3</b>	<b>445.6</b>	<b>438.5</b>	<b>432.3</b>
60°	<b>522.0</b>	<b>463.5</b>	<b>445.3</b>	<b>436.1</b>	<b>430.2</b>	<b>424.1</b>	<b>412.8</b>
75°	<b>500.5</b>	<b>453.3</b>	<b>429.2</b>	<b>412.8</b>	<b>403.4</b>	<b>397.5</b>	<b>383.3</b>
90°	<b>502.9</b>	<b>453.0</b>	<b>425.3</b>	<b>400.0</b>	<b>381.7</b>	<b>370.8</b>	<b>358.9</b>
110°	<b>523.5</b>	<b>451.9</b>	<b>423.8</b>	<b>403.1</b>	<b>385.2</b>	<b>365.7</b>	<b>324.1</b>
120°	<b>537.1</b>	<b>455.1</b>	<b>418.0</b>	<b>390.4</b>	<b>372.6</b>	<b>354.0</b>	<b>317.4</b>
135°	<b>592.1</b>	<b>479.9</b>	<b>436.9</b>	<b>400.1</b>	<b>364.6</b>	<b>330.9</b>	<b>289.8</b>
150°	<b>702.3</b>	<b>558.1</b>	<b>481.0</b>	<b>439.4</b>	<b>405.8</b>	<b>373.3</b>	<b>305.3</b>
Run VMG	<b>810.9</b>	<b>644.4</b>	<b>555.4</b>	<b>500.0</b>	<b>463.0</b>	<b>429.8</b>	<b>352.5</b>

**Certificate**  
Number **US6419**  
ORC Ref **US00000112**  
Issued On **30/05/2019**  
VPP Ver. **2019 1.01**  
Valid until **31/12/2019**

**Crew Weight**  
Default **777kg**  
Maximum **760kg**  
Minimum\* **570kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**  
ToD ToT  
Non Spin GPH **558.4 1.0745**  
Non Spin OSN **546.5 1.0978**

<b>Selected Courses</b>							
Windward / Leeward	<b>827.0</b>	<b>671.3</b>	<b>602.2</b>	<b>564.5</b>	<b>539.3</b>	<b>516.0</b>	<b>476.9</b>
Circular Random	<b>708.9</b>	<b>579.3</b>	<b>511.4</b>	<b>472.0</b>	<b>446.3</b>	<b>427.2</b>	<b>397.5</b>
Coastal / Long Distance	<b>825.4</b>	<b>633.5</b>	<b>546.2</b>	<b>493.6</b>	<b>460.9</b>	<b>430.7</b>	<b>380.3</b>
Non Spinnaker	<b>767.6</b>	<b>621.0</b>	<b>542.3</b>	<b>495.8</b>	<b>465.9</b>	<b>444.8</b>	<b>415.8</b>

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

<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>42.5°</b>	<b>40.7°</b>	<b>38.2°</b>	<b>37.7°</b>	<b>36.9°</b>	<b>36.3°</b>	<b>36.9°</b>
Beat VMG	<b>4.27</b>	<b>5.16</b>	<b>5.55</b>	<b>5.72</b>	<b>5.85</b>	<b>5.98</b>	<b>5.99</b>
52°	<b>6.51</b>	<b>7.54</b>	<b>7.85</b>	<b>7.99</b>	<b>8.08</b>	<b>8.21</b>	<b>8.33</b>
60°	<b>6.90</b>	<b>7.77</b>	<b>8.09</b>	<b>8.26</b>	<b>8.37</b>	<b>8.49</b>	<b>8.72</b>
75°	<b>7.19</b>	<b>7.94</b>	<b>8.39</b>	<b>8.72</b>	<b>8.92</b>	<b>9.06</b>	<b>9.39</b>
90°	<b>7.16</b>	<b>7.95</b>	<b>8.46</b>	<b>9.00</b>	<b>9.43</b>	<b>9.71</b>	<b>10.03</b>
110°	<b>6.88</b>	<b>7.97</b>	<b>8.50</b>	<b>8.93</b>	<b>9.35</b>	<b>9.84</b>	<b>11.11</b>
120°	<b>6.70</b>	<b>7.91</b>	<b>8.61</b>	<b>9.22</b>	<b>9.66</b>	<b>10.17</b>	<b>11.34</b>
135°	<b>6.08</b>	<b>7.50</b>	<b>8.24</b>	<b>9.00</b>	<b>9.87</b>	<b>10.88</b>	<b>12.42</b>
150°	<b>5.13</b>	<b>6.45</b>	<b>7.48</b>	<b>8.19</b>	<b>8.87</b>	<b>9.64</b>	<b>11.79</b>
Run VMG	<b>4.44</b>	<b>5.59</b>	<b>6.48</b>	<b>7.20</b>	<b>7.78</b>	<b>8.38</b>	<b>10.21</b>
Gybe Angles	<b>143.5°</b>	<b>143.4°</b>	<b>150.1°</b>	<b>157.0°</b>	<b>171.3°</b>	<b>155.7°</b>	<b>144.8°</b>

**Class Division Length**  
CDL = **11.245**

**Storm Sails Areas**  
Heavy Weather Jib **36.11**  
Storm Jib (JL=10.63) **13.38**  
Storm Trysail **17.25**

**Owner**

<b>BOAT</b>	
Name <b>ZEPHYR</b>	Sail Nr <b>70059</b>
File <b>ZEPHYRFarr40OD</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>		
Inclining Test <b>Enter RM directly</b>		
Flotation date <b>14/01/2019</b>		SG
		RM <sub>Ce</sub> <b>171.6</b>
FFM <b>1.346</b>	FF <b>1.346</b>	SFFP <b>0.152</b>
FAM <b>1.026</b>	FA <b>1.026</b>	SAFP <b>11.954</b>
LCF from stem on CL / on sheer		<b>6.834 / 7.087</b>
Maximum beam station from stem		<b>8.199</b>
RM Measured		<b>171.6kg-m</b>
RM Default		<b>166.3kg-m</b>
Limit of positive stability / Stab.Index		<b>131.2° / 127.6</b>
Freeboard at mast at 4.705		<b>1.204</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>16.700</b>	E <b>5.900</b>	MDT1 <b>0.121</b>	MW <b>0.240</b>	
IG <b>16.318</b>	J <b>4.705</b>	MDL1 <b>0.240</b>	GO <b>0.250</b>	
ISP <b>18.300</b>	SFJ <b>0.000</b>	MDT2 <b>0.090</b>	BD <b>0.225</b>	
BAS <b>1.760</b>	SPL <b>5.200</b>	MDL2 <b>0.104</b>	MWT <b>176.70</b>	
FSP <b>0.068</b>	TPS	TL <b>1.993</b>	MCG <b>5.497</b>	



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

<b>PROPELLER</b>		
Installation <b>Strut</b>	PRD <b>0.407</b>	
Type <b>Folding 2 blades</b>	PBW <b>0.100</b>	
Twin Screw <b>No</b>	PIPA <b>0.0038</b>	
ST1 <b>0.065</b>	ST3 <b>0.180</b>	ST5 <b>0.268</b>
ST2 <b>0.180</b>	ST4 <b>0.110</b>	EDL <b>0.702</b>

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<b>COMMENTS</b>	
MASTHEAD SPINNAKER VALID ONLY IN CONJUNCTION WITH FARR 40 CLASS CERTIFICATE	

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



**COPY ONLY**  
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<b>CENTERBOARD</b>	
N/A	

<b>SAILS (Maximum Areas)</b>						
Mainsail	MHB	MUW	MTW	MHW	MQW	Area Area (r) Formula
	0.180	1.47	2.59	4.20	5.25	63.14 65.04 P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)
Symmetric	SLU	SLE	SL	SHW	SFL	Area Formula
	18.50	18.50	18.50	10.50	10.53	161.97 SL · (SFL + 4·SHW) / 6
Asymmetric	Not Available					

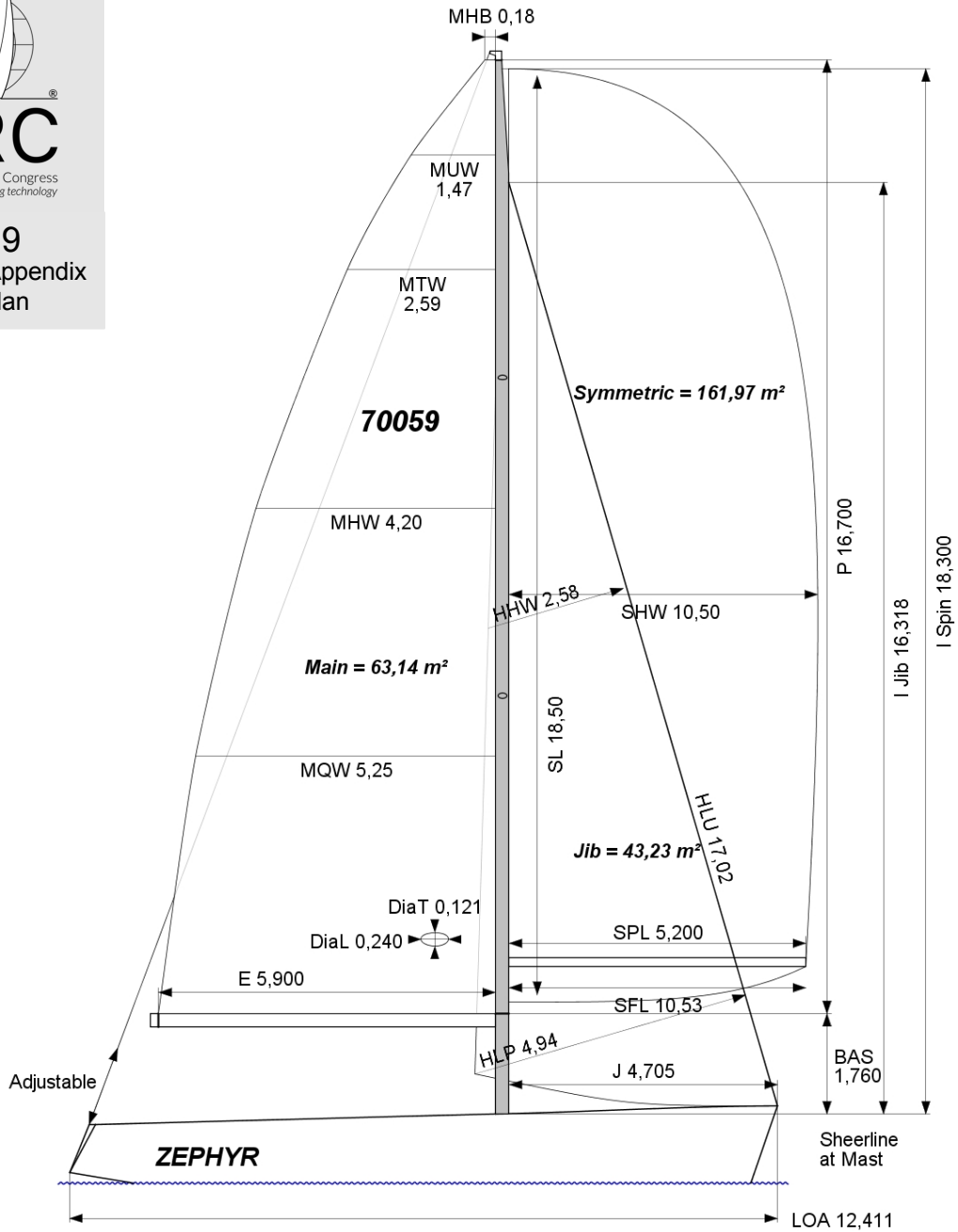
<b>HEADSAILS</b>												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.15	0.68	1.34	2.58	3.76	4.94	43.23					Unknow	Class Rules



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Certificate Appendix  
Sail Plan



**SAILS INVENTORY**

MAINSAIL (1)																	
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment						
ORC	0.18	1.47	2.59	4.20	5.25	63.14					Class Rules						
HEADSAILS (1)																	
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment	
1	0.15	0.68	1.34	2.58	3.76	4.94		105%	43.23							Unknow	Class Rules
SYMMETRIC SPINNAKERS (1)																	
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment						
ORC	18.50	18.50	18.50	10.50	10.53	161.97					Class Rules						
ASYMMETRIC SPINNAKERS (0)																	
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment					