

<b>BOAT</b> Name <b>Irony</b> Sail Nr <b>ROU-409</b>	<b>GPH</b> <b>598.6</b>	<b>HULL</b> Length Overall <b>11.924m</b> Maximum Beam <b>3.770m</b> Displacement <b>7,176kg</b> Draft <b>2.383m</b> IMS Reg. Division <b>Cruiser/Racer</b> Dynamic Allowance <b>0.127%</b> Fwd Accommodation <b>Yes</b> Hull Construction <b>Solid</b> Carbon Rudder <b>No</b> Crew Arm Extension
<b>GENERAL</b> Class <b>First 40.7</b> Designer <b>Farr</b> Builder <b>Benneteau</b> Series <b>01/2006</b> Age <b>12/2006</b> Age Allowance <b>0.422%</b> Offset File <b>F407NK10.off - 14/04/2010 15:05:00</b> Measurement by - <b>21/04/2010</b>		IMSLS <b>10.636m</b> VCGD <b>-0.164m</b> Sink <b>22.31kg/mm</b> RL <b>9.686m</b> VCGM <b>0.079m</b> WS <b>29.97m<sup>2</sup></b> LSM0 <b>10.514m</b> Displacement/Length ratio <b>6.1742</b>



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	<b>580.8</b>			<b>646.9</b>		
Time on Time	<b>1.0330</b>			<b>1.0434</b>		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	<b>689.8</b>	<b>529.2</b>	<b>470.2</b>	<b>891.1</b>	<b>650.7</b>	<b>560.3</b>
Time on Time	<b>0.9786</b>	<b>1.2755</b>	<b>1.4356</b>	<b>0.7575</b>	<b>1.0374</b>	<b>1.2047</b>

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1003.1</b>	<b>829.6</b>	<b>727.6</b>	<b>678.5</b>	<b>661.1</b>	<b>653.3</b>	<b>637.4</b>
52°	<b>658.0</b>	<b>554.4</b>	<b>500.8</b>	<b>479.9</b>	<b>472.1</b>	<b>468.5</b>	<b>463.0</b>
60°	<b>622.1</b>	<b>529.3</b>	<b>487.6</b>	<b>469.1</b>	<b>460.1</b>	<b>455.9</b>	<b>451.8</b>
75°	<b>596.7</b>	<b>512.0</b>	<b>478.1</b>	<b>459.5</b>	<b>446.0</b>	<b>436.4</b>	<b>428.6</b>
90°	<b>603.9</b>	<b>512.7</b>	<b>473.2</b>	<b>455.9</b>	<b>440.6</b>	<b>425.2</b>	<b>403.5</b>
110°	<b>617.7</b>	<b>509.5</b>	<b>467.2</b>	<b>443.2</b>	<b>422.2</b>	<b>408.5</b>	<b>389.1</b>
120°	<b>636.7</b>	<b>521.9</b>	<b>472.9</b>	<b>447.4</b>	<b>423.8</b>	<b>402.0</b>	<b>373.1</b>
135°	<b>705.5</b>	<b>571.8</b>	<b>498.0</b>	<b>464.7</b>	<b>441.7</b>	<b>418.6</b>	<b>375.3</b>
150°	<b>836.1</b>	<b>663.8</b>	<b>560.9</b>	<b>497.3</b>	<b>466.2</b>	<b>444.5</b>	<b>402.4</b>
Run VMG	<b>965.5</b>	<b>766.4</b>	<b>647.5</b>	<b>568.7</b>	<b>516.0</b>	<b>478.1</b>	<b>434.6</b>

**Certificate**  
Number **013/19**  
ORC Ref **ROU10025291**  
Issued On **24/05/2019**  
VPP Ver. **2019 1.01**  
Valid until **31/12/2019**

**Crew Weight**  
Default **739kg**  
Maximum **985kg**  
Minimum\* **739kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

	ToD	ToT
Double H.GPH	<b>609.2</b>	<b>0.9849</b>
Double H.OSN	<b>593.2</b>	<b>1.0115</b>
Non Spin GPH	<b>628.7</b>	<b>0.9544</b>
Non Spin OSN	<b>609.6</b>	<b>0.9843</b>

Selected Courses							
Windward / Leeward	<b>984.3</b>	<b>798.0</b>	<b>687.5</b>	<b>623.6</b>	<b>588.6</b>	<b>565.7</b>	<b>536.0</b>
Circular Random	<b>827.0</b>	<b>666.6</b>	<b>580.5</b>	<b>530.5</b>	<b>499.7</b>	<b>479.3</b>	<b>452.7</b>
Coastal / Long Distance	<b>982.4</b>	<b>749.8</b>	<b>620.3</b>	<b>546.5</b>	<b>509.5</b>	<b>480.5</b>	<b>434.4</b>
Non Spinnaker	<b>881.2</b>	<b>705.0</b>	<b>609.0</b>	<b>552.5</b>	<b>517.4</b>	<b>494.4</b>	<b>465.1</b>

**Sails Limitations**

Headsails	Spinnakers
<b>6</b>	<b>4</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>42.5°</b>	<b>40.9°</b>	<b>40.1°</b>	<b>38.7°</b>	<b>37.7°</b>	<b>38.0°</b>	<b>37.3°</b>
Beat VMG	<b>3.59</b>	<b>4.34</b>	<b>4.95</b>	<b>5.31</b>	<b>5.45</b>	<b>5.51</b>	<b>5.65</b>
52°	<b>5.47</b>	<b>6.49</b>	<b>7.19</b>	<b>7.50</b>	<b>7.62</b>	<b>7.68</b>	<b>7.77</b>
60°	<b>5.79</b>	<b>6.80</b>	<b>7.38</b>	<b>7.67</b>	<b>7.82</b>	<b>7.90</b>	<b>7.97</b>
75°	<b>6.03</b>	<b>7.03</b>	<b>7.53</b>	<b>7.83</b>	<b>8.07</b>	<b>8.25</b>	<b>8.40</b>
90°	<b>5.96</b>	<b>7.02</b>	<b>7.61</b>	<b>7.90</b>	<b>8.17</b>	<b>8.47</b>	<b>8.92</b>
110°	<b>5.83</b>	<b>7.07</b>	<b>7.71</b>	<b>8.12</b>	<b>8.53</b>	<b>8.81</b>	<b>9.25</b>
120°	<b>5.65</b>	<b>6.90</b>	<b>7.61</b>	<b>8.05</b>	<b>8.49</b>	<b>8.96</b>	<b>9.65</b>
135°	<b>5.10</b>	<b>6.30</b>	<b>7.23</b>	<b>7.75</b>	<b>8.15</b>	<b>8.60</b>	<b>9.59</b>
150°	<b>4.31</b>	<b>5.42</b>	<b>6.42</b>	<b>7.24</b>	<b>7.72</b>	<b>8.10</b>	<b>8.95</b>
Run VMG	<b>3.73</b>	<b>4.70</b>	<b>5.56</b>	<b>6.33</b>	<b>6.98</b>	<b>7.53</b>	<b>8.28</b>
Gybe Angles	<b>144.5°</b>	<b>148.8°</b>	<b>150.7°</b>	<b>155.6°</b>	<b>170.3°</b>	<b>180.0°</b>	<b>180.0°</b>

**Class Division Length**  
CDL = **10.162**

**Storm Sails Areas**  
Heavy Weather Jib **32.80**  
Storm Jib (JL=10.14) **12.15**  
Storm Trysail **13.70**

**Owner**

<b>BOAT</b>	
Name <b>Irony</b>	Sail Nr <b>ROU-409</b>
File <b>ROU409</b>	Data in <b>meters/kilograms</b>

<b>INCLINING TEST AND FREEBOARDS</b>					
Inclining Test <b>Current Inclining</b>					
Flotation date <b>09/05/2019</b>				SG <b>1.0100</b>	
FFM	<b>1.362</b>	FF	<b>1.367</b>	SFFP	<b>0.292</b>
FAM	<b>1.105</b>	FA	<b>1.112</b>	SAFP	<b>11.313</b>
W1	<b>99.0</b>	PD1	<b>562.0</b>	WD	<b>12.070</b>
W2	<b>99.0</b>	PD2	<b>559.7</b>	GSA	<b>1.0</b>
W3	<b>99.0</b>	PD3	<b>559.9</b>	RSA	<b>1.0</b>
W4	<b>99.0</b>	PD4	<b>559.5</b>	PLM	<b>9000.0</b>
LCF from stem on CL / on sheer				<b>6.508 / 6.748</b>	
Maximum beam station from stem				<b>7.502</b>	
RM Measured				<b>168.0kg-m</b>	
RM Default				<b>179.0kg-m</b>	
Limit of positive stability / Stab.Index				<b>115.9° / 118.6</b>	
Freeboard at mast at 4.410				<b>1.221</b>	



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<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>Yes</b>	Main Furler <b>No</b>				
Lenticular Rigging <b>No</b>	Without Backstay <b>No</b>				
Articulated Bowsprit <b>No</b>					
P <b>14.490</b>	E <b>5.399</b>	MDT1 <b>0.123</b>	MW <b>0.242</b>		
IG <b>15.480</b>	J <b>4.410</b>	MDL1 <b>0.242</b>	GO <b>0.272</b>		
ISP <b>15.650</b>	SFJ	MDT2 <b>0.112</b>	BD <b>0.249</b>		
BAS <b>1.710</b>	SPL <b>4.370</b>	MDL2 <b>0.175</b>	MWT <b>156.00</b>		
FSP <b>0.082</b>	TPS	TL <b>0.900</b>	MCG <b>5.248</b>		

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

<b>PROPELLER</b>			
Installation	<b>Strut</b>	PRD	<b>0.410</b>
Type	<b>Folding 2 blades</b>	PBW	<b>0.112</b>
Twin Screw	<b>No</b>	PIPA	<b>0.0035</b>
ST1	<b>0.042</b>	ST3	<b>0.180</b>
ST2	<b>0.180</b>	ST4	<b>0.112</b>
		ST5	<b>0.295</b>
		EDL	<b>2.265</b>

<b>COMMENTS</b>	

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

<b>CENTERBOARD</b>	
<b>N/A</b>	



<b>SAILS (Maximum Areas)</b>									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.600	1.38	2.21	3.58	4.57	48.35	49.63	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL				
	15.52	15.52	15.52	7.93	8.02	102.79	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)												
<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>
0.12	0.79	1.45	2.54	3.55	4.53	15.52	37.98	Y		01/11/2018	Carbon	j1 l-m
0.11	0.77	1.41	2.49	3.47	4.53	15.52	37.38	N		31/10/2018	Carbon	j2 m-h
0.09	0.74	1.39	2.50	3.54	4.52	15.11	36.52	Y		07/06/2015	Unknow	Reacher
0.07	0.52	0.98	1.96	3.00	4.18	12.90	26.10			23/05/2015	Unknow	j4
					3.42	13.81	24.05			04/05/2012	Unknow	staysail

<b>MEASUREMENT INVENTORY</b>				
Measurer				
Date	<b>09/05/2019</b>			
Comment				
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>
<b>Id</b>	<b>Item</b>	<b>Maker</b>	<b>Model</b>	
A	Engine	YANMAR	3 JH 4 E	
<b>Id</b>	<b>Item</b>	<b>Weight Description</b>		

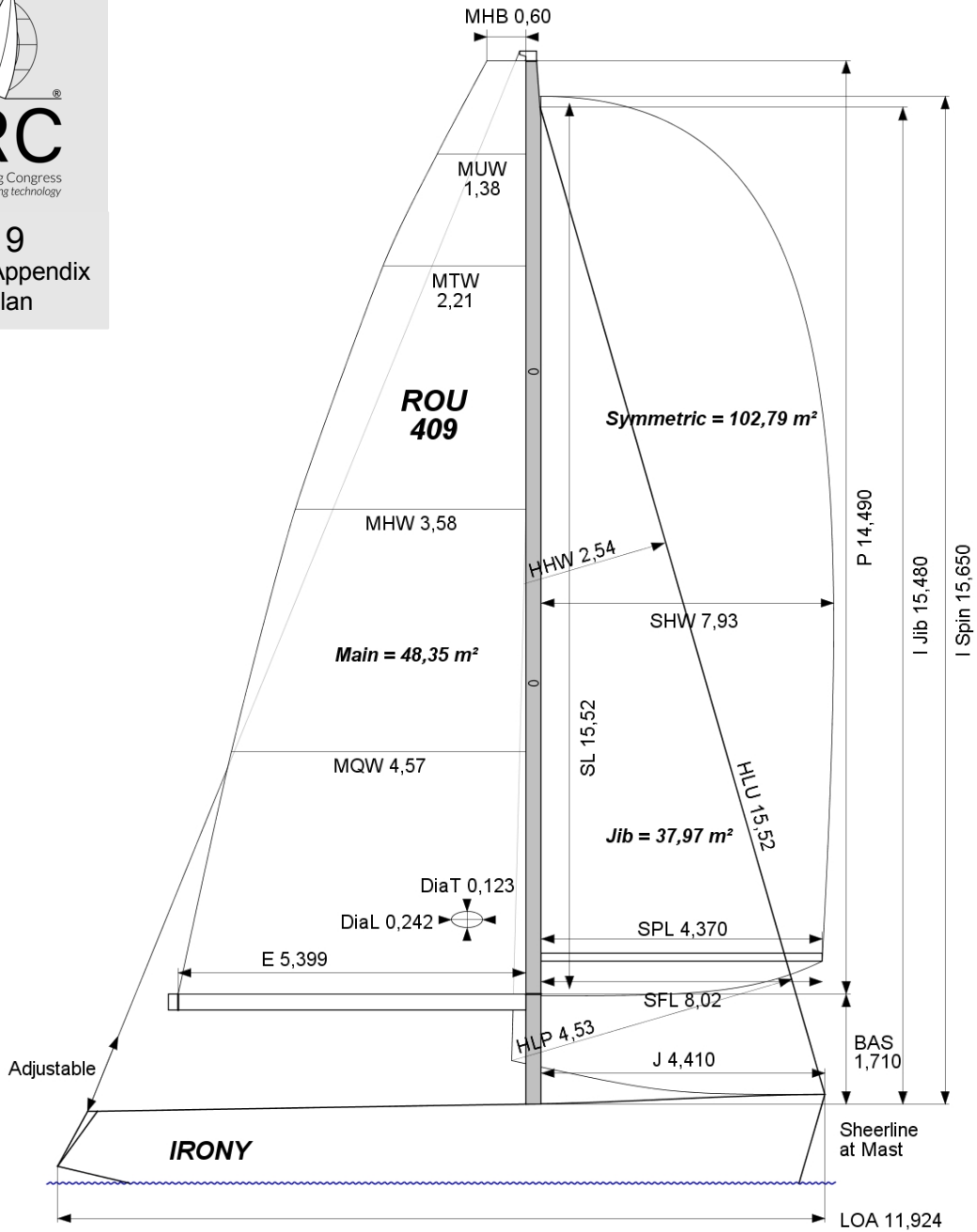
<b>MEASUREMENT INVENTORY</b>									
<b>Id</b>	<b>Item</b>	<b>Tank Use</b>	<b>Tank Type</b>	<b>Capcty</b>	<b>Dist.</b>	<b>VCG</b>	<b>Condtn</b>	<b>Description</b>	
A	Tank	WATER	PVC	150.0	5.50		0-0	EMPTY	
B	Tank	WATER	PVC	150.0	5.50		0-0	EMPTY	
C	Tank	DIESEL	PVC	135.0	9.20		20-0	LITRI	
<b>Id</b>	<b>Item</b>	<b>Weight</b>	<b>Distance</b>	<b>VCG Description</b>					
A	Battery	25.0	7.22	90 Ah					
B	Battery	25.0	7.22	90 Ah					
C	Battery	18.0	7.15	70 Ah					



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Sail Plan



**SAILS INVENTORY**

MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1	0.60	1.38	2.21	3.58	4.57	48.35		05/11/2018		Unknown						
2	0.43	1.29	2.16	3.55	4.50	47.54		10/10/2010	North Sails	Kevlar	offshore					
HEADSAILS (5)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1l-m	0.12	0.79	1.45	2.54	3.55	4.53	15.52	103%	37.98	Y			01/11/2018		Carbon	j1 l-m
2	0.11	0.77	1.41	2.49	3.47	4.53	15.52	103%	37.38	N			31/10/2018		Carbon	j2 m-h
3	0.09	0.74	1.39	2.50	3.54	4.52	15.11	102%	36.52	Y			07/06/2015		Unknow	Reacher
j4	0.07	0.52	0.98	1.96	3.00	4.18	12.90	95%	26.10				23/05/2015		Unknow	j4
st						3.42	13.81	78%	24.05				04/05/2012		Unknow	staysail
SYMMETRIC SPINNAKERS (4)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2	15.52	15.52	15.52	7.93	8.02	102.80		11/04/2011	North Sails	Nylon	S2					
S1.5	15.47	15.47	15.47	7.90	7.86	101.75		23/05/2019	North Sails	Nylon	S1.5					
1	15.44	15.44	15.44	7.82	7.98	101.03		21/04/2010	North sails	Nylon	S1					
3	15.37	15.37	15.37	7.71	7.78	98.94		10/04/2007	North sails	Nylon	S3					
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				