



MHR: **440.6**

CertNo:

**BOAT**

Class **Shift 54+Carbon**  
 Designer **James Hakes**  
 Builder  
 Age date **03/2026**  
 Series date **03/2026**  
 Offset file **Shift54+Carbon.off**  
 Data file **Shift54+C12050-RM1Reef**

**HULL**

Length Overall **16.459**  
 Maximum Beam **7.774**  
 Draft **3.568**  
 Displacement **12,612**  
 DLR **3.6563**  
 Dynamic Allowance **0.200%**  
 Age Allowance **0.000%**  
 RSA **0.000%**

**PROPELLER**

Installation **Shaft exposed**  
 Type **Folding 3 blades**  
 Diameter **0.512m**

**CREW**

Weight **562**  
 Crew Arm Extension

**SAIL AREAS (m<sup>2</sup>)**

Measured

Mainsail **71.14**  
 Headsail Luffed **80.55**  
 Headsail Flying **126.82**  
 Symmetric  
 Asymmetric **243.31**

*The owner and any other person in charge is responsible that boat is complying with her certificate in accordance with RRS 78.1 and ORC Rule 304.*

**Rated boat velocities in knots**

Wind Velocity	4 kt	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat Angles	45.7°	45.7°	45.0°	44.7°	43.2°	41.9°	41.6°	42.0°	42.2°
Beat VMG	2.52	3.89	4.99	5.09	5.83	6.44	6.96	7.86	7.96
52°	3.99	6.08	7.75	7.89	8.85	9.67	10.49	12.08	12.31
60°	4.38	6.54	8.23	8.40	9.33	10.22	11.21	13.37	13.87
75°	4.93	6.91	8.58	9.74	9.82	10.89	12.25	16.06	17.36
90°	4.79	6.78	8.50	9.70	9.91	11.08	12.67	17.44	21.25
110°	4.32	6.38	8.27	9.71	11.24	13.20	15.52	14.26	18.92
120°	4.19	6.20	8.06	9.47	10.84	12.60	14.84	19.93	15.93
135°	3.44	5.31	7.19	8.68	9.84	11.09	12.69	16.83	21.72
150°	3.01	4.45	5.90	7.42	8.59	9.57	10.61	13.79	17.74
Run VMG	2.61	3.86	5.11	6.42	7.44	8.29	9.19	11.94	15.36
Gybe Angles	142.2°	142.2°	137.6°	144.7°	148.3°	148.0°	145.3°	137.5°	134.4°



Time Allowances in secs/NM									
Wind Velocity	4 kt	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt	24 kt
Beat VMG	1428.8	926.4	721.5	707.8	617.5	559.4	517.0	457.9	452.2
52°	901.8	591.8	464.4	456.4	406.7	372.4	343.2	298.0	292.4
60°	822.4	550.3	437.4	428.7	385.8	352.2	321.2	269.2	259.5
75°	729.9	521.3	419.7	369.6	366.4	330.4	294.0	224.1	207.3
90°	751.5	531.0	423.4	371.3	363.2	324.8	284.1	206.4	169.4
110°	832.8	564.2	435.6	370.7	320.3	272.7	232.0	252.5	190.3
120°	858.4	580.4	446.9	380.2	332.1	285.8	242.6	180.7	225.9
135°	1046.6	677.5	500.7	414.7	365.8	324.6	283.7	213.9	165.7
150°	1194.2	808.4	610.5	485.4	418.9	376.2	339.4	261.0	203.0
Run VMG	1378.9	933.4	704.9	560.5	483.8	434.4	391.9	301.4	234.4
Selected Courses									
Windward / Leeward	1410.7	929.9	713.2	634.2	550.6	496.9	454.4	379.6	343.3
All purpose	1050.6	700.7	541.9	484.1	428.8	384.5	346.1	287.7	261.8

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	573.6	1.0460
All purpose	440.6	1.3618

Data in meters/kilograms (Metric)

**HULL AND APPENDAGES (Lightship Trim)**

Class	<b>Shift 54+Carbon</b>	LOA	<b>16.459</b>	Superstructure frontal area	<b>18.99</b>
Measurement		Max. Beam	<b>7.774</b>	Superstructure lateral area	<b>36.52</b>
HIN		Draft	<b>3.568</b>	Default crew weight	<b>562</b>
		Displacement	<b>12,612</b>	Declared crew weight	<b>N/A</b>
		Dspl lightship	<b>12,050</b>		
		Wetted area	<b>47.56</b>		

**PROPELLER**

Propeller Type	<b>Folding 3 blades</b>										
Installation	<b>Shaft exposed</b>	PRD	<b>0.512</b>	PSD	<b>0.032</b>	PSA	<b>15.0°</b>	ST1	<b>0.032</b>	ST4	<b>0.089</b>
Twin screw	<b>Yes</b>	PBW		PHD	<b>0.095</b>	ESL	<b>1.520</b>	ST2	<b>0.127</b>	ST5	<b>0.343</b>
Hydro generator	<b>No</b>	PIPA	<b>0.0181</b>	PHL	<b>0.128</b>			ST3	<b>0.169</b>		

**RIG**

Single headsail furler	<b>Yes</b>	P	<b>16.900</b>	E	<b>5.960</b>
Mainsail furler	<b>No</b>	IG	<b>19.180</b>	J	<b>7.180</b>
Articulated bowsprit	<b>No</b>	ISP	<b>22.900</b>	JZ	<b>1.661</b>
Non-circular rigging	<b>No</b>	MDT1	<b>0.278</b>	BAS	<b>1.520</b>
Adjustable mast foot	<b>No</b>	MDL1	<b>0.600</b>	FSD	
Running backstays	<b>0</b>	MDT2	<b>0.263</b>	SFJ	<b>0.902</b>
Checkstays	<b>0</b>	MDL2	<b>0.450</b>	SPL	
Spreaders	<b>0</b>	TL	<b>3.550</b>	WPL	
Jumper Struts	<b>No</b>	MW	<b>0.600</b>	TPS	<b>9.660</b>
Rotating mast	<b>Yes</b>	GO	<b>0.608</b>	BD	<b>0.256</b>
Mast rake	<b>3°</b>				
Mast cant angle	<b>0°</b>				

Foretriangles

Id	I	TP	TPZ	Comment
0	19.180	7.180	1.661	main forestay
0	22.900	9.660	1.661	ISP/TPS
1	21.090	9.660	1.720	Reacher
2	13.000	6.725	1.720	Staysail
3	8.422	5.300	1.720	Storm Jib

**FLOTATION**

Flotation Date **14/03/2026**



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**MAINSAIL**

<i>Id</i>	<i>MHB</i>	<i>MUW</i>	<i>MTW</i>	<i>MHW</i>	<i>MQW</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
Main Reef	2.09	2.41	3.28	4.42	5.25	71.14		Sail Plan

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**HEADSAIL**

<i>Id</i>	<i>HHB</i>	<i>HUW</i>	<i>HTW</i>	<i>HHW</i>	<i>HQW</i>	<i>HLP</i>	<i>HLU</i>	<i>Btn</i>	<i>Flying</i>	<i>FT</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
Reache	0.05	1.27	2.60	5.36	8.20	11.05	23.35	No	Inside	1	126.82		Sail Plan
Genoa	0.05	0.77	1.65	3.66	5.94	8.39	20.70	No	No	0	80.55		Sail Plan
Staysail	0.05	0.71	1.41	2.77	3.88	4.93	14.46	No	No	2	37.86		Sail Plan
Storm Jib	0.05	0.35	0.74	1.69	2.84	4.20	9.96	No	No	3	18.61		Sail Plan

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**ASYMMETRIC SPINNAKER**

<i>Id</i>	<i>SLU</i>	<i>SLE</i>	<i>SL</i>	<i>SHW</i>	<i>SFL</i>	<i>Ratio</i>	<i>FT</i>	<i>Area</i>	<i>Meas.Date</i>	<i>Comment</i>
ASpin	25.00	20.50	22.75	12.48	14.25	88%	0	243.31		Sail Plan