



MHR: **416.4**

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+Carbon12-5T

**HULL**

Length Overall	16.459
Maximum Beam	7.774
Draft	3.580
Displacement	13,062
DLR	3.6926
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	97.10
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°	44.7°	43.8°	41.9°	41.6°	40.0°	40.1°	41.0°
Beat VMG	2.74	4.12	5.25	5.57	6.32	6.94	7.39	7.50	7.50
52°	4.36	6.46	8.12	8.52	9.49	10.43	11.09	11.29	11.47
60°	4.82	6.96	8.59	9.00	10.00	11.10	12.02	12.44	12.70
75°	5.23	7.38	8.94	9.43	10.55	11.97	13.78	14.96	15.63
90°	5.28	7.26	8.87	10.12	10.61	12.14	14.44	17.74	18.98
110°	4.59	6.67	8.55	10.02	11.69	13.83	12.02	16.23	21.41
120°	4.41	6.48	8.35	9.77	11.28	13.26	15.74	13.78	18.02
135°	3.91	5.78	7.55	8.99	10.19	11.59	13.40	17.90	22.43
150°	3.29	4.85	6.35	7.76	8.93	9.94	11.10	14.65	18.90
Run VMG	2.85	4.20	5.50	6.72	7.73	8.60	9.62	12.68	16.37
Gybe Angles	142.4°	142.4°	143.0°	145.3°	149.2°	148.5°	141.7°	137.0°	137.1°



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	1313.8	874.1	685.5	645.8	570.0	518.8	487.2	480.3	479.9
52°	825.1	557.6	443.2	422.4	379.5	345.3	324.6	318.9	314.0
60°	746.9	517.0	418.9	400.2	360.0	324.4	299.6	289.5	283.4
75°	688.5	488.1	402.6	381.8	341.2	300.8	261.2	240.6	230.3
90°	682.3	495.9	405.8	355.6	339.5	296.5	249.3	202.9	189.7
110°	784.3	539.7	421.2	359.3	308.0	260.2	299.6	221.9	168.1
120°	816.3	555.5	430.9	368.4	319.2	271.6	228.7	261.3	199.7
135°	920.7	622.6	477.0	400.3	353.4	310.6	268.8	201.1	160.5
150°	1092.6	741.9	566.7	463.9	403.2	362.4	324.2	245.8	190.4
Run VMG	1261.6	856.6	654.4	535.7	465.6	418.4	374.4	283.8	219.9
Selected Courses									
Windward / Leeward	1290.6	865.4	669.9	590.7	517.8	468.6	430.8	382.1	349.9
All purpose	962.2	655.2	513.5	455.7	404.0	360.4	331.5	294.9	266.9

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	539.6	1.1118
All purpose	416.4	1.4408



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>18.95</b>
Measurement		Max. Beam	<b>7.774</b>	Superstructure lateral area	<b>36.34</b>
HIN		Draft	<b>3.580</b>	Default crew weight	<b>562</b>
		Displacement	<b>13,062</b>	Declared crew weight	<b>N/A</b>
		Dspl lightship	<b>12,500</b>		
		Wetted area	<b>48.45</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>21.040</b>	E	<b>6.530</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**

**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	2.09	2.66	3.63	4.88	5.74	97.10		Sail Plan

**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 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 shrouc	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

**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