

Preliminary.

Index No. 35358
(For London Office only).

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name S.H.W.R. Yacht No 1594	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 464.21 Breadth 61.75 Depth 34.04					Date of Survey 8.7.32
Moulded displacement at moulded draught = 85 per cent. of moulded depth 18198 tons					Surveyor's Signature
Coefficient of fineness for use with Tables .768					Particulars of Classification 100141 carry 700 tons in bulk (contingent)

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 34.04	(a) Where D is greater than Table depth (D - Table depth) R = (34.11 - 30.94) x 3 = +9.51	Moulded Breadth (B) 61.75
Stringer plate07	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ 14.82
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = 15.00
Depth for Freeboard (D) = 34.11		Difference .18
		Restricted to
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) =$ $\frac{.18^2}{4} \times .5695 = -.03$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...	103.00	103.00	8.0	-	103.00	Standard Height of Superstructure 7.5
.. overhang ...	3.50	1.75	-	-	1.75	.. R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure 42
.. overhang						Percentage covered $\frac{S}{L} =$ 45.87
Bridge enclosed...	36.00	36.00	8.0	-	36.00	.. $\frac{S_1}{L} =$ 43.05
.. overhang aft ...	3.00	2.25	-	-	2.25	.. $\frac{E}{L} =$ 43.05
.. overhang forward	3.50	1.75	-	-	1.75	Percentage from Table, Line A. Tanker 34.05
F'ele enclosed ...	63.96	55.11	8.0	-	55.11	(corrected for absence of forecastle (if required))
.. overhang ...						Percentage from Table, Line B.
Trunk aft ...						(corrected for absence of forecastle (if required))
.. forward ...						Interpolation for bridge less than .2L (if required) ✓
Tonnage opening aft ...						Deduction = 42 x .3405 = -14.30
.. forward						
Total ...	212.96	199.86			199.86	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	56.42	1		56.42	38.00	38.00	1		38.00	Mean actual sheer aft = Deficient
1/4 L from A.P. ...	25.105	4		100.42	21.87	21.87	4		87.48	Mean actual sheer forward = 99.82 Standard
1/2 L ..	6.205	2		12.41	6.00	6.00	2		12.00	Mean standard sheer forward
Amidships ...	-	4		-	-	-	4		-	Length of enclosed superstructure forward of amidships = Tanker
3/4 L from F.P. ...	12.41	2		24.82	12.25	12.25	2		24.50	.. aft of .. = Sheer forward
1/4 L ..	50.21	4		200.84	50.12	50.12	4		200.48	12.41 3 37.23 12.25 3 36.75
F.P. ...	112.84	1		112.84	113.00	113.00	1		113.00	50.21 3 150.63 50.12 3 150.36
Total ...				502.75					475.46	112.84 1 112.84 113.00 1 113.00
Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{32.29}{18} \left(\frac{.75 - .2293}{.5207} \right) = +.93$										300.70 300.11
If limited on account of midship superstructure.										If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Fresh Deck (if required)	78.75
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.768 + .68}{1.36} = \frac{1.448}{1.36}$	83.86
Depth to Freeboard Deck = 34.11	$\Delta =$ 17254 ✓	Depth Correction ... 9.51	
Summer freeboard = 6.67	Tons per inch immersion at summer load water line	Deduction for superstructures ... 14.30	
Moulded draught (d) = 27.44	$T =$ 58.12 ✓	Sheer correction93	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.86 = 6 3/4	Deduction = $\frac{\Delta}{40T}$ inches = 7.42 ✓	Round of Beam correction03	
Addition for Winter North Atlantic Freeboard (if required) = 6.86 + 4.64 = 11.50 = 11 1/2	= 7 1/2 ✓	Correction for Thickness of Deck amidships ... -	
		Other corrections, scantlings, etc. ... -	
		10.44 14.33 - 3.89	
		Summer Freeboard = 79.97	

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Steel, Deck:

Tropical Fresh Water Line above Centre of Disc ... 14 1/4 ✓	Tropical Fresh Water Freeboard ... 5 - 5 3/4 ✓
Fresh Water Line " " ... 7 1/2 ✓	Fresh Water " " ... 6 - 0 1/2 ✓
Tropical Line " " ... 6 3/4 ✓	Tropical " " ... 6 - 1 1/4 ✓
Winter Line below " " ... 6 3/4 ✓	Winter " " ... 7 - 2 3/4 ✓
Winter North Atlantic Line " " ... 11 1/2 ✓	Winter North Atlantic " " ... 7 - 7 1/2 ✓

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

$$\begin{array}{rcl}
 \text{F'de Total} & = & 63.96 \\
 \text{L/10} & = & 46.42 \\
 \text{alt L/10} & = & 17.54 \quad \times .5 = 8.77 \\
 \text{L/10} & = & 46.42 \\
 \text{dono} & = & 10.21 \quad \times 1 = 10.21 \\
 & & 36.21 \quad \times .998 = 36.13 \\
 & & \underline{55.11 \text{ allowed}}
 \end{array}$$

F'de assumed Spn owing to pinc doors.

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £



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Foundation