

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. _____
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having F.S. F.D. + F.S. 28.149 action Port of Survey _____

(Type of Superstructures.) SS Date of Survey 19.5.37

Ship's Name S.H.W.R. No 1572. Nationality and Port of Registry _____ Gross Tonnage _____ Date of Build _____

Name of Surveyor _____

Moulded Dimensions: Length 485.0 Breadth 67.0 Depth 36.25
28.25
 Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons
 Coefficient of fineness for use with Tables under .68

Particulars of Classification 100% with for completed

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth ...	<u>28.25</u> ✓	(a) Where D is greater than Table depth (D - Table depth) R =	<u>(36.29 - 32.33) × 3 = + 11.88</u> ✓	Moulded Breadth (B)	
Stringer plate ...	<u>.04</u> ✓	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	<u>(32.33 - 28.29) × 3 = - 12.12</u> ✓	Standard Round of Beam = $\frac{B \times 12}{50}$ =	
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	<u>28.29</u> ✓	If restricted by superstructures		Ship's Round of Beam =	
Depth for Freeboard (D) =	<u>36.29</u>			Difference	<u>None</u>
				Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	<u>Nil</u>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...						Standard Height of Superstructure <u>7.5</u>
" overhang ...						" " R.Q.D. _____
R.Q.D. enclosed ...						Deduction for complete superstructure <u>42</u>
" overhang ...						Percentage covered $\frac{S}{L} =$
Bridge enclosed ...						" " $\frac{S_1}{L} =$ <u>78.14</u> ✓ <u>100</u>
" overhang aft ...						" " $\frac{E}{L} =$
" overhang forward ...						Percentage from Table, Line A.
F'cle enclosed ...						(corrected for absence of forecastle (if required))
" overhang ...						Percentage from Table, Line B. <u>73.01</u> ✓
Trunk aft ...						(corrected for absence of forecastle (if required))
" forward ...						Interpolation for bridge less than 2L (if required)
Tonnage opening aft ...						Deduction = <u>Nil</u> <u>42 × 73.01 = - 30.67</u>
" " forward ...						<u>42</u>
Total ...						

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product	
A.P. ...		1				1		Mean actual sheer aft =
$\frac{1}{4}$ L from A.P. ...		4				4		Mean standard sheer aft =
$\frac{3}{8}$ L " ...		2				2		Mean actual sheer forward =
Amidships ...		4				4		Mean standard sheer forward =
$\frac{3}{8}$ L from F.P. ...		2				2		Length of enclosed superstructure forward of amidships =
$\frac{1}{4}$ L " ...		4				4		" " aft of " =
F.P. ...		1				1		
Total ...								

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L} \right) =$$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck =	<u>36.29</u> ✓
Summer freeboard =	<u>9.14</u> ✓
Moulded draught (d) =	<u>27.15</u>

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches 28.29 ✓Addition for Winter North Atlantic Freeboard (if required) = 24.69

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$

Tons per inch immersion at summer load water line

$T =$

Deduction = $\frac{\Delta}{40T}$ inches =

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction ...	<u>11.88</u>	<u>12.12</u> ✓
Deduction for superstructures ...	<u>42.00</u> ✓	
Sheer correction ...	<u>15.00</u> ✓	
Round of Beam correction ...	<u>- 30.67</u>	
Correction for Thickness of Deck amidships ...		
Other corrections, scantlings, etc. ...		
	<u>54.62</u> ✓	<u>12.79</u> ✓
	<u>43.18</u> ✓	<u>79.01</u>
	<u>3.00</u> ✓	<u>16.58</u>
	<u>11.88</u>	<u>47.2</u> + 11.88 ✓
Summer Freeboard =		<u>109.68</u> ✓

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

Tropical Fresh Water Line above Centre of Disc ...	
Fresh Water Line " " ...	
Tropical Line " " ...	
Winter Line below " " ...	
Winter North Atlantic Line " " ...	

Tropical Fresh Water Freeboard ...	
Fresh Water " " ...	
Tropical " " ...	
Winter " " ...	
Winter North Atlantic " " ...	