

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 Index No. _____
 (For London Office)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

Port of Survey _____

(Type of Superstructures.)

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

Date of Survey 11/12/33

Name of Surveyor _____

Particulars of Classification _____

Moulded Dimensions: Length 412' Breadth 56 Depth 30.58

Moulded displacement at moulded draught = 85 per cent. of moulded depth

Coefficient of fineness for use with Tables

.759

tons

Depth for Freeboard (D)

Moulded depth

Stringer plate

Sheathing on exposed deck

$$T \left(\frac{L-S}{L} \right) =$$

Depth for Freeboard (D) =

30.62**Depth correction**(a) Where D is greater than Table depth
(D-Table depth) R =- 9.45"(b) Where D is less than Table depth (if allowed)
(Table depth-D) R =✓If restricted by superstructures ✓**Round of Beam correction**

Moulded Breadth (B)

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} =$$

$$\text{Ship's Round of Beam} =$$

Difference

Restricted to

$$\text{Correction} = \frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = - .01"$$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
Funnel enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...					

Standard Height of Superstructure _____

" " R.Q.D. _____

Deduction for complete superstructure 42.00"

$$\text{Percentage covered} = \frac{S}{L} =$$

$$\frac{S_1}{L} =$$

$$\frac{E}{L} = 53.68\%$$

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. Timber(corrected for absence of forecastle (if required)) 71.55% ✓

Interpolation for bridge less than 2L (if required)

$$\text{Deduction} = 42.00 \times .7155 = - 30.05"$$

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...		1				1	
$\frac{1}{2}$ L from A.P. ...		4				4	
$\frac{2}{3}$ L " ...		2				2	
Amidships ...		4				4	
$\frac{2}{3}$ L from F.P. ...		2				2	
$\frac{1}{2}$ L " ...		4				4	
F.P. ...		1				1	
Total ...							

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = - 2.84"$$

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 = 30.62 Ft.Summer freeboard = 4.69Moulded draught (d) = 25.93

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 6.48" = 6 $\frac{1}{2}"$

Addition for Winter North Atlantic Freeboard (if

required) = $\frac{d}{3} = 8.64 = 8\frac{3}{4}"$ **Deduction for Fresh Water.**

Displacement in salt water at summer load water line

 $\Delta =$

Tons per inch immersion at summer load water line

T =

$$\text{Deduction} = \frac{\Delta}{40T} \text{ inches} = 6\frac{1}{2}"$$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 Depth Correction
 Deduction for superstructures
 Sheer correction
 Round of Beam correction
 Correction for Thickness of Deck amidships
 Other corrections, scantlings, etc.

+	-
9.45	-
-	30.05
-	2.84
-	.01
-	-
-	-
9.45	32.90

Summer Freeboard = 56.15**SUMMER FREEBOARD** amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:-

Tropical Fresh Water Line above Centre of Disc ...	<u>26$\frac{1}{4}"$</u>	Tropical Fresh Water Freeboard ...	<u>4' - 8$\frac{1}{4}"$</u>
" Fresh Water Line " ...	<u>1.9$\frac{3}{4}"$</u>	" Fresh Water " ...	<u>3' - 7$\frac{1}{4}"$</u>
" Tropical Line " ...	<u>1.9$\frac{3}{4}"$</u>	" Tropical " ...	<u>4' - 1$\frac{3}{4}"$</u>
" Winter Line " ...	<u>4$\frac{1}{2}"$</u>	" Winter " ...	<u>4' - 1$\frac{3}{4}"$</u>
" Winter North Atlantic Line " ...	<u>6$\frac{1}{4}"$</u>	" Winter North Atlantic " ...	<u>5' - 5"</u>
" Summer " ...	<u>above</u>		<u>6' - 3$\frac{3}{4}"$</u>