

TIMBER.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 Index. No. 31359.
 (For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey _____	
having <u>Poep, Bridge and Forecastle.</u>					Date of Survey <u>20th May. 32.</u>	
(Type of Superstructures.)						
Ship's Name <u>"FARNWORTH"</u>	Nationality and Port of Registry <u>British Newcastle</u>	Official Number <u>148086</u>	Gross Tonnage <u>4944</u>	Date of Build <u>1924.9m.</u>	Name of Surveyor _____	
Moulded Dimensions: Length <u>400.0</u> Breadth <u>53.0</u> Depth <u>29.75</u> Moulded displacement at moulded draught = 85 per cent. of moulded depth. <u>11656</u> tons Coefficient of fineness for use with Tables <u>.764</u>					Particulars of Classification <u>100 A1</u>	

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>29.62</u>	(a) Where D is greater than Table depth (D - Table depth) R = <u>+ 9.00</u>	Moulded Breadth (B) _____ Standard Round of Beam = $\frac{B \times 12}{50} =$ _____ Ship's Round of Beam = _____ Difference _____ Restricted to _____ Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right) =$ <u>- .04</u>
Stringer plate <u>.05</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = _____	
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ _____	If restricted by superstructures _____	
Depth for Freeboard (D) = <u>29.67</u>		

DEDUCTION FOR SUPERSTRUCTURES.

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

Standard Height of Superstructure _____
 " " R.Q.D. _____
 Deduction for complete superstructure 42.00
 Percentage covered $\frac{S}{L} =$ _____
 " " $\frac{S_1}{L} =$ _____
 " " $\frac{E}{L} =$ 47.55
 Percentage from Table, Line A.
 (corrected for absence of forecastle (if required))
 Percentage from Table, Line D. TIMBER. 67.72
 (corrected for absence of forecastle (if required))
 Interpolation for bridge less than .2L (if required)
 Deduction = 42.00 x .6772 = - 28.44

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
$\frac{1}{6}L$ from A.P.		4				4	
$\frac{2}{6}L$ "		2				2	
Amidships		4				4	
$\frac{3}{6}L$ from F.P.		2				2	
$\frac{4}{6}L$ "		4				4	
F.P.		1				1	
Total							

Mean actual sheer aft = _____
 Mean standard sheer aft = _____
 Mean actual sheer forward = _____
 Mean standard sheer forward = _____
 Length of enclosed superstructure forward of amidships = _____
 " " aft of " = _____

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ - 2.47

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 = 29.67 Ft.
 Summer freeboard = 4.50
 Moulded draught (d) = 25.17

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 6.29 = 6\frac{1}{4}

Addition for Winter North Atlantic Freeboard (if required) = $\frac{d}{3} = 8.39 = 8\frac{1}{2}$

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$ 11660
 Tons per inch immersion at summer load water line
 $T =$ 42

Deduction = $\frac{\Delta}{40 T}$ inches
= 6.94 = 7"

TABULAR FREEBOARD corrected for Flush Deck (if required)
 Correction for coefficient

	+	-
Depth Correction	<u>9.00</u>	
Deduction for superstructures		<u>28.44</u>
Sheer correction		<u>2.47</u>
Round of Beam correction		<u>.04</u>
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
Total	9.00	30.95

Summer Freeboard = 53.96

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

Line	Height	Line	Height
TIMBER Tropical Fresh Water Line above Centre of Disc	<u>27\frac{1}{2}"</u>	TIMBER Tropical Fresh Water Freeboard	<u>4' 6"</u>
" Fresh Water Line " "	<u>21\frac{1}{4}"</u>	" Fresh Water " "	<u>3' 4\frac{3}{4}"</u>
" Tropical Line " "	<u>20\frac{3}{4}"</u>	" Tropical " "	<u>3' 11"</u>
" Winter Line " "	<u>6"</u>	" Winter " "	<u>3' 11\frac{3}{4}"</u>
" Winter North Atlantic Line " "	<u>6"</u>	" Winter North Atlantic " "	<u>5' 2\frac{1}{2}"</u>

Timber Summer line above C. of disc = 14\frac{1}{4}"