

TIMBER.  
Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.

Index. No. \_\_\_\_\_  
(For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey _____
having _____					Date of Survey _____
(Type of Superstructures.)					Name of Surveyor _____
Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build	Particulars of Classification <u>+100A</u>
CAIRNGOWAN	British Newcastle	142829.	5295	1919.4	
Moulded Dimensions: Length <u>399.5</u> Breadth <u>52.0</u> Depth <u>31.0</u>					
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>12,060</u> tons					
Coefficient of fineness for use with Tables <u>771</u>					

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... ..	(a) Where D is greater than Table depth (D - Table depth) R =	Moulded Breadth (B)
Stringer plate ... ..		Standard Round of Beam = $\frac{B \times 12}{50}$ =
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Ship's Round of Beam =
Depth for Freeboard (D) = <u>31.04</u>	If restricted by superstructures	Difference
		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right)$ = <u>.06</u>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop 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 ... ..	<u>201.16</u>	<u>201.16</u>			<u>201.16</u>

Standard Height of Superstructure \_\_\_\_\_  
„ „ R.Q.D. \_\_\_\_\_  
Deduction for complete superstructure 41.96  
Percentage covered  $\frac{S}{L} = 50.36$   
„ „  $\frac{S_1}{L} = 50.36$   
„ „  $\frac{E}{L} = 50.36$   
Percentage from Table, Line A. TIMBER 69.47  
(corrected for absence of forecastle (if required))  
Percentage from Table, Line B.  
(corrected for absence of forecastle (if required))  
Interpolation for bridge less than 2L (if required)  
Deduction = 29.15

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		
$\frac{2}{6}$ L from F.P. ... ..		2					2		
$\frac{1}{6}$ L „ ... ..		4					4		
F.P. ... ..		1					1		
Total ... ..									

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) =$  2.43  
If limited on account of midship superstructure.

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 „ =

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	71.35. 76.12.
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient	
Depth to Freeboard Deck = <u>31.04</u>	$\Delta = 12,070$	Depth Correction ... .. <u>13.23</u>	
Summer freeboard = <u>4.81</u>	Tons per inch immersion at summer load water line	Deduction for superstructures ... .. <u>29.15</u>	
Moulded draught (d) = <u>26.23</u>	T = <u>41.3</u>	Sheer correction ... .. <u>2.43</u>	87.8 18.41
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>6.56 6 1/2</u>	Deduction = $\frac{\Delta}{40 T}$ inches = <u>7.31</u>	Round of Beam correction ... .. <u>.06</u>	
Addition for Winter North Atlantic Freeboard (if required) = $\frac{1}{3} = 8.74 = 8 3/4$		Correction for Thickness of Deck amidships ... ..	
		Other corrections, scantlings, etc. ... ..	
		13.23 31.64	Summer Freeboard = <u>57.71</u>

TIMBER SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—		4-9 3/4 ✓	
TIMBER Tropical Fresh Water Line above Centre of Disc ... ..	<u>27 1/2</u>	TIMBER Tropical Fresh Water Freeboard ... ..	3-8 ✓
„ Fresh Water Line „ „ ... ..	<u>21</u>	„ Fresh Water „ „ ... ..	4-2 1/2 ✓
„ Tropical Line „ „ ... ..	<u>20 1/2</u>	„ Tropical „ „ ... ..	4-3 1/4 ✓
„ Winter Line „ „ ... ..	<u>5</u>	„ Winter „ „ ... ..	5-6 1/2 ✓
„ Winter North Atlantic Line „ „ ... ..	<u>6 1/4</u>	„ Winter North Atlantic „ „ ... ..	6-5 3/4 ✓
5m, 3.32	„ SUMMER above „	<u>13 3/4</u>	