

— *TIMBER* —

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having Prop, Bridge & Fcsls.

Port of Survey _____

Date of Survey 29. 11. 34

(Type of Superstructures.)

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
<u>HARDINGHAM.</u>	<u>British London</u>	<u>163310</u>	<u>5414.71</u>	

Name of Surveyor _____

Particulars of Classification _____

Moulded Dimensions: Length _____ Breadth _____ Depth _____

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

Coefficient of fineness for use with Tables _____

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth	(a) Where D is greater than Table depth (D - Table depth) R = $(28.79 - 28.10) 3.00$ $= + 1.17.$	Moulded Breadth (B) _____ Standard Round of Beam = $\frac{B \times 12}{50} =$ _____ Ship's Round of Beam = _____
Stringer plate	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = _____	Difference _____ Restricted to _____
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ _____	If restricted by superstructures _____	Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = - .03''$
Depth for Freeboard (D) = <u>28.79</u>		

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					
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 $\frac{S}{L} =$ _____

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

 " " $\frac{E}{L} = 81.86$

Percentage from Table, Line A. Timber 88.66%
(corrected for absence of fore-castle (if required))

Percentage from Table, Line B. _____
(corrected for absence of fore-castle (if required))

Interpolation for bridge less than 2L (if required) _____

Deduction = $42.00 \times .8866 = - 37.23''$

SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P.		1				1	
$\frac{1}{8}L$ from A.P.		4				4	
$\frac{3}{8}L$ "		2				2	
Amidships		4				4	
$\frac{3}{8}L$ from F.P.		2				2	
$\frac{1}{8}L$ "		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 = _____
L

 " " aft of " = _____

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = - 2.22''$

If limited on account of midship superstructure. _____

If limited to maximum allowance of 1 1/2 ins. per 100 ft. _____

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Ft.

Depth to Freeboard Deck = 28.79

Summer freeboard = 3.79

Moulded draught (d) = 25.00

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.25''

Addition for Winter North Atlantic Freeboard (if required) = $\frac{2}{3} = 8.33'' = 8 \frac{1}{4}''$

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 12932$

Tons per inch immersion at summer load water line

$T = 47.42$

Deduction = $\frac{\Delta}{40T}$ inches = $6.82 = 6 \frac{3}{4}''$

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient _____

	+	-
Depth Correction	1.17	-
Deduction for superstructures	-	37.23
Sheer correction	-	2.22
Round of Beam correction	-	.03
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	1.17	39.48

Summer Freeboard = 45.45

83.76

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

<u>Timber</u> Tropical Fresh Water Line above Centre of Disc ... <u>17 1/2''</u>	<u>Timber</u> Tropical Fresh Water Freeboard ... <u>3'-9 1/2''</u>
" Fresh Water Line " " ... <u>11 1/4''</u>	" Fresh Water " " ... <u>2'-8 1/2''</u>
" Tropical Line " " ... <u>10 3/4''</u>	" Tropical " " ... <u>3'-2 3/4''</u>
" Winter Line below " " ... <u>3 3/4''</u>	" Winter " " ... <u>3'-3 1/4''</u>
" Winter North Atlantic Line " " ... <u>6 1/4''</u>	" Winter North Atlantic " " ... <u>4'-5 3/4''</u>

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Particulars of Scuppers and Sanitary Discharge Pipes :—

Particulars of Side Scuttles :—

Particulars of Guard Rails :—

Particulars of Gangways, Lifelines, etc. :—

RETAIN

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well						
Forward Well						

State position of each freeing port } After Well :—
(F. and A. position and height above deck edge) } Forward Well :—
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :—
Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead								
Raised Quarter Deck Bulkhead ...								
Bridge, After Bulkhead								
Bridge, Forward Bulkhead								
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Super-structure Decks								
Machinery Casings within Superstruc-tures not fitted with Class I Closing Appliances								
Deckhouses on Flush Deck Ships ...								

RETAIN

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead	
Bridge, Forward Bulkhead	
Forecastle Bulkhead	
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	
Exposed Machinery Casings on Super-structure Decks	
Machinery Casings within Superstruc-tures not fitted with Class I Closing Appliances	
Deckhouses on Flush Deck Ships ...	