

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

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

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having a Poop Bridge - Forecastle

Port of Survey Harre

Date of Survey Nov. 1932

Name of Surveyor J. L. Davis

Particulars of Classification +100 A1

**BESTIK 2** (Type of Superstructures.)

Ship's Name ANNIK

Nationality and Port of Registry \_\_\_\_\_

Official Number \_\_\_\_\_

Gross Tonnage \_\_\_\_\_

Date of Build \_\_\_\_\_

Moulded Dimensions: Length 310 Breadth 44 Depth 23.83

Moulded displacement at moulded draught = 85 per cent. of moulded depth 6267 tons

Coefficient of fineness for use with Tables .794

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... ..	(a) Where D is greater than Table depth (D-Table depth) R = <u>+7.63</u>	Moulded Breadth (B)
Stringer plate ... ..	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = <u>✓</u>	Standard Round of Beam = $\frac{B \times 12}{50} =$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures <u>✓</u>	Ship's Round of Beam =
Depth for Freeboard (D) = <u>23.87</u>		Difference
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = -0.02"$

### 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 ... ..					

Standard Height of Superstructure \_\_\_\_\_

" " R.Q.D. \_\_\_\_\_

Deduction for complete superstructure 36.00

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

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

" "  $\frac{E}{L} =$  48.06 ✓

Percentage from Table, Line A. Timber 68.04 ✓  
(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 = 36.00 x .6804 = -24.49"

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	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 ... ..									

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = +1.05"$

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.**

Ft.  
Depth to Freeboard Deck = 23.87  
Summer freeboard = 2.83  
Moulded draught (d) = 21.04

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = 5.26 = 5 $\frac{1}{4}$ "  
Addition for Winter ~~North Atlantic~~ Freeboard (if required) =  $\frac{d}{3} = 7.01 = 7"$

**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 = 5 $\frac{1}{4}$ "

**TABULAR FREEBOARD** corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ... .. 7.63 - 1  
Deduction for superstructures ... .. - 24.49  
Sheer correction ... .. 1.05 - 1  
Round of Beam correction ... .. - .02  
Correction for Thickness of Deck amidships ... .. - -  
Other corrections, scantlings, etc. ... .. - -

Summer Freeboard = 33.92

**SUMMER FREEBOARD** amidships from ~~Centre of Disc~~ to top of Deck Line, ~~Wood~~, Steel, Deck :- 2'-10" = 86 $\frac{1}{2}$ "

Timber Tropical Fresh Water Line above Centre of Disc .225 ... 57 $\frac{1}{2}$ "  
" Fresh Water Line " " 1.7 $\frac{1}{4}$ " = 43 $\frac{1}{2}$ "  
" Tropical Line " " 1.7 $\frac{1}{4}$ " = 43 $\frac{1}{2}$ "  
" Winter Line below " 5 $\frac{1}{2}$ " = 127"  
" Winter North Atlantic Line below " 7 $\frac{1}{2}$ " = 178"  
" Summer above " 12" = 30 $\frac{1}{2}$ "

Tropical Fresh Water Freeboard ... .. 1'-11 $\frac{1}{2}$ " = 59 $\frac{1}{2}$ "  
" Fresh Water " " 2'-4 $\frac{3}{4}$ " = 73 $\frac{1}{2}$ "  
" Tropical " " 2'-4 $\frac{3}{4}$ " = 73 $\frac{1}{2}$ "  
" Winter " " 3'-5" = 104"  
" Winter North Atlantic " " 4'-5" = 134"