

Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.

SEP 77 1937

Computation of Freeboard for Steamer, Sailing Ship, Tanker				Port of Survey	
having					
(Type of Superstructures.)				Date of Survey 9-9-32.	
Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build	
"ROSLAGEN"					
Moulded Dimensions: Length	Breadth	Depth			
Moulded displacement at moulded draught = 85 per cent. of moulded depth				tons	
Coefficient of fineness for use with Tables				. 776	
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 ... ..		+ 5.88"		Standard Round of Beam = $\frac{B \times 12}{50} =$	
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth—D) R =		Ship's Round of Beam =	
T $\left(\frac{L-S}{L}\right) =$				Difference	
Depth for Freeboard (D) =		If restricted by superstructures		Restricted to	
20.54				Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L}\right) = - .04"$	

## 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					
File enclosed ... ..					
„ overhang ... ..					
Trunk aft ... ..					
„ forward ... ..					
Tonnage opening aft ...					
„ „ forward					
Total ... ..					

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

„ „ R.Q.D. \_\_\_\_\_

Deduction for complete superstructure \_\_\_\_\_ *32.47*

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

„ „  $\frac{S_1}{L} =$

„ „  $\frac{E}{L} =$  *47.15%*

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, ~~Line B.~~ *Timber* *67.46%*

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = *32.47 × .6746 = - 21.90*

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

$$\frac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}} =$$
$$\frac{\text{Mean actual sheer forward}}{\text{Mean standard sheer forward}} =$$
$$\frac{\text{Length of enclosed superstructure}}{L} \text{ forward of amidships} =$$

" " aft of " =

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{8}{2L} \right) = -.07''$$

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 = 20.54 Ft.

Summer freeboard = 1.81

Moulded draught (d) = 18.73

~~Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches =  $4.68'' = 119\frac{1}{2}$~~

~~Addition for Winter North Atlantic Freeboard (if required) =  $\frac{d}{3} = 6.24'' = 158\frac{1}{2}$~~

**Deduction for Fresh Water.**

Displacement in salt water at summer load water line

$\Delta = 4732$

Tons per inch immersion at summer load water line

T = 22.25

Deduction =  $\frac{\Delta}{40 T}$  inches

=  $5.32'' = 135\frac{1}{2}$

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

Correction for coefficient

	+	-
Depth Correction ...	5.88	-
Deduction for superstructures ...	-	21.90
Sheer correction ...	-	.07
Round of Beam correction ...	-	.04
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc. ...	-	-
	5.88	22.01

37.89

Summer Freeboard =  $21.76'' = 553\frac{1}{2}$

Timber SUMMER FREEBOARD amidships from ~~Center of Dis~~ top of Deck Line, ~~Wood~~, Steel, Deck:—

Timber		Tropical Fresh Water Line above Centre of Disc		Tropical Fresh Water Freeboard	
		520			294
"	Fresh Water Line	401	"	Fresh Water	418
"	Tropical Line	385	"	Tropical	434
"	Winter Line	108	"	Winter	711
"	Winter North Atlantic Line	177	"	Winter North Atlantic	996
"	Summer Line above centre of disc	266			

5m,3,32.

MARKING FORM RECEIVED 1974