

Rpt. C.11

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index No. **19049**  
(For London Office only.)H26  
Sally Oct.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having

Poop, Bulwark + Forecastle

Port of Survey

Malmo

(Type of Superstructures.)

Date of Survey

3<sup>rd</sup> June 1932

Ship's Name

VIRGINIA

NORANIA

Nationality and Port of Registry

Swedish

5540

Gross Tonnage

2811

Date of Build

1907

Name of Surveyor

Moulded Dimensions: Length

317.16

Breadth

46.28

Depth

23.29

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

tons

Coefficient of fineness for use with Tables

.835

Particulars of Classification

\*100A1

## Depth for Freeboard (D)

Moulded depth ... .. 23.29

Stringer plate ... .. .05

Sheathing on exposed deck

$$T \left( \frac{L-S}{L} \right) =$$

Depth for Freeboard (D) =

23.34

## Depth correction

(a) Where D is greater than Table depth  
(D-Table depth) R =

+ 5.37

(b) Where D is less than Table depth (if allowed)  
(Table depth-D) R =

If restricted by superstructures

## Round of Beam correction

Moulded Breadth (B)

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} =$$

$$\text{Ship's Round of Beam} =$$

Difference

Restricted to

$$\text{Correction} = \frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right) =$$

## 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

6.672

" " R.Q.D.

Deduction for complete superstructure

36.48

Percentage covered  $\frac{S}{L} =$ " "  $\frac{S_1}{L} =$ " "  $\frac{E}{L} =$ 

48.93

Percentage from Table, Line A.

(corrected for absence of forecastle (if required))

Percentage from Table, Line B.

68.58

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction =

- 25.02

## 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	
$\frac{2}{8}L$ " ...		2				2	
midships ...		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 " =

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

- 1.39

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 =

23.34

Summer freeboard =

2.66

Moulded draught (d) =

20.68

Addition for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches =

5.17 = 131

Addition for Winter North Atlantic Freeboard (if required) =  $\frac{d}{3}$  inches =

175

## 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

5.17 = 131

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

Correction for coefficient

47.69

53.13

Depth Correction ... .. 5.37

Deduction for superstructures ... .. 25.02

Sheer correction ... .. 1.39

Round of Beam correction ... .. .11

Correction for Thickness of Deck amidships ... ..

Other corrections, scantlings, etc. ... ..

	+	-
Depth Correction	5.37	
Deduction for superstructures		25.02
Sheer correction		1.39
Round of Beam correction		.11
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
	5.37	26.52

21.15

Summer Freeboard = 31.98

## SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

31.98 = 812 mm

Tropical Fresh Water Line above Centre of Disc ...

55.5

Fresh Water Line " " ...

42.4

Tropical Line " " ...

42.4

Winter Line " " ...

11.8

Winter North Atlantic Line " " ...

193

Tropical Fresh Water Freeboard ...

550

Fresh Water " " ...

681

Tropical " " ...

681

Winter " " ...

987

Winter North Atlantic " " ...

1298

8 JUL 1932

6 MAY 1938

RECEIVED

20 JUL 1937

RECEIVED

8 JUL 1932