

-2 JUL 1932

C.11.

Index. No. 31501
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

No 100667

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having **COMBINED FORECASTLE & BRIDGE, AND POOP**

Port of Survey **LIVERPOOL**

(Type of Superstructures.)

Date of Survey **JUNE 1932**

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

CITY OF DELHI

BRITISH

GLASGOW

148871

7443

1925-7M.

Name of Surveyor **S. B. Lumsden**

Moulded Dimensions: Length **450.5'** Breadth **58.33'** Depth **34.9'**
Moulded displacement at moulded draught = 85 per cent. of moulded depth **17,345** tons
Coefficient of fineness for use with Tables **.782**

Particulars of Classification **+100A1**

S.S. Nav. No. 1-29

Depth for Freeboard (D)

Moulded depth ... **34.9** **34.9**

Stringer plate ... **.04** **.44**

Sheathing on exposed deck

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

Depth for Freeboard (D) = **34.49**

Depth correction

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

$$(34.49 - 30.03) \times 3 = 14.28$$

(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) **58.33**

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} = 14.00$$

$$\text{Ship's Round of Beam} = 14\frac{1}{2}$$

Difference **excess .50**

Restricted to

$$\text{Correction} = \frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.50}{4} \times .1332 = (-).02$$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Po enclosed ...	73.75	73.75	8'-2"	-	73.75
overhang ...					
R.Q.D. enclosed ...					
overhang ...					
Bridge enclosed ...					
overhang aft ...	316.75	316.75	8'-2"	-	316.75
overhang forward ...					
enclosed ...					
overhang ...					
Trunk aft ...					
forward ...					
Tonnage opening aft ...					
forward ...					
Total ...	390.50	390.50			390.50

Standard Height of Superstructure **7.5**

" " R.Q.D.

Deduction for complete superstructure **42.00**

$$\text{Percentage covered } \frac{S}{L} = 86.68$$

$$\frac{S_1}{L} = 86.68$$

$$\frac{E}{L} = 86.68$$

Percentage from Table, Line A. **83.58**
(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)

$$\text{Deduction} = .8358 \times 42 = 35.10$$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	55.05	1		55.05	64	64.50	1		64.50
$\frac{1}{2}$ L from A.P. ...	24.49	4		97.96	27	28.44	4		113.76
$\frac{2}{3}$ L " ...	6.06	2		12.12	5 $\frac{1}{2}$	7.11	2		14.22
Amidships ...	-	4		-	0	-	4		-
$\frac{2}{3}$ L from F.P. ...	12.11	2		24.22	12 $\frac{1}{2}$	14.81	2		29.62
$\frac{1}{2}$ L " ...	48.99	4		195.96	57	59.25	4		237.00
F.P. ...	110.10	1		110.10	132	133.50	1		133.50
Total ...				495.41					592.60

Mean actual sheer aft = **excess.**
Mean standard sheer aft

Mean actual sheer forward = **excess.**
Mean standard sheer forward

Length of enclosed superstructure forward of amidships = **.50**

" " aft of " = **.203**

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{97.19}{18} \left(.75 - \frac{.4334}{2} \right) = (-).141$$

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 = **34.49**

Summer freeboard = **5.94**

Moulded draught (d) = **28.85**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **7.21**

Addition for Winter North Atlantic Freeboard (if required) = **4 $\frac{1}{2}$**

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$$\Delta = 16942$$

Tons per inch immersion at summer load water line

$$T = 55.66$$

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

$$= 7.62$$

$$4\frac{1}{2}$$

TABULAR FREEBOARD corrected for Flush Deck (if required)

$$\text{Correction for coefficient} = \frac{.782 + .68}{1.36} = \frac{1.462}{1.36}$$

	+	-
Depth Correction ...	14.28	
Deduction for superstructures ...		35.10
Sheer correction ...		1.71
Round of Beam correction02
Correction for Thickness of Deck amidships ...		
Other corrections, scantlings, etc. ...		
	14.28	36.83

Summer Freeboard = **71.25**

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, **Steel**, Deck: - **5'-11 $\frac{1}{4}$ "**

Tropical Fresh Water Line above Centre of Disc ... **14 $\frac{3}{4}$ "**

Fresh Water Line " " ... **7 $\frac{1}{2}$ "**

Tropical Line " " ... **7 $\frac{1}{4}$ "**

Winter Line below " " ... **7 $\frac{1}{4}$ "**

Tropical Fresh Water Freeboard ... **4'-8 $\frac{1}{2}$ "**

Fresh Water " " ... **5'-3 $\frac{3}{4}$ "**

Tropical " " ... **5'-11 $\frac{1}{4}$ "**

Winter " " ... **6'-16 $\frac{1}{2}$ "**

6 JUL 1932

MARKING FORM
MAY 1932

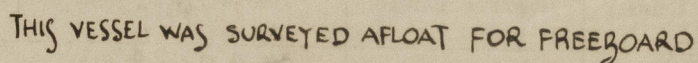
RECEIVED 15 MAR 1934



Lloyd's Register of Shipping
Foundation

005020-005028-0124 1/2

A hand-drawn plan view of a ship, labeled 'F. E.' at the top. The ship is oriented horizontally. The deck layout includes several compartments and holds. From left to right (Aft to Fore), the compartments are: AFT PEAK, NO5 HOLD, NO4 HOLD, DEEP TANK, MACHY. SPACE, NO3 HOLD, NO2 HOLD, NO1 HOLD, and FORE PEAK. Above the deck, there are various structures and labels: 'F.' at the bow, 'E.' at the stern, 'NO6' and 'NO5' on the bow side, 'NO4' and 'NO3' on the stern side, 'SALOON' in the center, and 'NO2' and 'NO1' on the stern side. The ship's hull is shown with a curved bow and a straight stern.



T: TUNNEL ESCAPE. STEEL DOOR 5'0" X 2'0" SILL. 15"
DOOR CAPABLE OF BEING OPERATED FROM EITHER SIDE.

$30 = 17.600 -$
 $29 = 16.930 -$
 $502 = 752640$
 $17.432 -$
 $89 -$
 $17.345 -$ Monday