For Scantling Purposes only.

Rpt. C.11 (Comp.).

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
T.S. *Rovuma*				

Port of Survey _____

Date ~~of Survey~~ 9·7·42

Moulded Dimensions: Length **211** Breadth **35** Depth **13·5**

Surveyor's Signature _____

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

Coefficient of fineness for use with Tables **·764 (estimated)**

Particulars of Classification 100A with fbd.

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... ... **13·50**	(a) Where D is greater than Table depth (D—Table depth) R =	Moulded Breadth (B)
Stringer plate ... ... :34 ... **·03**		Standard Round of Beam = $\frac{B \times 12}{50}$ =
Sheathing on exposed deck $T\left(\frac{L-S}{L}\right)$ = ‒	(b) Where D is less than Table depth (if allowed) (Table depth—D) R = $\frac{(14\cdot07 - 13\cdot53) \times 1\cdot623}{\cdot54}$ = ~~＋~~ ‒ **·88**	Ship's Round of Beam = Difference *assumed standard*
Depth for Freeboard (D) = **13·53**	If restricted by superstructures	Restricted to Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L}\right)$ =

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	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 **6·0** ✓

,, ,, R.Q.D. _____

Deduction for complete superstructure **27·10**

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

,, ,, $\frac{S_1}{L}$ = ⎫ **100 %**

,, ,, $\frac{E}{L}$ = ⎭

Percentage from Table, Line A.
(corrected for absence of forecastle (if required))

Percentage from Table, Line B. **100 %**
(corrected for absence of forecastle (if required))

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

Deduction = **− 27·10**

SHEER CORRECTION.

LR standard height amendation = 7·50
L.L. ,, ,, ,, = 6·00
Difference 1·50

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
... ...		1				1	
from A.P. ...		4				4	
,, ...		2	*Standard*			2	
Midships ...		4				4	
from F.P. ...		2				2	
,, ...		4				4	
... ...		1				1	
Total ...							

$\frac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}}$ =

$\frac{\text{Mean actual sheer forward}}{\text{Mean standard sheer forward}}$ =

$\frac{\text{Length of enclosed superstructure}}{L}$ forward of amidships =

,, ,, ,, aft of ,, =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\cdot75 - \frac{S}{2L}\right)$ = **− 1·50**

If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

**Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.**

Depth to Freeboard Deck = **13·53** Ft.

Summer freeboard = **·17**

Moulded draught (d) = **13·36**

Deduction for Tropical freeboard and addition for
Winter freeboard = $\frac{d}{4}$ inches = **3·34 = 3¼**

Addition for Winter North Atlantic Freeboard (if required) = **5¼**

Deduction for Fresh Water.

Displacement in salt water at summer load water line
△ =

Tons per inch immersion at summer load water line
T =

Deduction = $\frac{\triangle}{40\,T}$ inches = **3¼**

TABULAR FREEBOARD ~~corrected for Flush Deck~~ (if required) **24·98**

Correction for coefficient $\frac{·764 + ·68}{1·36} = \frac{1·444}{1·36}$ = **26·53**

	+	−
Depth Correction		·88
Deduction for superstructures		27·10
Sheer correction		1·50
Round of Beam correction		‒
Correction for Thickness of Deck amidships		‒
Other corrections, scantlings, etc.		‒
	− 29·48	−29·48

Summer Freeboard = **− 2·95**

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck :— 0·2 limited.

Tropical Fresh Water Line above Centre of Disc	Tropical Fresh Water Freeboard		
Fresh Water Line ,, ,, ,,	Fresh Water ,, ...		
Tropical Line ,, ,, ,,	Tropical ,, ...		
Winter Line below ,, ,, ,,	Winter ,, ...		
Winter North Atlantic Line ,, ,, ,, ,,	Winter North Atlantic ,, ...		