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
Messrs. Furness S.B. Co. Yard No. 387/8				

Port of Survey ....

Date of Survey   24-3-44

Surveyor's Signature ....

Moulded Dimensions: Length 535.75   Breadth 74.0   Depth $\{$ 57.0 / 35.0

Centre of middle deck.

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

Coefficient of fineness for use with Tables .844 (assumed)

Particulars of Classification + 100 A1 with fred.
Carrying petroleum in bulk (contemplated)

Depth for Freeboard (D).

Moulded depth ... Verlind ...	47.80	
Stringer plate ...	.07	
Sheathing on exposed deck $T\left(\dfrac{L-S}{L}\right)=$		
Depth for Freeboard (D) =	47.87	

Depth correction.

(a) Where D is greater than Table depth
$\dfrac{(D-\text{Table depth}) R}{12.16} = \dfrac{(47.87-35.71) \times 3}{12.16} = +36.48$

(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)

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

Ship's Round of Beam

Difference   assumed standard

Restricted to

Correction = $\dfrac{\text{Diff}^e}{4} \times \left(1-\dfrac{S_1}{L}\right)$ = Nil

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					

Flush decked

Standard Height of Superstructure ....

„ „ R.Q.D. ....

Deduction for complete superstructure ....

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

„ „ $\dfrac{S_1}{L}$ =

„ „ $\dfrac{E}{L}$ =

Percentage from Table, Line A.
(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)

Deduction = Nil

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
⅙L from A.P. ...		4				4	
⅔L „ ...		2				2	
Amidships ...		4				4	
⅔L from F.P. ...		2				2	
⅙L „ ...		4				4	
F.P.		1				1	
Total ...							

assumed standard

Mean actual sheer aft =
Mean standard sheer aft

Mean actual sheer forward =
Mean standard sheer forward

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

„ „ aft of „ =

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

	Ft.
Depth to Freeboard Deck =	47.87
Summer freeboard =	13.55
Moulded draught (d) =	34.32

Deduction for Tropical freeboard and addition for
Winter freeboard = $\dfrac{d}{4}$ inches =

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line
Δ =

Tons per inch immersion at summer load water line
T =

Deduction = $\dfrac{\Delta}{40\,T}$ inches =

TABULAR FREEBOARD corrected for Flush Deck (if required)   112.51

Correction for coefficient $\dfrac{.844+.05}{1.36} = \dfrac{.1524}{1.36}$ 126.60

	+	−	
Depth Correction	36.48		S.B. 24.3.44.
Deduction for superstructures		−	
Sheer correction		−	
Round of Beam correction ...		−	
Correction for Thickness of Deck amidships		−	
Other corrections, scantlings, etc. ...		−	
	36.48	+36.48	
		Summer Freeboard =	162.58

13.55 free

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

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

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