Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

(3)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
Fort Amherst.				

Port of Survey

Date of Survey 3-10-44.

Surveyor's Signature

Particulars of Classification

Moulded Dimensions: Length 330.25. Breadth 45. Depth 27.08.

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

Coefficient of fineness for use with Tables .68 lowal —

Depth for Freeboard (D).

Moulded depth	27.08
Stringer plate	.03
Sheathing on exposed deck $T\left(\dfrac{L-S}{L}\right)=$	✓
Depth for Freeboard (D) =	27.11

Depth correction.

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

$$\dfrac{(27.11 - 22.02) \times 2.54}{5.09} = +12.93.$$

(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)	45.0.
Standard Round of Beam $= \dfrac{B \times 12}{50} =$	108
Ship's Round of Beam =	6.0.
Difference	4.8
Restricted to	
Correction $= \dfrac{Diff^n}{4} \times \left(1 - \dfrac{S_1}{L}\right) = \dfrac{4.8}{4}(.4345) = +.52$	

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	38.00	38.00	8'-0"	✓	38.00
„ overhang					
R.Q.D. enclosed ...					
„ overhang					
Bridge enclosed ...	118.00.	118.00	8'-0	✓	118.00
„ overhang aft ...					
„ overhang forward					
F'cle enclosed ...	30.75	30.75	7'-6"	✓	30.75.
„ overhang ...					
Trunk aft ...					
„ forward ...					
Tonnage opening aft					
„ „ forward					
Total	186.75	186.75			186.75.

Standard Height of Superstructure 6.80

„ „ R.Q.D. ✓

Deduction for complete superstructure 37.35.

Percentage covered $\dfrac{S}{L} = 56.55$

„ „ $\dfrac{S_1}{L} = 56.55$

„ „ $\dfrac{E}{L} = 56.55$

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

Percentage from Table, Line B. 42.55 (corrected for absence of forecastle (if required))

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

Deduction = $37.35 \times .4255 = -15.89$

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	43.025	1	43.025	41.00	41.00	1	41.00
⅙L from A.P. ...	19.15.	4	76.60	18.50	18.50	4	74.00
⅔L „ ...	4.73.	2	9.46	4.50	4.50	2	9.00
Amidships ...	-	4	-	-	-	4	-
⅔L from F.P. ...	9.46	2	18.92	10.00	10.00	2	20.00
⅙L ...	38.30	4	153.20	39.75	39.75	4	159.00
F.P.	86.05	1	86.05	92.50	92.50	1	92.50
Total ...			387.25				395.50

$\dfrac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}} = $ deficient >75%

$\dfrac{\text{Mean actual sheer forward}}{\text{Mean standard sheer forward}} = $ Excess.

$\dfrac{\text{Length of enclosed superstructure}}{L}$ forward of amidships = >·1L

„ „ aft of „ = >·1L

Correction = $\dfrac{\text{Difference between sums of products}}{18}\left(.75 - \dfrac{S}{2L}\right) = \dfrac{8.25}{18}\left(.75 - \dfrac{.2827}{.4673}\right) = -.21$

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 =	27.11.
Summer freeboard =	4.04
Moulded draught (d) =	23.07

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

$\Delta =$

Tons per inch immersion at summer load water line

$T =$

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

TABULAR FREEBOARD corrected for Flush Deck (if required) 51.07.

Correction for coefficient NIL. 51.07.

	+	—
Depth Correction	12.93	-
Deduction for superstructures	-	15.89.
Sheer correction	-	.21
Round of Beam correction	.52	-
Correction for Thickness of Deck amidships ...	-	-
Other corrections, scantlings, etc.	-	-
	13.45	16.10

-2.65

Summer Freeboard = 48.42

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: 4.02

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

10m 3.37. T.

23'-1"