

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

14. CLOSURE
SUP

For

Br

Port

KARAMEA.

149326

BRITISH
SOUTHAMPTON.

1928-8.

Port of Survey

Date of Survey

Surveyor's Signature

Particulars of Classification

Moulded Dimensions: Length 48.04 Breadth 64.00 Depth 42.87

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

Coefficient of fineness for use with Tables .740 (assumed)

Depth for Freeboard (D).

Moulded depth ... 42.87

Stringer plate04

Sheathing on exposed deck

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

Depth for Freeboard (D) = 42.91

Depth correction.

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

$$(42.91 - 32.07) 3 = 32.52$$

(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) 64.00

$$\text{Standard Round of Beam} = \frac{B \times 12}{50} = 15.36$$

$$\text{Ship's Round of Beam} = 16.00$$

$$\text{Difference} = \text{Even} = .64$$

Restricted to

$$\text{Correction} = \frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.64}{4} \times \frac{5270}{4290} = .08$$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed...	173.00	173.00	8.0	-	173.00
" overhang aft ...					
" overhang forward					
Fore enclosed OPEN ...	62.50	54.56	8.0	-	54.56
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward					
Total ...	235.50	227.56			227.56

Standard Height of Superstructure 7.50

" " R.Q.D.

Deduction for complete superstructure 42.00

$$\text{Percentage covered} \frac{S}{L} = 48.95$$

$$\frac{S_1}{L} = 47.30$$

$$\frac{E}{L} = 47.30$$

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)

$$\text{Deduction} = 42.00 \times \frac{3370}{4290} = 33.70$$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	58.10	1		58.10	54.00	54.00	1		54.00
1/4 L from A.P. ...	25.85	4		103.40	24.97	24.97	4		99.88
1/2 L " ...	6.39	2		12.78	6.24	6.24	2		12.48
Amidships ...	-	4		-	-	-	4		-
1/4 L from F.P. ...	12.78	2		25.56	12.69	12.69	2		25.38
1/2 L " ...	51.71	4		206.84	50.77	50.77	4		203.08
F.P. ...	116.20	1		116.20	108.00	108.00	1		108.00
Total ...				522.88					502.82

Mean actual sheer aft = Deficient
Mean standard sheer aft

Mean actual sheer forward = Deficient
Mean standard sheer forward

Length of enclosed superstructure forward of amidships = } Deficient Sheer
" " aft of " = }

	Standard	Actual
1/2 L	12.78	12.69
1/4 L	51.71	50.77
F.P.	116.20	108.00
Total	309.67	298.38

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{20.06}{18} \times \left(\frac{.75 - .2448}{2} \right) = +.56$$

If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

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

Depth to Freeboard Deck = 42.91
Summer freeboard = 13.35
Moulded draught (d) = 29.56

Deduction for Tropical freeboard and addition for Winter freeboard = d inches = 7.39 = 7 1/2"
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

$$T =$$

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

$$= \frac{20.06}{40 \times 108} = 7 3/4"$$

TABULAR FREEBOARD corrected for Flush Deck (if required)

$$\text{Correction for coefficient} \frac{.740 \times .68}{1.36} = \frac{1.42}{1.36}$$

Depth Correction ... 32.52

Deduction for superstructures ... 14.16

Sheer correction56

Round of Beam correction08

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. 10.52

10 a moulded draught of 29.56 3/4"

Summer Freeboard = 60.22

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

Tropical Fresh Water Line above Centre of Disc ...	15 1/4"
Fresh Water Line " " ...	7 3/4"
Tropical Line " " ...	7 1/2"
Winter Line below " " ...	7 1/2"
Winter North Atlantic Line " "

Tropical Fresh Water Freeboard ...	12 1/2"
Fresh Water " " ...	12 1/2"
Tropical " " ...	12 1/2"
Winter " " ...	12 1/2"
Winter North Atlantic " "

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A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

Trade of ship.....

Names of sister ships.....

Builder's name and yard number *Fairfield S. & E. Co. No. 626.*

Owners *Shaw Savill & Albion Co. Ltd.*

Fee £



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Foundation