Standard. Tonkes

pt. C.11.

Lloyd's Register of Shipping.

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

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having 4 0 & erections

(Type of Superstructures.)

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
S.S. James Clark Ross				

Moulded Dimensions: Length 535.25 Breadth Depth 40.75

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

Coefficient of fineness for use with Tables .846

Port of Survey _____

Date of Survey _____

Name of Surveyor _____

Particulars of Classification _____

Depth for Freeboard (D)

Moulded depth ... ...

Stringer plate ... ...

Sheathing on exposed deck $T\left(\frac{L-S}{L}\right)$ =

Depth for Freeboard (D) = 48.81

Depth correction

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

(48.81 - 35.68) 3 = 39.39 –

(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 = $\frac{B \times 12}{50}$ =

Ship's Round of Beam =

Difference

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 (S_1)	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 _____

„ „ R.Q.D. _____

Deduction for complete superstructure 42.

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

„ „ $\frac{S_1}{L}$ =

„ „ $\frac{E}{L}$ = 40 L

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

Percentage from Table, Line B. (corrected for absence of forecastle (if required)) 31 –

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

Deduction = .31 x 42 = 13.02

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
$\frac{1}{6}$L from A.P. ...		4				4	
$\frac{2}{6}$L „ ...		2				2	
Amidships ...		4				4	
$\frac{2}{6}$L from F.P. ...		2				2	
$\frac{1}{6}$L „ ...		4				4	
F.P.		1				1	
Total ...							

Mean actual sheer aft / Mean standard sheer aft =

Mean actual sheer forward / Mean standard sheer forward =

Length of enclosed superstructure / L forward of amidships =

„ „ aft of „ =

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

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 =	48 - 9¾
Summer freeboard =	11 - 1½
Moulded draught (d) =	37 - 8¼

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ 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 = $\frac{\Delta}{40\,T}$ inches

=

TABULAR FREEBOARD corrected for Flush Deck (if required) 95.45 / 104.40

Correction for coefficient

	+	−
Depth Correction	39.39	
Deduction for superstructures		13.02
Sheer correction		
Round of Beam correction		
Correction for Thickness of Deck amidships ...		
Other corrections, scantlings, etc.		
	39.39	13.02

41 26.37

Summer Freeboard = 133.47

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck :— 111 12

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 „	

5m,3,32.