AS FREIGHTER

Rpt. C.11.

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

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

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having   Geometric Freeboard

as Freighter

(Type of Superstructures.)

Port of Survey _____

Date of Survey   23-6-32.

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
SIR JAMES CLARK ROSS				

Name of Surveyor _____

Moulded Dimensions : Length 535·25 Breadth 74·0 Depth 48·75

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

Coefficient of fineness for use with Tables   ·846

Particulars of Classification _____

Depth for Freeboard (D)

Moulded depth ... ...

Stringer plate ... ...

Sheathing on exposed deck

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

Depth for Freeboard (D) = 49·01

Depth correction

(a) Where D is greater than Table depth
(D — Table depth) R =   + 39·99

(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

Restricted to

Correction = $\dfrac{\text{Diff}^{e}}{4} \times \left(1 - \dfrac{S_1}{L}\right)$ = + 2·35

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 _____

„ „ R.Q.D. _____

Deduction for complete superstructure   42·00

Percentage covered $\dfrac{S}{L}$ = 20·32

„ „ $\dfrac{S_1}{L}$ = 20·04   As standard Ship with 40% E

„ „ $\dfrac{E}{L}$ = 20·04

Percentage from Table, Line A.   10·02   23·5
(corrected for absence of forecastle (if required))

Percentage from Table, Line B.   27·5
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)   ·25·5

1L

Deduction =   42·00 × ·1002 = — 4·21   10·71

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
¼L from A.P. ...		4				4	
²⁄₆L „ ...		2				2	
Amidships ...		4				4	
²⁄₆L from F.P. ...		2				2	
¼L „ ...		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 = $\dfrac{\text{Difference between sums of products}}{18}\left(·75 - \dfrac{S}{2L}\right)$ =   + 19·17

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 = 49·06

Summer freeboard = 15·46

Moulded draught (d) = 33·60

Deduction for Tropical freeboard and addition for

Winter freeboard = $\dfrac{d}{4}$ inches = 8·40 8½"

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 =

3"

TABULAR FREEBOARD corrected for Flush Deck (if required)   112·34

Correction for coefficient   1·526   126·09

	+	—
	1·36	
Depth Correction	39·99	—
Deduction for superstructures	—	4·21
Sheer correction	19·17	—
Round of Beam correction	2·35	—
Correction for Thickness of Deck amidships ...	·60	
Other corrections, scantlings, etc. Sheerway	1·50	
	63·61	4·21
	42·21	5·71

J.M.M.

59·40   33·73

Summer Freeboard = 185·47   159·82

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :— 2526½ 13'-3¾"

Tropical Fresh Water Line above Centre of Disc		Tropical Fresh Water Freeboard	
Fresh Water Line „ „		Fresh Water	
Tropical Line „ „		Tropical	
Winter Line below „ „ ...	8½	Winter	8½
Winter North Atlantic Line „ „ ...		Winter North Atlantic	