

As a Tanker - lengthened by 38' 4"

Rpt. C.11 (Comp.)

LLOYD'S REGISTER OF SHIPPING
UNITED WITH THE BRITISH CORPORATION REGISTER
SURVEYS FOR FREEBOARD
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

For LONDON OFFICE ONLY

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Index No.
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Owners C11

Ship's Name " SIR JAMES CLARK ROSS	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 573.58 Breadth 74.00 Depth 48.75					Date of Survey 15th July 1955
Freeboard Length 573.58					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth 42,890 tons					Particulars of Classification +100A1 Whaling Service C.P.I.B.
Coefficient of fineness for use with Tables .854 (Estimated)					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 48.75	(a) Where D is greater than Table depth (D - Table depth) R = (49.01 - 38.24) 3 = +32.31	Moulded Breadth (B) 74.00
Stringer plate06	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = 10.77	Standard Round of Beam = $\frac{B \times 12}{50} = \mathbf{17.76}$
Wood Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = .25 \times .8073 = \mathbf{.20}$	If restricted by superstructures	Ship's Round of Beam = 6.00
Depth for Freeboard (D) = 49.01		Difference 11.76
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{11.76}{4} \times .81 = \mathbf{+2.38}$

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 ...	107.50	107.50			107.50
" overhang ...	3.00	1.50			1.50
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	110.50	109.00			109.00

Standard Height of Superstructure **7.50**

" " R.Q.D. **✓**

Deduction for complete superstructure **42.00**

Percentage covered $\frac{S}{L} = \mathbf{19.27}$

" " $\frac{S_1}{L} = \mathbf{19.00}$

" " $\frac{E}{L} = \mathbf{13.30}$

Percentage from Table, Line A Tanker **13.30**

(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 = **42.00 × .133 = -5.59**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	67.36	1			3.75	3.75	1		3.75
$\frac{1}{4}$ L from A.P. ...		4					4		
$\frac{3}{4}$ L " ...		2					2		
Amidships ...	0	4	0	0	0	0	4	0	0
$\frac{3}{4}$ L from F.P. ...		2					2		
$\frac{1}{4}$ L " ...		4					4		
F.P. ...	134.72	1			35.75	35.75	1		35.75
Total ...				606.24					39.50

Mean actual sheer aft = **3.75**

Mean standard sheer aft = **3.75**

Mean actual sheer forward = **35.75**

Mean standard sheer forward = **35.75**

Length of enclosed superstructure forward of amidships = **109.00**

" " aft of " = **109.00**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{566.74}{18} \left(\frac{.75 - .0963}{2 \times 109} \right) = \mathbf{+20.58}$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100ft. **✓**

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.854 + .68}{1.36} = \mathbf{1.534}$
Depth to Freeboard Deck = 49.06	$\Delta =$	Depth Correction ... 32.31
Summer freeboard = 14.02	Tons per inch immersion at summer load water line	Deduction for superstructures ... 5.59
Moulded draught (d) = 35.04	T =	Sheer correction ... 20.58
Keel allowance =	Deduction = $\frac{\Delta}{40 T}$ inches	Round of Beam correction ... 2.38
Extreme draught =		Correction for Thickness of Deck amidships60
Deduction for Tropical freeboard and addition for =		Other corrections, loss of buoyancy due to settling at sea way 1.40
Winter freeboard = $\frac{d}{4}$ inches =		57.27 5.59 +51.68
Addition for Winter North Atlantic Freeboard (if required) =		Summer Freeboard = 168.28

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

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	"