

DEC 14 1937

Rpt. C.11 (Comp.).

BT. COPY.

35487

Index. No.
(For London Office only).

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

No 32254.A

Ship's Name Anglo-Indian LUCKY	Official Number 166338	Nationality and Port of Registry British PANAMANIAN London PANAMA	Gross Tonnage 6 5809	Date of Build 1938	Port of Survey Sunderland
Moulded Dimensions: Length 426.0 Breadth 61.17 Depth 28.5					Date of Survey Wrist Building
Moulded displacement at moulded draught = 85 per cent. of moulded depth 12,809 tons					Surveyor's Signature John Bartlett
Coefficient of fineness for use with Tables .710					Particulars of Classification +100 A1 With Freeboard (Contemplated)

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth	28.50	(a) Where D is greater than Table depth (D-Table depth) R =		Moulded Breadth (B)	61.17
Stringer plate	.50	(28.54-28.40) 3 = +.42		Standard Round of Beam = $\frac{B \times 12}{50}$	14.68
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Ship's Round of Beam	15.00
T $\left(\frac{L-S}{L}\right)$	None			Difference	Excess = .32
Depth for Freeboard (D) =	28.54	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L}\right)$	$\frac{.32}{4} \times .0061 = \text{NIL}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	37.80	37.80	8.0		37.80
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	383.04	383.04	8.0		383.04
" overhang aft					
" overhang forward					
F'cle enclosed					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft	5.16	DIFF x 1/2 2.58			2.58
" " forward					
Total	426.00	423.42			423.42

Standard Height of Superstructure **7.50'**
" " R.Q.D. **✓**
Deduction for complete superstructure **42.00"**
Percentage covered $\frac{S}{L} = 100.00$
" " $\frac{S_1}{L} = 99.39$
" " $\frac{E}{L} = 99.39$
Percentage from Table, Line A. **99.25**
(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 x .9925 = 41.69"**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	52.60	1		52.60	+6.00	66.00	1		66.00
1/4 L from A.P.	23.41	4		93.64	27.25	29.34	4		117.48
1/2 L	5.49	2		11.58	7.00	7.26	2		14.52
Amidships	-	4		-	-	-	4		-
3/4 L from F.P.	11.54	2		23.14	14.00	13.86	2		27.72
1/4 L	46.82	4		187.28	53.45	56.04	4		224.28
F.P.	105.20	1		105.20	120.00	126.00	1		126.00
Total				473.44	+6.00				576.00

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75-S}{2L} \right) = \frac{102.56}{18} \times .25 = -1.42$
If limited on account of midship superstructure.

Mean actual sheer aft = **Excess**
Mean standard sheer aft = **Excess**
Mean actual sheer forward = **Excess**
Mean standard sheer forward = **Excess**
Length of enclosed superstructure forward of amidships = **6.1.1.1**
" " aft of " = **6.1.1.1**

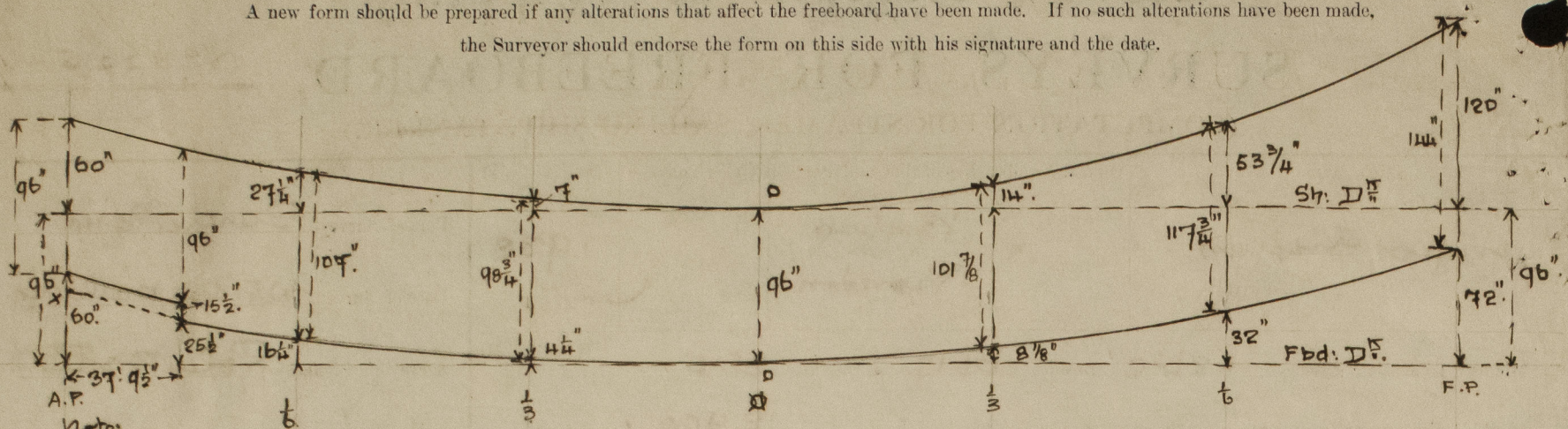
Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	79.66
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.710+.68}{1.36} = \frac{1.39}{1.36}$	81.42
Depth to Freeboard Deck = 28.54	$\Delta = 13529$	Depth Correction	42
Summer freeboard = 3.23	Tons per inch immersion at summer load water line	Deduction for superstructures	41.69
Moulded draught (d) = 25.31	T = 49.50	Sheer correction	1.42
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.32 = 6 1/4"	Deduction = $\frac{\Delta}{40T}$ inches = 6.83 = 6 3/4"	Round of Beam correction	-
Addition for Winter North Atlantic Freeboard (if required) = ✓		Correction for Thickness of Deck amidships	-
		Other corrections, scantlings, etc.	-
		Summer Freeboard = 38.43	

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

Tropical Fresh Water Line above Centre of Disc	330	13"	Tropical Fresh Water Freeboard	3' 2 3/4"	984 mm
Fresh Water Line	171	6 3/4"	Fresh Water	2' 1 3/4"	654 mm
Tropical Line	159	6 1/4"	Tropical	2' 8"	813 mm
Winter Line below	159	6 1/4"	Winter	2' 8 1/2"	825 mm
Winter North Atlantic Line			Winter North Atlantic	3' 9"	1143 mm

Lucky Anglo-Indian.

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.



Note:

abst. shear of freeboard deck is parallel to that of shelter deck. If shear of freeboard deck be carried out in a fair line to the A.P. at X then shear at X = 36".

Actual displacement at actual draught $25' 4\frac{1}{2}" = 13,455 \text{ Tons}$
T.T.S. " " " 49.50

Trade of ship General cargo

Names of sister ships. None

Builder's name and yard number Messrs Short Bros & Co No 453

Owners: Gawther, Gatta & Co, 8th St.

Fee £ 1 6

Will be changed on completion

Anglo Indian