

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

12 DEC 1958

Ship's Name Cheoy Lee Shipyard Yard No. 701 <i>"ADRI VIII"</i>	Official Number	Nationality and Port of Registry Indonesian Djakarta	Gross Tonnage 223	Date of Build 1958.	Port of Survey Hong Kong.
Moulded Dimensions: Length 108.375 ft. Breadth 22.00 ft. Depth 10.50 ft. Freeboard Length 108' 4 1/2" from F.P. to aft side rudder post on 9' 4" mld. drft. Moulded displacement at moulded draught = 85 per cent. of moulded depth 451 tons Coefficient of fineness for use with Tables .742 ✓					Date of Survey 18th November, 1958.
Surveyor's Signature <i>James A. Anderson</i> James A. Anderson					Particulars of Classification +100A1 Restricted Service.

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 10.50 ✓	(a) Where D is greater than Table depth (D-Table depth) R = (10.69 - 7.23) .834 ✓ = 2.89 ✓	Moulded Breadth (B) 22.00 ✓ Standard Round of Beam = $\frac{B \times 12}{50} = 5.28$ ✓
Stringer plate03 ✓	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = (10.69 - 10.50) .834 ✓ = 0.15 ✓	Ship's Round of Beam = 5 1/2 ✓ Difference = 22. ✓
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) = \frac{2 1/2 \times 79.94}{12 \times 108.38} = .15$ ✓	If restricted by superstructures	Restricted to Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{22^2}{4} \times .7546 = -1.04$ ✓
Depth for Freeboard (D) = 10.74 ✓		

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 ...	23.54 ✓	23.54 ✓			23.54 ✓
" overhang aft ...	See sketch on reverse.	1.84 ✓	6.75 ✓		1.84 ✓
" overhang forward ...	2.44 ✓	1.22 ✓			1.22 ✓
F'cle enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	28.44 ✓	26.60 ✓			26.60 ✓

Standard Height of Superstructure	6.00 ✓
" " R.Q.D.	
Deduction for complete superstructure	16.84 ✓
Percentage covered $\frac{S}{L} =$	26.24 ✓
" " $\frac{S_1}{L} =$	24.54 ✓
" " $\frac{E}{L} =$	
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	12.27 - 5.00 = 7.27 ✓
Percentage from Table, Line B. (corrected for absence of forecastle (if required))	
Interpolation for bridge less than .2L (if required)	
Deduction =	16.84 x .0727 = 1.22 ✓

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	20.84 ✓	1	20.84 ✓	19.50	19.50 ✓	1	19.50 ✓
1/2 L from A.P. ...	9.27 ✓	4	37.08 ✓	8.00	8.00 ✓	4	32.00 ✓
3/8 L " ...	2.29 ✓	2	4.58 ✓	0.75	.75 ✓	2	1.50 ✓
Amidships ...		4		0		4	
3/8 L from F.P. ...	4.88 ✓	2	9.16 ✓	5.75	5.75 ✓	2	11.50 ✓
1/2 L " ...	18.55 ✓	4	74.20 ✓	20.50	20.50 ✓	4	82.00 ✓
F.P. ...	41.68 ✓	1	41.68 ✓	44.25	44.25 ✓	1	44.25 ✓
Total ...			187.54 ✓				190.78 ✓

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{3.21}{18} \left(\frac{.75 - .1312}{.6188} \right) = -.11$ ✓
If limited on account of midship superstructure. *no - nil*

Mean actual sheer aft	20.84 ✓	20.84 ✓	Actual 19.5 ✓	19.5 ✓
Mean standard sheer aft =	27.27 ✓	27.81 ✓	8.0 ✓	8.0 ✓
	2.29 ✓	6.87 ✓	.75 ✓	.75 ✓
		55.52 ✓		45.78 ✓
Mean actual sheer forward				
Mean standard sheer forward =				
Length of enclosed superstructure forward of amidships =				
" " aft of " =				

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck =	10.75 ✓
Summer freeboard =	1.40 ✓
Moulded draught (d) =	9.35 ✓

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = $\frac{2.34}{4} = .585$ ✓

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta = 483$ tons at 9' 4 1/2" ext. drft.
Tons per inch immersion at summer load water line
T = 5.0

Deduction = $\frac{\Delta}{40 T}$ inches
= $\frac{483}{40 \times 5.0} = 2.41$ ✓

= 2 1/2 ✓

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

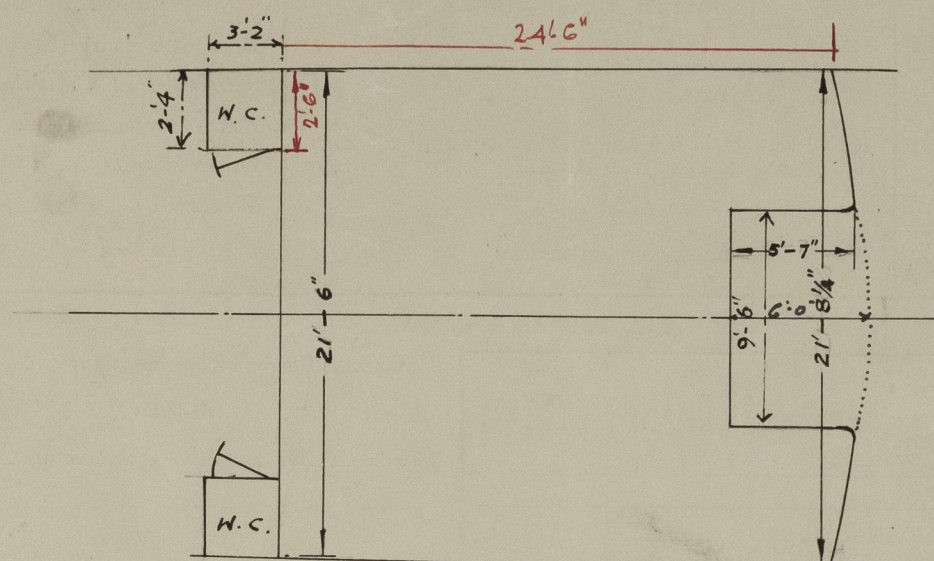
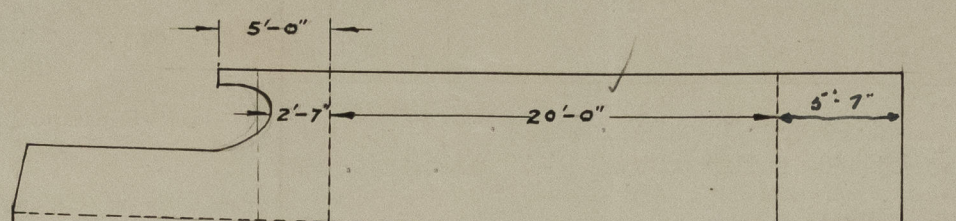
Depth Correction ...	2.89 ✓
Deduction for superstructures ...	1.22 ✓
Sheer correction ...	
Round of Beam correction04 ✓
Correction for Thickness of Deck amidships70 ✓
Other corrections, scantlings, etc. ...	3.09 ✓
Summer Freeboard =	16.75 ✓

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

Tropical Fresh Water Line above Centre of Disc	12 cm	4 3/4 ✓	Tropical Fresh Water Freeboard	1' 0" ✓
Fresh Water Line	6 cm	2 1/2 ✓	Fresh Water	1' 2 1/4 ✓
Tropical Line	6 cm	2 1/4 ✓	Tropical	1' 2 1/2 ✓
Winter Line below		not assigned	Winter	not assigned
Winter North Atlantic Line		not assigned	Winter North Atlantic	not assigned

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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.



Bridge Hse.
 as Center.
 plus aft. $\frac{3.16 \times 2.42 \times 2}{21.5} = 20.0'$
 plus forward. $\frac{5.04 \times 12.19}{21.69} = 2.83'$
 23.54' equiv

O.H. aft = $3.17' - .71' = 2.46'$
 O.H. fwd. $\frac{5.58 \times 9.5}{21.69} = 2.44'$

Trade of ship Indonesian Waters.

Names of sister ships First of this type.

Builder's name and yard number Cheoy Lee Shipyard - Yard No.701.

Owners

Fee £



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Foundation