

LLOYD'S REGISTER OF SHIPPING

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, ~~SAILING SHIP~~, ~~TANKER~~)

Received
 Index No.
 Govt. Copy
 Owners C11

Ship's Name "KURWINA"	Official Number	Nationality and Port of Registry British Rabaul	Gross Tonnage 383.4	Date of Build 1960	Port of Survey Hong Kong
Taikoo Dockyard Yard No. 486					Date of Survey Whilst building
Moulded Dimensions: Length 92'-0" Breadth 22'-0" Depth 10'-0"					Surveyor's Signature <i>James K. Young</i> James K. Young
Freeboard Length 92.00					Particulars of Classification 100A1 "For New Guinea Coasting Service" <i>(contemplated)</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 383.4 tons					
Coefficient of fineness for use with Tables .780					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 10.00'	(a) Where D is greater than Table depth (D - Table depth) R = [10.05 - 6.13] .708 = +2.76"	Moulded Breadth (B) 22.00
Stringer plate03'	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{22.00 \times 12}{50} = \mathbf{5.28}$
Wood Sheathing on exposed deck	If restricted by superstructures	Ship's Round of Beam = 6"
$T \left(\frac{L-S}{L} \right) =$		Difference .72
Depth for Freeboard (D) = 10.03'		Restricted to
		Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S}{L} \right) = \frac{.72}{4} \left[1 - \frac{6.114}{22.00} \right] = \mathbf{-.11}$

DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S _i)	Height	Height Correction	Effective Length (E)
Poop enclosed	35.75'	35.75'	7'	NIL	35.75'
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
F'cle enclosed					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	35.75	35.75			35.75

Standard Height of Superstructure **6.00**

" " R.Q.D. **15.2**

Deduction for complete superstructure **15.2**

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

" " $\frac{S_i}{L} =$ **38.86**

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

Percentage from Table, Line A. = **22.53** less **5** = **17.53**
 (corrected for absence of forecastle (if required))

Percentage from Table, Line B. **17.53**
 (corrected for absence of forecastle (if required))

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

Deduction = **15.2 x 17.53 = -2.66**

SHEER CORRECTION.							
Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S
A.P.	19.20	1	19.20	20.94"	20.94	1	20.94
$\frac{1}{4}L$ from A.P.	8.54	4	34.16	9.75	9.75	4	39.00
$\frac{2}{4}L$ "	2.11	2	4.22	3.00	3.00	2	6.00
Amidships	0	4	0	0	0	4	0
$\frac{3}{4}L$ from F.P.	4.22	2	8.44	4.63	4.63	2	9.26
$\frac{1}{4}L$ "	17.09	4	68.36	19.00	19.00	4	76.00
F.P.	38.40	1	38.40	40.69	40.69	1	40.69
Total			172.78				191.89

Mean actual sheer aft = **20.94**
 Mean standard sheer aft = **20.94**

Mean actual sheer forward = **39.00**
 Mean standard sheer forward = **39.00**

Length of enclosed superstructure forward of amidships = **NIL**
 " " aft of " = **NIL**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{19.11}{18} + 1.85 \left[\frac{.75 - .1943}{2 \times 19.20} \right] = \mathbf{-1.62}$
 If limited on account of midship superstructure. **YES - No ALLOWANCE**

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)	SUMMER FREEBOARD
Addition for Winter and Winter North Atlantic Freeboard. 10.03 / Depth to Freeboard Deck = 10.03 3.52 / Summer freeboard = .82 6.51 / Moulded draught (d) = 9.21 Keel allowance = .03 Extreme draught = 9.24 Deduction for Tropical freeboard and addition for = 1.63 - 1.34 Winter freeboard = $\frac{d}{4}$ inches = 2.3 Addition for Winter North Atlantic Freeboard (if required) =	Displacement in salt water at summer load water line 426 tons Tons per inch immersion at summer load water line 4.30 Deduction = $\frac{\Delta}{40 T}$ inches = 2.48 INCORRECT DRAUGHT USE 1.34	Correction for coefficient $\frac{.78 + .68}{1.36} = \frac{1.46}{1.36}$ Depth Correction 2.76 Deduction for superstructures 2.66 Sheer correction .11 Round of Beam correction .11 Correction for Thickness of Deck amidships .11 Other corrections, scantlings, etc. to correspond 32.38 Summer Freeboard = 42.25	9.20 9.88 42.25

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

5- APR 1961

Tropical Fresh Water Line above Centre of Disc ... **3.82**
 Fresh Water Line " " ... **1.34**
 Tropical Line " " ... **1.34**
 Winter Line below " " **NOT ASSIGNED**
 Winter North Atlantic Line " " **NOT ASSIGNED**

Tropical Fresh Water Freeboard **3.82**
 Fresh Water " **1.34**
 Tropical " **1.34**
 Winter " **NOT ASSIGNED**
 Winter North Atlantic " **NOT ASSIGNED**

Survina.

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.

SHEER ALLOWANCE FOR POOP

ACTUAL HT. OF POOP	=	7.00
WOOD DECKING		.19
		<u>7.19</u>
LESS RULE HT.		6.00
∴ EXCESS		<u>1.19</u>

∴ ALLOWANCE $\frac{14.25}{3} \times \frac{35.75}{92.00} = \underline{1.85}$

Trade of ship Coasting in the New Guinea Waters.

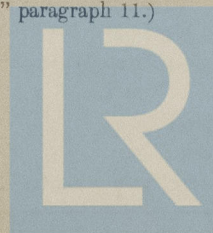
Names of sister ships "KALILI" - Taikoo Dockyard - Yard No.485

Builder's name and yard number Taikoo Dockyard & Engineering Company of Hong Kong Ltd.

Owners Burns, Philp & Co., Ltd.

Fee £ : :

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



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