

LLOYD'S REGISTER OF SHIPPING.

COMPUTATION FOR FREEBOARD.

TYPE A.	TYPE B.	TYPE B, reduced or increased	FREEBOARD.	TIMBER.
Ship's Name & Builder's Number. ALPHA TRADER	Official Number	Nationality and Port of Registry BRITISH HONG KONG	Gross Tonnage	Date of Build 1942
Particulars of Classification 1100 A1				

Least moulded depth **37.67**

Length on waterline at 85 per cent. of least moulded depth { Overall $\times 0.96$ =
to centreline of rudderstock =

Freeboard Length **425.94'** Breadth **56'** Depth (amidships) **37.67'**

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.	
Moulded depth	37.67	Table depth = $L/15 =$	
Stringer plate	05	(a) Where D is greater than Table depth (D - Table depth) R = 27.98	
Wood Sheathing on exposed deck:		(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	
$T \left(\frac{L-S}{L} \right) =$			
Depth for Freeboard (D)	37.72		

If restricted by superstructures: yes/no.

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Height	Height Correction	Breadth	Breadth Correction	Effective Length (E)	Standard Height
Fore	35.67	6.75	6.75			32.10	Superstructure 7.5
Bridge							R.Q.D.
Poop							Deduction for superstructure 4.0 L
R.Q.D.							Effective Length of R.Q.D. limited to $0.6L$ yes/no
Trunk aft							Percentage covered $\frac{S}{L} =$
forward							$\frac{E}{L} =$
Total							

Percentage from Table

TYPE A SHIP

Deduction =

TYPE B SHIP

	Line I	Line II	Timber
Percentage from Table			
Corrected for forecastle less than $0.7L$			
Interpolation for bridge less than $2L$			
Deduction	1.58		

SHEER CORRECTION.

Excess Height of End Superstructure :-

	Actual	Standard	Diff. y.	S
Poop or R.Q.D. at A.P.				$\frac{1}{3} \times \text{ / } =$
Forecastle at F.P.				$\frac{1}{3} \times \text{ / } =$

Station	Actual Ordinate	S	Product
A.P. ...	31.0	1	
$\frac{1}{2}L$ from A.P.	0	3	
$\frac{1}{2}L$ "	0	3	
Sum =			
$+(16 \times S_2)$			
Sum of virtual shear			
Allowable sum =			
$\frac{1}{2}L$ from F.P.	0	3	
$\frac{1}{2}L$ "	6.0	3	
F.P. ...	81.0	1	
Sum =			
$+(16 \times S_2)$			
Sum of virtual shear			
Allowable sum =			
Total			

Sum of Standard Sheer aft $\times \frac{8}{3} =$

" " " " fore $\times \frac{8}{3} =$

Ratio... virtual shear { aft } =

standard shear { forward } =

DEFICIENT

Length of enclosed superstructure covering { aft } =

{ forward } =

Correction = $\frac{\text{Difference between sums of products}}{16} \left(\frac{S}{2L} \right)$

= 12.87"

If limited on account of midship superstructure: yes/no.

If limited to maximum allowance: yes/no.

Maximum allowance =

004394-004404-0149 1/2

BLOCK COEFFICIENT.

'Moulded displacement (excluding boosing) at moulded draught 85 per cent. of moulded depth

Block Coefficient for use with Tables: **.785**

TABULAR FREEBOARD AND SUMMARY OF CORRECTIONS.

	TYPE A		TYPE B		TYPE B+	
TABULAR FREEBOARD						
Correction for superstructure Length < .35 L				74.69		79.68
Correction for block coefficient				80.45		85.83
Other corrections	+	=	+	=	+	=
Depth			27.98			
Superstructure			12.87	1.58		
Sheer						
Thickness of Deck amidships						
Position of Deck Line						
Scantlings, floodability						
Bow Height etc (see below)						
			40.85	1.58	39.27	39.27

Summer Freeboard =

119.72

125.10

9' 11 3/4"

10' 5"

BOW HEIGHT.

Bow Height required **16.39'**

Actual Bow Height **23.48'**

Maximum Draught = Depth (D) + Sheer at F.P. + Free Height at F.P. - Bow Height.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck	= 37.72	= 37.72	Timber
Summer freeboard	= 9.98	= 10.42	
Moulded draught (d)	= 27.74	= 27.30	
Keel Thickness	=	=	
Extreme draught	=	=	
Deduction for Tropical freeboard	=	=	
Addition for Winter freeboard	=	=	
Addition for Winter North Atlantic Freeboard	=	=	

Deduction for Fresh Water.

Displacement in salt water at summer load water line	Timber
$\Delta =$	$\Delta =$
Rate of immersion at summer load water line	
T =	T =
Deduction = $\frac{\Delta}{40 T}$	Deduction = $\frac{\Delta}{40 T}$

FREEBOARD ASSIGNED FROM DECKLINE.

Deck Line	below top of Wood, Steel,	Deck, continued to side.
Freeboard from Deck Line	Load	Line above or below Summer.
Tropical Fresh Water		above Summer
Fresh Water		" "
Tropical		" "
Summer		Upper edge of line through Centre of Ring
Winter		below Summer
Winter North Atlantic		" "
Timber Freeboard from Deck Line	Load	Line above or below Timber Summer.
Timber Tropical Fresh Water		above Timber Summer
" Fresh Water		" "
" Tropical		" "
" Summer		above Centre of Ring
" Winter		below Timber Summer
" Winter North Atlantic		" "

Committee's Minute:

0149 2/2