

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

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

Ship's Name "THALAMUS" Official Number 181782 Nationality and Port of Registry BRITISH LONDON Gross Tonnage 10,673 Date of Build 1945

Port of Survey LIVERPOOL  
Date of Survey OCT. & NOV., 1947

Moulded Dimensions: Length 503.00' Breadth 68.00' Depth 39.25'  
To centre of rudder stock  
Moulded displacement at moulded draught = 85 per cent. of moulded depth 24300 tons  
Coefficient of fineness for use with Tables .745

Surveyor's Signature Namish C. Murray  
Particulars of Classification Class contemplated

## DEPTH FOR FREEBOARD (D).

Moulded depth ... .. 39.25  
Stringer plate ... .. .08  
Sheathing on exposed deck  
 $T \left( \frac{L-S}{L} \right) =$   
Depth for Freeboard (D) = 39.33

## DEPTH CORRECTION.

- (a) Where D is greater than Table depth  
(D-Table depth) R =  $(39.33 - 33.63) \times 3 = +17.40"$   
(b) Where D is less than Table depth (if allowed)  
(Table depth-D) R =

If restricted by superstructures

## ROUND OF BEAM CORRECTION.

Moulded Breadth (B) 68.00  
Standard Round of Beam =  $\frac{B \times 12}{50} = \frac{16.32}{50} = \underline{16.32}$   
Ship's Round of Beam SEE SKETCH = 15.82"  
Difference .50  
Restricted to  
Correction =  $\frac{\text{Diff}^{\circ}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.50}{4} \times \frac{5980}{2} = \underline{+0.7"}$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..	<u>110.17</u>	<u>110.17</u>	<u>8.0</u>	<u>✓</u>	<u>110.17</u>
" overhang ... ..					
R.Q.D. enclosed ... ..					
" overhang ... ..					
Bridge enclosed ... ..	<u>38.67</u>	<u>38.67</u>	<u>8.0</u>	<u>✓</u>	<u>38.67</u>
" overhang aft ... ..					
" overhang forward ... ..					
F'cle enclosed ... ..	<u>53.0</u>	<u>53.00</u>	<u>10.0</u>	<u>✓</u>	<u>53.00</u>
" overhang ... ..	<u>.75</u>	<u>.38</u>			<u>.38</u>
Trunk aft ... ..					
" forward ... ..					
Tonnage opening aft ... ..					
" " forward ... ..					
Total ... ..	<u>202.59</u>	<u>202.22</u>			<u>202.22</u>

Standard Height of Superstructure 7.50  
" " R.Q.D. ✓  
Deduction for complete superstructure 42.00  
Percentage covered  $\frac{S}{L} = \frac{40.28}{100} = \underline{40.28\%}$   
" "  $\frac{S_1}{L} = \frac{40.20}{100} = \underline{40.20\%}$   
" "  $\frac{E}{L} = \frac{31.20}{100} = \underline{31.20\%}$   
Percentage from Table, Line A. Tanker 31.20  
(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  $\times$  31.20 = 13.10

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..	<u>60.30</u>	1		<u>60.30</u>	<u>16.00</u>	<u>16.00</u>	1		<u>16.00</u>
$\frac{1}{4}$ L from A.P. ... ..	<u>26.83</u>	4		<u>107.32</u>	<u>2.00</u>	<u>2.00</u>	4		<u>8.00</u>
$\frac{2}{4}$ L " ... ..	<u>6.63</u>	2		<u>13.26</u>	-	-	2		-
Amidships ... ..	-	4		-	-	-	4		-
$\frac{2}{4}$ L from F.P. ... ..	<u>13.27</u>	2		<u>26.54</u>	-	-	2		-
$\frac{1}{4}$ L " ... ..	<u>53.67</u>	4		<u>214.68</u>	<u>6.00</u>	<u>6.00</u>	4		<u>24.00</u>
F.P. ... ..	<u>120.60</u>	1		<u>120.60</u>	<u>18.00</u>	<u>18.00</u>	1		<u>18.00</u>
Total ... ..				<u>542.70</u>					<u>66.00</u>

Mean actual sheer aft = Deficient  
Mean standard sheer aft =

Mean actual sheer forward = Deficient  
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = Tanker  
" " aft of " =

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{476.70}{18} \left( .75 - \frac{201.4}{5486} \right) = \underline{+14.53"}$   
If limited on account of midship superstructure.

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 39.33  
Summer freeboard = 9.23  
Moulded draught (d) = 30.10

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 7.52  $\approx$  7 1/2"

Addition for Winter North Atlantic Freeboard (if required) = 7.52 + 5.03 = 12.55  $\approx$  12 1/2"

## Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta = 21890$   
Tons per inch immersion at summer load water line  
T = 67.0

Deduction =  $\frac{\Delta}{40 T}$  inches  
= 8.17  
= 8 1/4"

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient 7.45 + .68 = 8.13  
1.36

Depth Correction ... .. 17.40  
Deduction for superstructures ... .. 13.10  
Sheer correction ... .. 14.53  
Round of Beam correction ... .. .07  
Correction for Thickness of Deck amidships ... ..  
Other corrections, scantlings, etc. ... ..

Summer Freeboard = 111.30  
88.19  
92.40  
8 1/2"  
14.11"

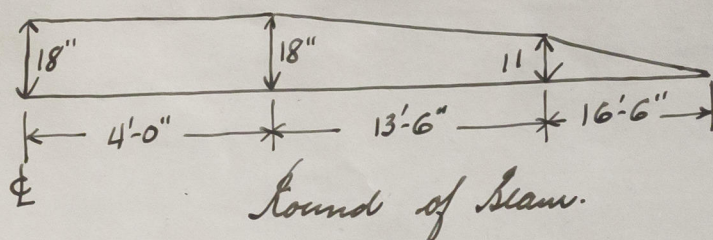
SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc ... .. 15 3/4"  
Fresh Water Line " " ... .. 8 1/4"  
Tropical Line " " ... .. 7 1/2"  
Winter Line below " " ... .. 7 1/2"  
Winter North Atlantic Line " " ... .. 12 1/2"

Tropical Fresh Water Freeboard ... .. 7 1/2"  
Fresh Water " " ... .. 8 1/4"  
Tropical " " ... .. 8 1/2"  
Winter " " ... .. 9 1/2"  
Winter North Atlantic " " ... .. 10 3/4"



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.



$$\text{Prop} = 107.50$$

$$\frac{2}{3} \times 4 = \frac{2.67}{110.17} = \text{equivalent undressed length.} \checkmark$$

$$\text{Bridge} = 36.00$$

$$\frac{2}{3} \times 4 = \frac{2.67}{38.67} = \text{equivalent undressed length.} \checkmark$$

$$\text{Camber } (8 \times 12) 18 = 1728$$

$$(27 \times 12) 14.5 = 4698$$

$$(16.50 \times 12) 11 = 2178$$

$$8604 \text{ in} \checkmark$$

$$\frac{2}{3} \times (68 \times 12) = 8604$$

$$h = \frac{8604 \times 3}{2(68 \times 12)}$$

$$\text{equivalent camber} = 15.82 \text{ in} \checkmark$$

Name of Ship THALAMUS

Freeboard Report Examined

(Date) 1 April 1957

Signed [Signature]

Trade of ship

Tanker

Names of sister ships

Builder's name and yard number

Kaiser Co. Inc. Portland Or.

Owners

Anglo Saxon Petroleum Co.

Fee £

29 0 0

11/12/57



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