

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name THAUMASTUS <i>ex White Sands</i>	Official Number 181731	Nationality and Port of Registry British London	Gross Tonnage 10,670	Date of Build 1945	Port of Survey Falmouth
Moulded Dimensions: Length 503.00' Breadth 68.00 Depth 39.25' <i>to main deck</i>					Date of Survey 16-9-47
Moulded displacement at moulded draught = 85 per cent. of moulded depth 24300 tons					Surveyor's Signature Jas. Stevenson
Coefficient of fineness for use with Tables .745					Particulars of Classification Class contemplated

DEPTH FOR FREEBOARD (D). Moulded depth ... 39.25' Stringer plate08 Sheathing on exposed deck $T \frac{(L-S)}{L} =$ - Depth for Freeboard (D) = 39.33	DEPTH CORRECTION. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(39.33 - 33.53) \times 3 = +17.40"$ (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 = $\frac{B \times 12}{50} =$ 16.32" Ship's Round of Beam = 18.00" Difference 1.68 Restricted to Correction = $\frac{\text{Diff}}{4} \times (1 - \frac{S_1}{L}) =$ $\frac{1.68}{4} \times .601 = -.25$
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DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed <i>Equ</i> ...	108.67	108.67	8.0	-	108.67
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed <i>Equ</i> ...	38.67	38.67	8.0	-	38.67
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	53.00	53.00	10.0	-	53.00
" overhang75	.37	10.0		.37
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	201.09	200.71			200.71
Standard Height of Superstructure 7.5 " " R.Q.D. - Deduction for complete superstructure 42.00 Percentage covered $\frac{S}{L} =$ 39.98 " " $\frac{S_1}{L} =$ 39.90 " " $\frac{E}{L} =$ 39.90 Percentage from Table, Line A. Tanker 30.9 (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 x .309 = -12.98					

SHEER CORRECTION.							
Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S
A.P. ...	60.30	1		60.30	24.00	24.00	1
$\frac{1}{8}L$ from A.P. ...	26.835	4		107.34	4.00	4.00	4
$\frac{2}{8}L$ " ...	6.63	2		13.26	-	-	2
Amidships ...	-	4		-	-	-	4
$\frac{3}{8}L$ from F.P. ...	13.27	2		26.54	-	-	2
$\frac{4}{8}L$ " ...	53.67	4		214.68	6.00	6.00	4
F.P. ...	120.60	1		120.60	18.00	18.00	1
Total ...				542.72			82.00
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{460.72}{18} (.75 - .1999) = +14.08"$ If limited on account of midship superstructure. .5501 If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.							
Mean actual sheer aft = < 1 Mean standard sheer aft = < 1 Mean actual sheer forward = < 1 Mean standard sheer forward = < 1 Length of enclosed superstructure forward of amidships = Tanker " " aft of " = Tanker							

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 ~ 7.2 Addition for Winter North Atlantic Freeboard (if required) = 7.52 + 5.03 = 12.55	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 1.425/1.36 Depth Correction ... 17.40 Deduction for superstructures ... 12.98 Sheer correction ... 14.08 Round of Beam correction25 Correction for Thickness of Deck amidships ... - Other corrections, scantlings, etc. ... - 31.48 Summer Freeboard = 110.67
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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"	Tropical Fresh Water Freeboard	... 9'-2 3/4"
Fresh Water Line " "	... 8 1/4"	Fresh Water " "	... 2'-8 1/2"
Tropical Line " "	... 7 1/2"	Tropical " "	... 3'-8 1/4"
Winter Line below " "	... 7 1/2"	Winter " "	... 9'-10 1/4"
Winter North Atlantic Line " "	... 12 1/2"	Winter North Atlantic " "	... 10'-3 1/4"

Thaumastus.

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.

Prop at side	106
Round $\frac{2}{3} \times 4$	2.67
Equis.	<u>108.67</u>

Bridge at side	36.0
Round $\frac{2}{3} \times$	2.67
Equis.	<u>38.67</u>

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £



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Foundation