

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>ARGUS.</b>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey.....
Moulded Dimensions: Length <b>250' 40"</b> Breadth <b>40' 0"</b> Depth <b>18' 50"</b> <i>to 4' of rudder stock</i>					Date of Survey <b>29/9/47.</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>2872.</b> tons					Surveyor's Signature.....
Coefficient of fineness for use with Tables <b>.68 (.638 actual)</b> ✓					Particulars of Classification.....

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... .. <b>18' 50"</b>	(a) Where D is greater than Table depth (D - Table depth) R = <b>(18.53 - 16.69) 1.92 = +3.54"</b>	Moulded Breadth (B) Standard Round of Beam = $\frac{B \times 12}{50} =$ Ship's Round of Beam <b>taken</b> = <b>Standard.</b>
Stringer plate ... <b>34</b> ... .. <b>03'</b>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <b>1.84</b>	Difference
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures	Restricted to
Depth for Freeboard (D) = <b>18' 53"</b>		Correction = $\frac{\text{Diff}^\circ}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ <b>Nik.</b> ✓

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ... ..						Standard Height of Superstructure <b>6' 00"</b> ✓
" overhang ... ..						" " R.Q.D. ✓
R.Q.D. enclosed ... ..						Deduction for complete superstructure <b>31' 04"</b> ✓
" overhang ... ..	<b>C</b>					Percentage covered $\frac{S}{L} =$
Bridge enclosed ... ..						" " $\frac{S_1}{L} =$ <b>100.</b> ✓
" overhang aft ... ..						" " $\frac{E}{L} =$
" overhang forward ...	<b>S</b>					Percentage from Table, Line A. (corrected for absence of forecastle (if required))
F'cle enclosed ... ..						Percentage from Table, Line B. (corrected for absence of forecastle (if required))
" overhang ... ..	<b>S</b>					Interpolation for bridge less than .2L (if required)
Trunk aft ... ..						Deduction = <b>-31' 04"</b> ✓
" forward ... ..						
Tonnage opening aft ...						
" " forward ...						
Total ... ..						

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..		1		<b>S</b>		1	
$\frac{1}{8}L$ from A.P. ... ..		4		<b>T</b>		4	
$\frac{3}{8}L$ " ... ..		2		<b>A</b>		2	
Amidships ... ..		4		<b>N</b>		4	
$\frac{3}{8}L$ from F.P. ... ..		2		<b>D</b>		2	
$\frac{1}{8}L$ " ... ..		4		<b>A</b>		4	
F.P. ... ..		1		<b>R</b>		1	
Total ... ..				<b>D.</b>			

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) =$  **-1' 50"** ✓  
If limited on account of midship superstructure.

If limited to maximum allowance of 1½ ins. per 100 ft.

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = <b>18' 53"</b> Summer freeboard = <b>29'</b> Moulded draught (d) = <b>18' 24"</b> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = Addition for Winter North Atlantic Freeboard (if required) =	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line T = Deduction = $\frac{\Delta}{40 T}$ inches =	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required) Correction for coefficient <b>Nik.</b> Depth Correction ... .. ✓ <b>3.54</b> Deduction for superstructures ... .. <b>31' 04"</b> Sheer correction ... .. <b>1.50</b> Round of Beam correction ... .. Correction for Thickness of Deck amidships ... .. Other corrections, scantlings, etc. ... .. <b>3.54 32.54 -29.00</b> Summer Freeboard = <b>32.38</b> ✓
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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 ... ..	Tropical Fresh Water Freeboard ... ..
Fresh Water Line " " ... ..	Fresh Water " " ... ..
Tropical Line " " ... ..	Tropical " " ... ..
Winter Line below " " ... ..	Winter " " ... ..
Winter North Atlantic Line " " ... ..	Winter North Atlantic " " ... ..

*Freeboard will be limited to position of lowest side of hull.*