

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name TURNIA	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
					Date of Survey 20.11.47
Moulded Dimensions: Length 54.330 Breadth 9.143 Depth 4.115					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth 1525 tons					Particulars of Classification
Coefficient of fineness for use with Tables .870					

DEPTH FOR FREEBOARD (D). Moulded depth 4.115 Stringer plate - Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ - Depth for Freeboard (D) = 4.115	DEPTH CORRECTION. (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $8.33(4.115 - 3.622) \times 13.79 = +56$ (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) 9.143 M Standard Round of Beam = $\frac{B \times 12}{50} =$ 183 Ship's Round of Beam = Nil Difference Restricted to Correction = $\frac{\text{Diff}^\circ}{4} \times \left(1 - \frac{S_1}{L}\right) =$ $\frac{183}{4} \times 6762 =$ 31
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed	11.650	11.650	2380	MIN	11.650
„ overhang aft					
„ overhang forward					
F'cle enclosed	5.943	5.943	2100		5.943
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft					
„ „ forward					
Total	17.593	17.593			17.593

Standard Height of Superstructure **1.83**
 „ „ R.Q.D. **-**
 Deduction for complete superstructure **606**
 Percentage covered $\frac{S}{L} =$ **32.38**
 „ „ $\frac{S_1}{L} =$ **32.38**
 „ „ $\frac{E}{L} =$ **32.38**
 Percentage from Table, Line **A Tanker** **23.38**
 (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 = $606 \times 23.38 =$ **-142**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	707	1	707	0	0	1	0
$\frac{1}{4}L$ from A.P.	314	4	1256	0	0	4	0
$\frac{2}{8}L$ „	78.5	2	157	0	0	2	0
Amidships	-	4	-	-	-	4	-
$\frac{2}{8}L$ from F.P.	157	2	314	0	0	2	0
$\frac{1}{4}L$ „	628	4	2512	0	0	4	0
F.P.	1413	1	1413	0	0	1	0
Total			6359				0

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 with special sheer**
 „ „ aft of „ = **Tanker with special sheer**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ $\frac{6359}{18} (.75 - .1619) =$ **+208**
 If limited on account of midship superstructure. **5881** If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Ft. Depth to Freeboard Deck = _____ Summer freeboard = _____ Moulded draught (d) = _____ Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = _____ Addition for Winter North Atlantic Freeboard (if required) = _____	Deduction for Fresh Water. 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 = _____	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.87 + .01}{1.36} = 1.55/1.36$ <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">+</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Depth Correction</td> <td style="text-align: center;">56</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Deduction for superstructures</td> <td style="text-align: center;">-</td> <td style="text-align: center;">42</td> </tr> <tr> <td>Sheer correction</td> <td style="text-align: center;">208</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Round of Beam correction</td> <td style="text-align: center;">31</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Other corrections, scantlings, etc. to correct</td> <td style="text-align: center;">295</td> <td style="text-align: center;">-</td> </tr> <tr> <td>with a summer moulded draught 9, 11'-2 1/4"</td> <td style="text-align: center;">284</td> <td style="text-align: center;">142</td> </tr> <tr> <td>Summer Freeboard =</td> <td style="text-align: center;">705</td> <td style="text-align: center;">716</td> </tr> </table>		+	-	Depth Correction	56	-	Deduction for superstructures	-	42	Sheer correction	208	-	Round of Beam correction	31	-	Correction for Thickness of Deck amidships	-	-	Other corrections, scantlings, etc. to correct	295	-	with a summer moulded draught 9, 11'-2 1/4"	284	142	Summer Freeboard =	705	716
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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 „ „