

TIMBER.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. 31138
(For London Office only.)

① 158

Computation of Freeboard for Steamer, Sailing Ship, Tanker				
having <u>POOP, BRIDGE, & FORECASTLE</u>				
(Type of Superstructures.)				
Ship's Name <u>Gwenegale</u> <u>the renamed "NERVA"</u>	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
Moulded Dimensions: Length <u>249.75</u> Breadth <u>39.50</u> Depth <u>19.86</u>				
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>3603</u> tons				
Coefficient of fineness for use with Tables <u>757</u>				
Port of Survey <u>Cardiff</u>			Date of Survey <u>14/10/35</u>	
Name of Surveyor <u>EE. Brintlecombe</u>			Particulars of Classification <u>+100M</u>	

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>19.86</u>	(a) Where D is greater than Table depth (D - Table depth) R = <u>+ 6.22"</u>	Moulded Breadth (B)
Stringer plate <u>.03</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <u>✓</u>	Standard Round of Beam = $\frac{B \times 12}{50} =$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures <u>✓</u>	Ship's Round of Beam =
Depth for Freeboard (D) = <u>19.89</u>		Difference
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) = - .23"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poep enclosed					
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed					
„ overhang aft					
„ overhang forward					
F'cle enclosed					
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft					
„ „ forward					
Total					

Standard Height of Superstructure 6.00'

„ „ R.Q.D. ✓

Deduction for complete superstructure 30.975"

Percentage covered $\frac{S}{L} =$

„ „ $\frac{S_1}{L} =$

„ „ $\frac{E}{L} = 38.84\%$

Percentage from Table, Line A. Timber 61.75% ✓
(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 = 30.975 × .6175 = -19.12" ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.		1					1		
$\frac{1}{8}L$ from A.P.		4					4		
$\frac{3}{8}L$ „		2					2		
Amidships		4					4		
$\frac{3}{8}L$ from F.P.		2					2		
$\frac{1}{8}L$ „		4					4		
F.P.		1					1		
Total									

Mean actual sheer aft =

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

„ „ aft of „ =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = - .67"$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

<p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p style="text-align: right;">Ft.</p> <p>Depth to Freeboard Deck = <u>19.89</u></p> <p>Summer freeboard = <u>1.69</u></p> <p>Moulded draught (d) = <u>18.20</u></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>4.55</u> = <u>4.2"</u></p> <p>Addition for Winter North Atlantic Freeboard (if required) = $\frac{d}{3}$ = <u>6.06</u> = <u>6"</u></p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta = 3886$</p> <p>Tons per inch immersion at summer load water line</p> <p>$T = 18$</p> <p>Deduction = $\frac{\Delta}{40T}$ inches = <u>5.40</u></p> <p>= <u>5.2"</u></p>	<p>TABULAR FREEBOARD corrected for Flush Deck (if required)</p> <p>Correction for coefficient</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction</td> <td>6.22</td> <td>-</td> </tr> <tr> <td>Deduction for superstructures</td> <td>-</td> <td>19.12</td> </tr> <tr> <td>Sheer correction</td> <td>-</td> <td>.67</td> </tr> <tr> <td>Round of Beam correction</td> <td>-</td> <td>.23</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td>-</td> <td>-</td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td>-</td> <td>-</td> </tr> <tr> <td></td> <td>6.22</td> <td>20.02</td> </tr> </table> <p>Summer Freeboard = <u>20.28</u></p>		+	-	Depth Correction	6.22	-	Deduction for superstructures	-	19.12	Sheer correction	-	.67	Round of Beam correction	-	.23	Correction for Thickness of Deck amidships	-	-	Other corrections, scantlings, etc.	-	-		6.22	20.02
	+	-																								
Depth Correction	6.22	-																								
Deduction for superstructures	-	19.12																								
Sheer correction	-	.67																								
Round of Beam correction	-	.23																								
Correction for Thickness of Deck amidships	-	-																								
Other corrections, scantlings, etc.	-	-																								
	6.22	20.02																								

<p>SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—</p> <p>Timber Tropical Fresh Water Line above Centre of Disc <u>20 1/2" = 52 1/2"</u></p> <p>„ Fresh Water Line „ <u>16" = 406"</u></p> <p>„ Tropical Line „ <u>15" = 381"</u></p> <p>„ Winter Line below „ <u>4 1/2" = 114"</u></p> <p>„ Winter North Atlantic Line „ <u>4 1/2" = 114"</u></p> <p>„ Summer „ above <u>10 1/2" = 267"</u></p>	<p>1' - 8 1/4" = 514"</p> <p>0' - 10 1/4" = 260"</p> <p>1' - 2 3/4" = 375"</p> <p>1' - 3 3/4" = 400"</p> <p>2' - 2 1/4" = 667"</p> <p>2' - 11 1/4" = 894"</p> <p>894" - 514" = 380"</p> <p>380" - 260" = 120"</p> <p>120" - 375" = -255"</p> <p>-255" - 400" = -655"</p> <p>-655" - 667" = -1322"</p> <p>-1322" - 894" = -2216"</p>
--	---

24 APR 1936

W1308-0098

21 APR 1936

RECEIVED