

Timber Deck-cargo forward B.T. COPY

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index. No. 36457
(For London Office only).

Ship's Name <i>Mari II</i>	Official Number <i>165994</i>	Nationality and Port of Registry <i>British Glasgow</i>	Gross Tonnage <i>1372</i> <i>1395</i>	Date of Build <i>1918</i>	Port of Survey
Moulded Dimensions: Length <i>237.5</i> Breadth <i>37.01</i> Depth <i>20.00</i>					Date of Survey <i>23-1-41</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>3100</i> tons					Surveyor's Signature
Coefficient of fineness for use with Tables <i>.726</i>					Particulars of Classification <i>Class contemplated</i>

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth	(a) Where D is greater than Table depth (D-Table depth) R = <i>+7.69</i> ✓	Moulded Breadth (B)
Stringer plate	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam =
Depth for Freeboard (D) =		Difference
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <i>Nil</i> ✓

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... ..	<i>57.42</i>		<i>7.0</i>		
„ overhang aft					
„ overhang forward					
F'cle enclosed <i>equivalent</i>	<i>28.52</i>		<i>7.0</i>		
„ overhang	<i>3.23</i>				
Trunk aft					
„ forward					
Tonnage opening aft ...					
„ „ forward					
Total					

Standard Height of Superstructure *6.0*

„ „ R.Q.D. *-*

Deduction for complete superstructure *29.75* ✓

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

„ „ $\frac{S_1}{L} =$

„ „ $\frac{E}{L} =$ *36.86* ✓

Percentage from Table, Line A. *Timber 59.63* ✓

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. *poop 59.63 - 5 = 54.63* ✓

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = *29.75 × 54.63 = -16.25* ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.		1					1		
$\frac{1}{4}$ L from A.P.		4					4		
$\frac{2}{4}$ L „		2					2		
Amidships		4					4		
$\frac{3}{4}$ L from F.P.		2					2		
$\frac{1}{4}$ 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 = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ *+1.87* ✓

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>Depth to Freeboard Deck = <i>20.04</i></p> <p>Summer freeboard = <i>2.02</i></p> <p>Moulded draught (d) = <i>18.02</i></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>4.50 = 4\frac{1}{2}</i></p> <p>Addition for Winter North Atlantic Freeboard (if required) = $\frac{d}{3} = 6.00 = 6$ ✓</p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta =$ <i>3327</i> ✓</p> <p>Tons per inch immersion at summer load water line</p> <p>$T =$ <i>18.03</i> ✓</p> <p>Deduction = $\frac{\Delta}{40T}$ inches = <i>4.61</i></p> <p>= <i>4\frac{1}{2}</i> ✓</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;"> <thead> <tr> <th></th> <th>+</th> <th>-</th> </tr> </thead> <tbody> <tr> <td>Depth Correction</td> <td><i>7.69</i></td> <td><i>-</i></td> </tr> <tr> <td>Deduction for superstructures</td> <td><i>-</i></td> <td><i>16.25</i> ✓</td> </tr> <tr> <td>Sheer correction</td> <td><i>1.87</i></td> <td><i>-</i></td> </tr> <tr> <td>Round of Beam correction</td> <td><i>-</i></td> <td><i>-</i></td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td><i>-</i></td> <td><i>-</i></td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td><i>-</i></td> <td><i>-</i></td> </tr> <tr> <td>Summer Freeboard =</td> <td><i>24.19</i></td> <td><i>-</i></td> </tr> </tbody> </table> <p><i>29.85</i> ✓</p> <p><i>30.88</i> ✓</p> <p><i>87.8</i></p> <p><i>23.1.41</i></p>		+	-	Depth Correction	<i>7.69</i>	<i>-</i>	Deduction for superstructures	<i>-</i>	<i>16.25</i> ✓	Sheer correction	<i>1.87</i>	<i>-</i>	Round of Beam correction	<i>-</i>	<i>-</i>	Correction for Thickness of Deck amidships	<i>-</i>	<i>-</i>	Other corrections, scantlings, etc.	<i>-</i>	<i>-</i>	Summer Freeboard =	<i>24.19</i>	<i>-</i>
	+	-																								
Depth Correction	<i>7.69</i>	<i>-</i>																								
Deduction for superstructures	<i>-</i>	<i>16.25</i> ✓																								
Sheer correction	<i>1.87</i>	<i>-</i>																								
Round of Beam correction	<i>-</i>	<i>-</i>																								
Correction for Thickness of Deck amidships	<i>-</i>	<i>-</i>																								
Other corrections, scantlings, etc.	<i>-</i>	<i>-</i>																								
Summer Freeboard =	<i>24.19</i>	<i>-</i>																								

Timber **SUMMER FREEBOARD** amidships from Centre of Disc to top of Deck Line, **Wood, Steel, Deck:**

	Timber	Steel	Deck
Tropical Fresh Water Line above Centre of Disc ...	<i>17\frac{3}{4}</i> ✓	<i>17\frac{3}{4}</i> ✓	<i>17\frac{3}{4}</i> ✓
Fresh Water Line „ „	<i>13\frac{1}{4}</i> ✓	<i>13\frac{1}{4}</i> ✓	<i>13\frac{1}{4}</i> ✓
Tropical Line „ „	<i>13\frac{1}{4}</i> ✓	<i>13\frac{1}{4}</i> ✓	<i>13\frac{1}{4}</i> ✓
Winter Line <i>below above</i> „ „	<i>2\frac{3}{4}</i> ✓	<i>2\frac{3}{4}</i> ✓	<i>2\frac{3}{4}</i> ✓
Winter North Atlantic Line <i>above</i> „ „	<i>6\frac{1}{4}</i> ✓	<i>6\frac{1}{4}</i> ✓	<i>6\frac{1}{4}</i> ✓
<i>Summer</i> „ „	<i>8\frac{3}{4}</i> ✓	<i>8\frac{3}{4}</i> ✓	<i>8\frac{3}{4}</i> ✓

28 JAN 1941

10m 3.37. T.

010982-010991-0074