

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>MARIA PEPA</b> <i>now named CABO DE HORROS.</i>	Official Number	Nationality and Port of Registry <i>Spanish Bilbao</i>	Gross Tonnage <i>12567 12597</i>	Date of Build <i>1921</i>	Port of Survey <i>San Francisco</i>
Moulded Dimensions: Length <i>158.20<sup>m</sup></i> Breadth <i>21.942<sup>m</sup></i> Depth <i>12.497<sup>m</sup></i>					Date of Survey <i>24th May 1940.</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>24355 M<sup>3</sup></i>					Surveyor's Signature <i>D. Millar.</i>
Coefficient of fineness for use with Tables <i>.68 (1.66 actual).</i>					Particulars of Classification <i>100A1 with food.</i>

Depth for Freeboard (D). <i>M.</i>	Depth correction.	Round of Beam correction.
Moulded depth ... <i>12.497</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>8.33 (12.511 - 10.547) x 30 = +491 m/m</i> <i>1.964</i>	Moulded Breadth (B) <i>21.942 m</i>
Stringer plate ... <i>14</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <i>✓</i>	Standard Round of Beam = $\frac{B \times 100}{50} =$ <i>439 m/m</i>
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ <i>✓</i>	If restricted by superstructures <i>✓</i>	Ship's Round of Beam = <i>Nie</i>
Depth for Freeboard (D) = <i>12.511</i>		Difference <i>439 "</i>
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ <i><math>\frac{439}{4} \times 0.0205 = +2.2</math> m/m</i>

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S) <i>M</i>	Equivalent Enclosed Length (S <sub>1</sub> ) <i>M</i>	Height <i>M</i>	Height Correction	Effective Length (E) <i>M</i>
Poop enclosed ...	<i>123.76</i>	<i>123.76</i>	<i>1.743</i>	<i>✓</i>	<i>123.76</i>
" overhang ...	<i>.61</i>	<i>.30</i>			<i>.30</i>
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward					
Fore enclosed ...	<i>12.86</i>	<i>12.86</i>	<i>2.743</i>	<i>✓</i>	<i>12.86</i>
" overhang ...	<i>9.55</i>	<i>4.77</i>			<i>4.77</i>
Trunk aft ...					
" forward ...					
Tonnage opening <i>at forward</i>	<i>1.42</i>	<i>3.26</i>	<i>diff</i>	<i>✓</i>	<i>3.26</i>
" " <i>forward</i>					
Total ...	<i>158.20</i>	<i>154.95</i>			<i>154.95</i>

Standard Height of Superstructure *2.290 m.*

" " R.Q.D. *✓*

Deduction for complete superstructure *1067 m/m*

Percentage covered  $\frac{S}{L} =$  *100.00*

" "  $\frac{S_1}{L} =$  *97.95*

" "  $\frac{E}{L} =$  *97.95*

Percentage from Table, Line A. *97.48*

(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 =  $1067 \times 97.48 = -1040$  m/m.

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate <i>+453</i>	Effective Ordinate	S M	Product
A.P. ...	<i>1572</i>	<i>1</i>	<i>1572</i>	<i>991</i>	<i>1444</i>	<i>1</i>	<i>1444</i>
$\frac{1}{4}$ L from A.P. ...	<i>698</i>	<i>4</i>	<i>2792</i>	<i>127</i>	<i>580</i>	<i>4</i>	<i>2320</i>
$\frac{3}{8}$ L " ...	<i>174</i>	<i>2</i>	<i>348</i>	<i>-</i>	<i>159</i>	<i>2</i>	<i>318</i>
Amidships ...	<i>-</i>	<i>4</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>4</i>	<i>-</i>
$\frac{5}{8}$ L from F.P. ...	<i>349</i>	<i>2</i>	<i>698</i>	<i>-</i>	<i>352</i>	<i>2</i>	<i>704</i>
$\frac{3}{4}$ L " ...	<i>1397</i>	<i>4</i>	<i>5588</i>	<i>483</i>	<i>936</i>	<i>4</i>	<i>3744</i>
F.P. ...	<i>3144</i>	<i>1</i>	<i>3144</i>	<i>2743</i>	<i>3196</i>	<i>1</i>	<i>3196</i>
Total ...			<i>14142</i>	<i>+453</i>			<i>11726</i>

Actual height of Superstructure = *2743*

Standard " " = *2290*

Diff. *453*

Mean actual sheer aft = *991*

Mean standard sheer aft = *1444*

Mean actual sheer forward = *127*

Mean standard sheer forward = *580*

Length of enclosed superstructure forward of amidships = *✓*

" " aft of " = *✓*

Deficient.

Cor.

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) = \frac{2416}{18} \times .25 = +34$  m/m

If limited on account of midship superstructure. *✓*

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

Deduction for Tropical Freeboard.  
Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *12.511*

Summer freeboard = *3251*

Moulded draught (d) = *9260*

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 =  $\frac{\Delta}{40T}$  inches

= *190 m/m*

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient *1.00*

Depth Correction ...

Deduction for superstructures ...

Sheer correction ...

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. to conform to all-seasons moulded draught *30'-4 1/2"*

Summer Freeboard = *3251 m/m*

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

Tropical Fresh Water Line above Centre of Disc *7.48" 190 m/m*

Fresh Water Line " " *7.48" 190 "*

Tropical Line " " *✓ ... Nie.*

Winter Line below " " *✓ ... Nie.*

Winter North Atlantic Line " " *✓ ... ✓*

Tropical Fresh Water Freeboard ...

Fresh Water " " ...

Tropical " " ...

Winter " " ...

Winter North Atlantic " " ...

24 SEP 1940