

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 Index. No. **334.06.**
 (For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having *a forecastle.*Port of Survey *Barcelona*

(Type of Superstructures.)

Date of Survey *5th. 7th. April 1934*

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

*CIUDAD DE BARCELONA**Spanish
Palma de Mallorca.**3946**1929*Name of Surveyor *Geo. J. Thomas.*Moulded Dimensions: Length *100.89m.* Breadth *14.884m.* Depth *8.509m.*Moulded displacement at moulded draught = 85 per cent. of moulded depth *7490 m³ tons*Coefficient of fineness for use with Tables *.690*Particulars of Classification *+100M**with freeboard.*

Depth for Freeboard (D)				Depth correction		Round of Beam correction	
Moulded depth	<i>8.509</i>	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	<i>14.884m.</i>
Stringer plate	<i>12</i>	<i>8.33(8.573 - 6.726) * 25.48 = +392 m</i>		Standard Round of Beam = $\frac{B \times 12}{50}$	<i>= 298 m</i>
Sheathing on exposed deck				(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam	<i>= 152</i>
$T \left(\frac{L-S}{L} \right) =$	<i>65 * 8006</i>		<i>52</i>			Difference	<i>146</i>
Depth for Freeboard (D) =	<i>8.573</i>			If restricted by superstructures		Restricted to	
						Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right)$	<i>= \frac{146 * 8006}{4} = +29 m</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 ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	<i>20.12</i>	<i>20.12</i>	<i>2.210</i>	<i>✓</i>	<i>20.12</i>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	<i>20.12</i>	<i>20.12</i>			<i>20.12</i>

Standard Height of Superstructure *2.078*" " R.Q.D. *✓*Deduction for complete superstructure *950*Percentage covered $\frac{S}{L} =$ *19.94*" $\frac{S_1}{L} =$ *19.94*" $\frac{E}{L} =$ *19.94*

Percentage from Table, Line A.

(corrected for absence of forecastle (if required)) *9.97*Percentage from Table, Line B. *✓*

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required) *✓*Deduction = *950 * 0.997 = - 95 m*

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>1094</i>	<i>1</i>		<i>1094</i>	<i>920</i>	<i>920</i>	<i>1</i>		<i>920</i>
$\frac{1}{8}L$ from A.P. ...	<i>486</i>	<i>4</i>		<i>1944</i>	<i>349</i>	<i>349</i>	<i>4</i>		<i>1396</i>
$\frac{2}{8}L$ " ...	<i>121</i>	<i>2</i>		<i>242</i>	<i>87</i>	<i>87</i>	<i>2</i>		<i>174</i>
Amidships ...	<i>-</i>	<i>4</i>		<i>-</i>	<i>-</i>	<i>-</i>	<i>4</i>		<i>-</i>
$\frac{2}{8}L$ from F.P. ...	<i>243</i>	<i>2</i>		<i>486</i>	<i>213</i>	<i>213</i>	<i>2</i>		<i>426</i>
$\frac{1}{8}L$ " ...	<i>973</i>	<i>4</i>		<i>3892</i>	<i>851</i>	<i>851</i>	<i>4</i>		<i>3404</i>
F.P. ...	<i>2189</i>	<i>1</i>		<i>2189</i>	<i>1874</i>	<i>1874</i>	<i>1</i>		<i>1874</i>
Total ...				<i>9847</i>					<i>8194</i>

Mean actual sheer aft = *Deficient*Mean actual sheer forward = *Deficient*Length of enclosed superstructure forward of amidships = *Sheer Deficient*

" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{1653}{18} \left(.75 - \frac{.6503}{2} \right) = +60 m$

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.

 Ft.
 Depth to Freeboard Deck = *8586*
 Summer freeboard = *2714*
 Moulded draught (d) = *5872*

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{48}$ inches = *122 m*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*1906 m = 127 m*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{.694 - .68}{1.36} = \frac{.014}{1.36} =$ Depth Correction ... *392*Deduction for superstructures ... *95*Sheer correction ... *60*Round of Beam correction ... *29*Correction for Thickness of Deck amidships ... *13*Other corrections, scantlings, etc. ... *1003**1497* *95* *+1402*Summer Freeboard = *2714*SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: *2714 m = 106.83'*Tropical Fresh Water Line above Centre of Disc ... *249 = 9.80'*Fresh Water Line " " ... *127 = 5.00'*Tropical Line " " ... *122 = 4.80'*Winter Line below " " ... *122 = 4.80'*Winter North Atlantic Line " " ... *✓*Tropical Fresh Water Freeboard ... *2465 = 97.03'*Fresh Water " " ... *2587 = 101.83'*Tropical " " ... *2592 = 102.83'*Winter " " ... *2836 = 111.63'*Winter North Atlantic " " ... *✓*

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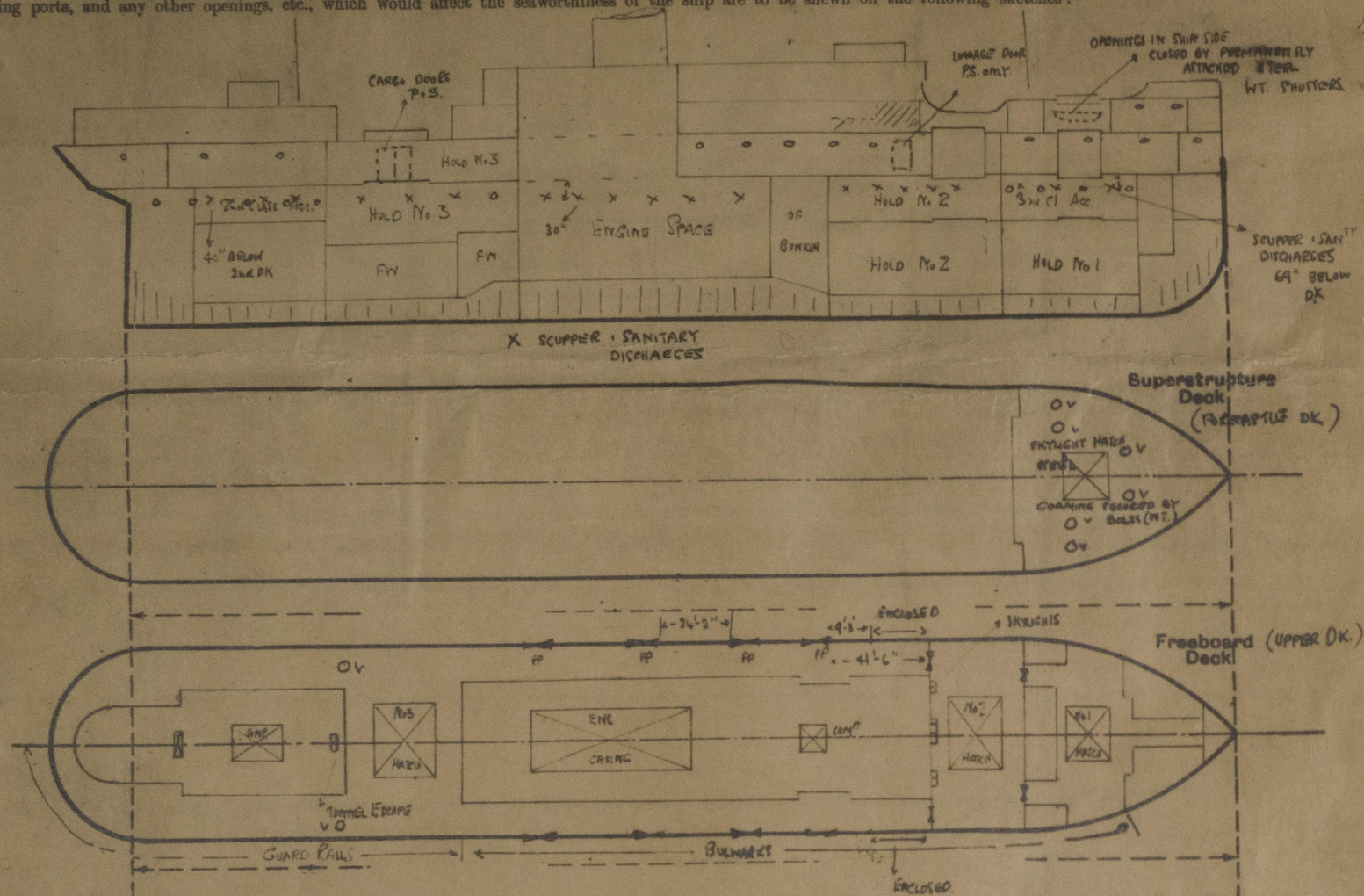
MARINE FORM

RECEIVED 30 AUG 1935

5-8 SEP 1935

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



State any special features in the construction of the ship:—

Vessel surveyed afloat.

The forecastle on this vessel is now a closed superstructure, the side openings in the shell having been closed by permanently attached steel plate shutters with W.T. joints. Teak wood doors are fitted in the bulkhead entrances. as shown in above sketch.

Draught limited by scantlings to that of a complete superstructure vessel viz. 5.872 metres summer loadline.

Builder's name and yard number *Cant. Nav. Triestino - Monfalcone*

Names of sister ships *Ciudad de Palma*

Owners *Cia. Transmediterranea.*

Fee *810 flis.*

Received by me *[Signature]*



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