

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received

Index No.

Govt. Copy

Owners C11

Ship's Name SAN PEDRO	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 512 Breadth 67.92 Depth 39.44	Freeboard Length				Date of Survey 14.3.56
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing)	Coefficient of fineness for use with Tables .816				Surveyor's Signature
Particulars of Classification dry cargo carrier contemplated					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 39.44	(a) Where D is greater than Table depth (D-Table depth) R = (39.57 - 34.13) 3' = 16.32	Moulded Breadth (B) 67.92
Stringer plate07	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 16.30$
Wood Sheathing on exposed deck .06		Ship's Round of Beam = 16.75
$T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Difference .45
Depth for Freeboard (D) = 39.57		Restricted to
		Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.45}{4} \times \frac{412}{L} = .05$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Peep enclosed	58.24	58.24	7.87		
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	39.63	39.63			
" overhang aft					
" overhang forward					
F'cle enclosed	44.39	44.39			
" overhang					
Trunk aft		93.70	5.15	X	
" forward		65.00		X	
Tonnage opening aft					
" " forward					
Total	142.26	300.96			300.96

Standard Height of Superstructure **7.50**

" " R.Q.D. **✓**

Deduction for complete superstructure **42.00**

Percentage covered $\frac{S}{L} = 27.79$

" " $\frac{S_1}{L} = 58.79$ **✓** *Assume Bridge closed for full allowance of superstructure*

Percentage from Table, Line A. **44.31** **✓**

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. **44.79** **✓**

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required) **.48 x 39.63 = .19**

Deduction = **42 x .4450 = 18.69** **✓**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	6120	1			57.12	57.12	1		
$\frac{1}{4}$ L from A.P.		4			17.76	17.76	4		
$\frac{2}{8}$ L "		2					2		
Amidships	0	4	0	0	0	0	4	0	0
$\frac{2}{8}$ L from F.P.		2			23.16		2		
$\frac{1}{4}$ L "		4			23.16	23.16	4		
F.P.		1			114.24	114.24	1		
Total				550.86					335.04

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{215.82}{18} \left(.75 - \frac{.1390}{2L} \right) = + 7.33$

If limited on account of midship superstructure.

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 " =

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

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **39.57**

Summer freeboard = **10.10**

Moulded draught (d) = **29.47**

Keel allowance =

Extreme draught =

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

Depth Correction **16.32**

Deduction for superstructures **18.69**

Sheer correction **7.33**

Round of Beam correction **.05**

Correction for Thickness of Deck amidships **.05**

Other corrections, scantlings, etc.

+	-
16.32	
18.69	
7.33	
.05	
.05	
23.65	18.74

Summer Freeboard = **721.27**

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 " "

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

10.640 m wide = 34.91 ft.

aft tank =

$$\begin{array}{r} 22050 \\ 17050 \\ \hline 22500 \\ \checkmark 61600 \\ \hline 6040 \\ \checkmark 55560 \end{array} \quad - \quad \begin{array}{r} 3555 \\ 2685 \\ \hline 6040 \end{array}$$

$$182.29' \times \frac{34.91}{67.92} = 93.70'$$

Forward tank

$$\begin{array}{r} 19535 \\ 21095 \\ \hline 3950 \\ \checkmark 44580 \\ \hline 6040 \\ \checkmark 38540 \end{array}$$

$$126.45' \times \frac{34.91}{67.92} = 65.08'$$

Bridge $6040 + 6040 = 12080' = 39.63'$

Trade of ship

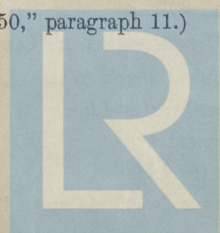
Names of sister ships

Builder's name and yard number

Owners

Fee £ : :

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



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