

# Lloyd's Register of Shipping

## SURVEYS FOR FREEBOARD - STEAMERS

(Under the Provisions of the U. S. A. Load Line Act of March 2, 1929)

New York Office Index No. 27  
Port of Survey Philadelphia  
Date of Survey 8th Nov 1935  
Name of Surveyor G. Harbutt

Ship's Name <b>SAN JUAN</b>	Port of Registry and Nationality <b>Baltimore U.S.A.</b>	Official Number <b>221360</b>	Gross Tonnage <b>6817</b>	Date of Build. <b>1921-6</b>	Particulars of Classification <b>+100 ft. No. 103, 2-34</b> <b>Carrying petroleum in bulk</b>
S.S. <b>W. W. Mills</b>					
M.S.					
Number in Register Book <b>36146</b>					
Owner <b>Merchants S. S. Corp.</b>	Builder <b>Merchants S. S. Corp.</b>				Hull No. <b>381</b>
Moulded dimensions <b>424.0 x 58.0 x 33.0</b>					
Moulded displacement at a moulded draught of 85 per cent. of moulded depth <b>16,445 x .995 = 15,965 Tons</b>					
Coefficient of fineness for use with tables <b>.810</b>					

DEPTH FOR FREEBOARD.	CORRECTION FOR DEPTH.	CAMBER
Moulded depth ... 33.00	(a) When D is greater than $\frac{L}{15}$	Standard $\frac{58 \times 12}{50} = \dots 13.92$
Stringer plate ... .64	$(D - \frac{L}{15}) \times R = (33.05 - 28.27) \times 3 = 14.37$	Ship ... equivalent ... 10.78
Sheathing in wells $T(\frac{L-S}{L}) = \dots$	(b) When D is less than $\frac{L}{15}$ (if allowed).	Difference ... 3.14
Depth D = ... 33.05	$(\frac{L}{15} - D) \times R = \dots$	Restricted to ...
	If restricted by height of superstructures ...	Allowance = $\frac{\text{Difference}}{4} \times (1 - \frac{S}{L}) = \frac{3.14}{4} \times \frac{57}{42} = 1.45$

### SUPERSTRUCTURES.

	Mean Covered Length S	Effective Length S <sub>e</sub> (Uncorrected for Height)	Height	Correction for Height	Effective Length
Poop enclosed	128.29	128.29	8.0	✓	128.29
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	24.96	24.96	8.0	✓	24.96
" overhang aft					
" overhang forward					
F'cle enclosed	40.71	27.37	8.0	✓	27.37
" overhang					
Trunks forward					
" aft					
Tonnage opening					
<b>TOTAL =</b>	<b>193.96</b>	<b>180.62</b>			<b>180.62</b>
Length of ship (L) =	424	424			424
% Covered ... =	45.75%	42.60%			42.60%
Corresponding %, corrected for absence of forecastle if required } <b>A = Tanker</b>					
Allowance ... =	42	33.60%		Correction for Bridge less than 2 L if required } = -14.11	

*Sheer forward*

0.19	4	.76
11.94	2	23.88
41.81	4	167.24
90.0	1	90.00
		<u>281.88</u>

*Standard Sheer Forward*

6.55	4	26.20
26.20	2	52.40
58.95	4	235.80
104.80	1	104.80
		<u>419.20</u>

### SHEER.

Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.
A.P. 1	45.56	52.40	45.56	1	45.56
A.P. 2	21.19	29.48	21.19	2	42.38
A.P. 3	4.75	13.10	4.75	4	19.00
A.P. 4		3.27		2	6.54
A.P. 5				2	
A.P. 6	0.19	6.55	0.19	4	0.76
A.P. 7	1.94	26.20	1.94	2	3.88
A.P. 8	4.81	58.95	4.81	4	19.24
F.P. 9	9.00	90.00	9.00	1	9.00
Mean effective sheer ...					17.57
Standard sheer .05 L + 5 =					26.20
Difference (Df) ...					8.63
Allowance = $Df \times (\frac{S}{L} - .75) = 8.63 \times (\frac{75}{42} - .75) = 4.50$					4.50
If limited on account of amidship superstructure ...					✓
If limited on account of excess sheer (1 1/2 in. per 100 ft.) ...					✓

If excess sheer forward and deficient sheer aft:-

Actual sheer aft = Deficient

Standard sheer aft =

Actual sheer forward =  $\frac{281.88}{419.20} = 67.24\%$

Standard sheer forward =

∴ allow 67.24% of open forward

Length of enclosed superstructure L

Forward of amidships =

Aft of amidships =

DRAFTS.	F. W. ALLOWANCE	TABULAR FREEBOARD (corrected for flush deck if required) =
Moulded Depth D = 33'-0"	Displacement = 15015	Corrected for Coefficient $\frac{810 + .68}{136} = 68.40$
Stringer Plate = (or Wood Deck) 3/4"	Tons per inch = 51.3	Correction for Depth ... 14.37
Freeboard 6'-8 1/4"	$\frac{15015}{40 \times 51.3} = 7.32$	" Superstructures ... 14.11
Moulded draught 26'-4 1/2"		" Sheer ... 4.50
Addition for keel below base line 2 1/4"		" Camber ... .45
Extreme draught 26'-6 3/4"		" Thickness of deck ...
		" Scantlings, etc. ...
		Summer Freeboard = 80.15

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

Tropical Fresh Water Line (above center of Disc)	5'-6 1/4"	Tropical Fresh Water Freeboard	...
Fresh Water Line	6'-0 3/4"	Fresh Water	...
Tropical Line	6'-1 1/2"	Tropical	...
Winter Line (below " " )	7'-2 3/4"	Winter	...
Winter North Atlantic Line	7'-4"	Winter North Atlantic	...



SAN JUAN I

Department of Commerce.

Note:—The Rules referred to below are the Load Line Regulations of the United States Dept. of Commerce.  
(These should be consulted when completing the report.)

Is the poop or raised quarter deck connected with the bridge? No  
 Has the poop or raised quarter deck an efficient steel bulkhead at the fore end? Yes  
 Give particulars of the means of closing the openings in this bulkhead (Rules 43 and 44). No openings  
 Has the bridge an efficient steel bulkhead at the fore end? Yes  
 Give particulars of the means of closing the openings in this bulkhead. No openings  
 Has the bridge an efficient steel bulkhead at the after end? Yes  
 Give particulars of the means of closing the openings in this bulkhead. 2 hinged steel H.T. doors  
 Has the forecastle an efficient steel bulkhead at the after end? No open  
 Give particulars of the means of closing the openings in this bulkhead.  
 Are the engine and boiler openings covered by a bridge, poop, raised quarter-deck, or enclosed by a strong steel deckhouse? Covered by poop  
 If the openings are not so protected, are the exposed parts of the casing efficiently constructed? Yes  
 Give thickness of plating, scantlings and spacing of stiffeners  
 Are Rules Nos. 19, 20, 21 and 22 complied with (where applicable)? Yes

Particulars of bulkheads of erections:

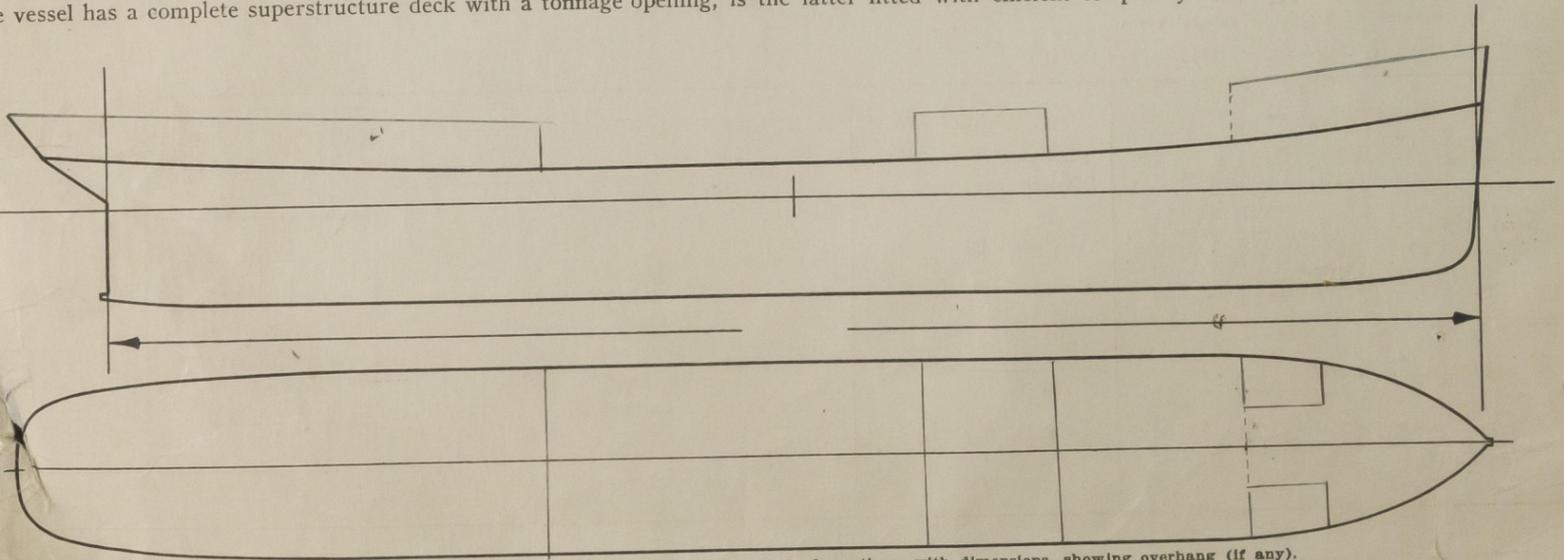
	Poop or Raised Quarter-Deck bulkhead	Bridge front bulkhead	Bridge after bulkhead	Forecastle bulkhead
Thickness of bulkhead plating	Coaming .44 B.H. .40	.40 Coaming .44	Coaming .44 B.H. .40	
Scantlings of stiffeners	8 x 3 1/2 x 3 1/2 x .425	8 x 3 1/2 x 3 1/2 x .425	8 x 3 1/2 x 3 1/2 x .425	Open at after
Spacing of stiffeners, and if bracketed	28" bracketed	28" bracketed	28" bracketed	
Height of sills of openings above deck	No openings	✓	17 1/2"	

Particulars of weather deck hatchways. (In case of complete superstructure vessels having tonnage openings, give, in addition, particulars of 2nd deck hatchways, and also of those in bridge spaces closed by Class 2 appliances, or in open bridges).

Position and Size.	No. 1 9'-0" x 19'-0"		18 O.T. Hatch 8'-8" x 6'-0"		8 Summer Tank 6'-0" x 4'-0"		Poop Deck 8'-2" x 22'-0"		Ship.	Rule.
	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.		
COAMING										
Height above top of DECK	30"		7"		30"		21"			
Thickness	Sides.....	.44	L7 x 3 1/2 x .50		.44		.44			
	Ends.....	.44			.44		.44			
SHIFTING BEAMS OR WEB PLATES.	Number.....	One	✓		✓		One			
	Section and Scantlings.....	17 x .38 4 x 3 x .44					18 1/2 x .38 4 x 3 x .44			
	Material.....	Steel					Steel			
* FORE AND AFTERS.	Number.....				✓		✓			
	Section and Scantlings.....	Nil								
	Material.....									
HATCHES Thickness	5" Spruce		.38 Steel Stiffened		.38 Steel Stiffened		1 3/4 Spruce			
Remarks										

\* The depth of Fore and Afters should be stated from the underside of the hatches in all cases.

Are Rules 12, 13, 14, 15, 16, 17, 18 complied with as far as practicable? Yes  
 Are hatchway coamings stiffened in accordance with Rule 9? Yes  
 Length of bulwarks in wells—forward: 8 1/2 feet; aft: 14 1/2 feet.  
 Area of freeing ports required by regulations (Rules 30 and 100) forward: Open bulwarks for half length sq. ft.; aft:                      sq. ft.  
 Particulars of freeing ports fitted on each side of vessel  
 forward well }  $4 \times 47' \times 15' = 19.6$  sq. ft.  
 after well }  $7 \times 47' \times 15' = 30.3$  sq. ft.  
 Are Rules 23 and 24 complied with as far as practicable? Yes  
 Are air pipes to tanks in accordance with Rule 25? Yes  
 Are all scuppers and sanitary discharge pipes in accordance with Rule 27? Yes  
 In oil tankers, what is the extent of the fore and aft gangway? Bridges to Poop Are the crew berthed in the forecastle? (Rule 96). No  
 Is the gangway strong and efficiently braced fore and aft? Yes State spacing of supports 10 feet.  
 In oil tankers, are the bulwarks open for at least half the length of the exposed portion of the weather deck? (Rule 100). Yes  
 Are Rules Nos. 95, 97, 98 and 99 complied with as far as practicable? Yes  
 If the vessel has a complete superstructure deck with a tonnage opening, is the latter fitted with efficient temporary covers? Yes



Indicate thickness and extent of any deck covering, and extent of erections, with dimensions, showing overhang (if any).  
 Indicate position of scuppers from tonnage-exempted spaces above freeboard deck.

Sister vessels:

Fee: 9.00

Exp. 7.30

