

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD-STEAMERS.

Port of Survey
Date of Survey 13 April 1931
Name of Surveyor

Ship's Name. <i>Motor Ship "Santa Inez"</i>	Port of Registry and Nationality. <i>New York U.S.A</i>	Official Number. <i>228403</i>	Gross Tonnage.	Date of Build.	Particulars of Classification. <i>+100 A.1. with freeboard</i>
Number in Register Book <i>83639</i>					

Moulded dimensions *370.0' x 53.0' x 23.5'*
Moulded displacement at a moulded draught of 85 per cent. of moulded depth
Coefficient of fineness for use with tables *Assumed .72*

DEPTH FOR FREEBOARD.				CORRECTION FOR LENGTH.			
Moulded depth	...	...	23.5	(a) When D is greater than $\frac{L}{15}$			
Stringer plate	...	...	.04	$(D - \frac{L}{15}) \times R =$	...	...	...
Sheathing in wells $T(\frac{L-S}{L}) =$	...	...		(b) When D is less than $\frac{L}{15}$ (if allowed).			
				$(\frac{L}{15} - D) \times R =$	<i>(24.67 - 23.54) 2.846</i>	<i>1.13</i>	<i>- 3.21</i>
Depth D =	...	...	23.54	If restricted by height of superstructures	...	...	...

SUPERSTRUCTURES.						
	Mean Covered Length S.	Equivalent Enclosed Length S ₁ .	Height.	Correction for Height.	Effective Length.	
Poop enclosed	36.5	36.5	8'-6"	-	36.5	
" overhang	1.5	.75			.75	
R.Q.D. enclosed						
" overhang						
Bridge enclosed						
" overhang aft	.50	.38	8'-6"	-	.38	
" overhang forward						
F'cle enclosed	326.50	326.50			326.50	
" overhang						
Trunks forward						
" aft						
Tonnage opening	5.0	2.93				
TOTAL =	370.0	367.06			367.06	
Length of ship (L) =	370.0	370.0			370.0	
% Covered ... =	100%	99.2%			99.2%	
Corresponding %, corrected for absence of forecastle if required } A =		B = 99.01		Correction for Bridge less than 2L if required } ✓		
Allowance ... =	40.0	x .9901		=	- 39.60	

Stand. Height of Superstructure: 7.2'
Actual do. 8.5'
1.3'
= 15.6" difference for sheer allowance

SHEER.						
Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.	
54.5 + 15.6 A.P. 1 =	40.1	47.0	40.10	1	70.10	
2		20.9	31.19	4	124.76	
3		5.17	7.71	2	15.42	
4				4		
5		10.34	10.96	2	21.92	
6		4.18	44.32	4	174.28	
84.0 + 15.6 F.P. 7 =	99.6	94.0	99.60	1	99.60	
				18)	509.08	
Mean effective sheer ...				=	28.28	
Standard sheer .05L + 5 =				=	23.50	
Difference (Df) ...				=	4.78	
Allowance = $Df \times (\frac{.75 - S}{2L}) =$				=	- 1.19	
If limited on account of amidship superstructure				=	-	
If limited on account of excess sheer ($1\frac{1}{2}$ in. per 100 ft.)				=	-	

If excess sheer forward and deficient sheer aft :-
Actual sheer aft = Excess
Standard sheer aft
Actual sheer forward = Excess
Standard sheer forward
Length of enclosed superstructure L
Forward of amidships = Complete
Aft of amidships = Superstructure

ROUND OF BEAM.				TABULAR FREEBOARD (corrected for flush deck if required)			
Standard	...	...	12.72	Corrected for Coefficient	<i>Assumed .72</i>	$\frac{.68}{1.36} =$	<i>1.40</i>
Ship	...	...	NIL				<i>1.36</i>
Difference	...	...	12.72	Correction for Length	...		
Restricted to	...	...		" Superstructures	...		3.21
Allowance = $\frac{\text{Difference}}{4} \times (1 - \frac{S}{L}) =$			<i>3.18 x .008</i>	" Sheer	...		39.60
			<i>.403</i>	" Round of beam	...	.03	1.19
				" Thickness of deck	...		
				" Scantlings, etc.	...		
				" Statutory deck line	...		
						.03	44.00
							43.94
							Summer Freeboard = 20.24

23.54
1.69
4/21.83
5.46
20.27
5.46
14.81
25.73
1-8 1/4
1-2 3/4
2-1 3/4

FREEBOARD recommended amidships from centre of Disc to top of Statutory Deck Line, Wood (Steel) Deck :-

Fresh Water Line	above centre of Disc	...	...	...
Indian Summer Line	"	"	"	...
Winter Line	below	"	"	...
Winter North Atlantic Line	"	"	"	...

