

WRECK
Lloyd's Register of Shipping
SURVEYS FOR FREEBOARD - STEAMERS
(Under the Provisions of the U. S. A. Load Line Act of March 2, 1929)

33962
New York Office Index No. 57
Port of Survey. New York
Date of Survey. Jan 30th 1931
Name of Surveyor. W. Baylan

Ship's Name.	Port of Registry and Nationality.	Official Number.	Gross Tonnage.	Date of Build.	Particulars of Classification.
<i>S. Pennsylvania</i>	<i>Wilmington U.S.A.</i>	<i>205286</i>	<i>6455</i>	<i>1917-7</i>	<i>+100 A1</i>
Number in Register Book. <i>81131</i>					
Owner. <i>The Texas Co.</i>	Builder. <i>Ford & Co. S. B. Corp.</i>				<i>Carrying petroleum in bulk</i>

Moulded dimensions *415.0* × *56.0* × *32.75* (85% = *27.84*)

Moulded displacement at a moulded draught of 85 per cent. of moulded depth. *14900*

Coefficient of fineness for use with tables. *806*

DEPTH FOR FREEBOARD.		CORRECTION FOR DEPTH.		CAMBER	
Moulded depth	<i>32.75</i>	(a) When <i>D</i> is greater than $\frac{L}{15}$		Standard $\frac{56 \times 12}{50} =$	<i>13.45</i>
Stringer plate	<i>.66</i>	$(D - \frac{L}{15}) \times R = (32.80 - 27.67) \times 3.3 =$	<i>+15.39</i>	Ship	<i>13.62</i>
Heating in wells		(b) When <i>D</i> is less than $\frac{L}{15}$ (if allowed).		Difference	<i>.17</i>
$T(\frac{L-S}{L}) =$		$(\frac{L}{15} - D) \times R =$		Restricted to	
Depth <i>D</i> =	<i>32.80</i>	If restricted by height of superstructures		Allowance = $\frac{\text{Difference}}{4} \times (1 - \frac{S_1}{L}) =$	$\frac{.17 \times .623}{4} = -.03$

SUPERSTRUCTURES.

	Mean Covered Length <i>S</i>	Effective Length <i>S_e</i> (Uncorrected for Height)	Height	Correction for Height	Effective Length
Poop enclosed	<i>107.00</i>	<i>107.00</i>	<i>8.0</i>	<i>✓</i>	<i>107.00</i>
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed <i>Open</i>	<i>34.50</i>	<i>17.25</i>	<i>8.0</i>	<i>✓</i>	<i>17.25</i>
" overhang aft					
" overhang forward					
Forecastle enclosed <i>Open</i>	<i>33.00</i>	<i>32.02</i>	<i>8.0</i>	<i>✓</i>	<i>32.02</i>
" overhang					
Trunks forward					
" aft					
Tonnage opening					

Shore Ford

11.15 *33.45*

44.65 *3 133.95*

99.0 *1 99.00*

261.40

Star

103

TOTAL = *174.50* *156.276* *156.276*
Length of ship (*L*) = *415* *415* *415*
% Covered... = *42.04%* *37.65%* *37.65%*
Corresponding %, corrected for absence of forecastle if required } *A = Tanker* *B = 28.65%*
Allowance ... = *42.0* × *-2865* = *-12.03*
Correction for Bridge less than *2 L* if required } *Tanker does not apply*

SHEER.

Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.
A.P. 1	<i>51.0</i>	<i>51.5</i>	<i>51.0</i>	<i>1</i>	<i>51.00</i>
2	<i>19.35</i>	<i>22.42</i>	<i>19.35</i>	<i>4</i>	<i>77.40</i>
3	<i>4.8</i>	<i>5.67</i>	<i>4.8</i>	<i>2</i>	<i>9.60</i>
4				<i>4</i>	
5	<i>11.15</i>	<i>11.34</i>	<i>11.15</i>	<i>2</i>	<i>22.30</i>
6	<i>44.65</i>	<i>45.84</i>	<i>44.65</i>	<i>4</i>	<i>178.60</i>
F.P. 7	<i>99.0</i>	<i>103.0</i>	<i>99.0</i>	<i>1</i>	<i>99.00</i>

If excess sheer forward and deficient sheer aft:—

Actual sheer aft
Standard sheer aft =

Actual sheer forward = *266.40*
Standard sheer forward = *274.54*

allow *97.4%* of open *F*

Length of enclosed superstructure

L

Forward of amidships =

Aft of amidships =

Mean effective sheer ... *18* *137.90*
Standard sheer $.05 L + 5 =$ *24.33*
Difference (*Df*) ... *25.75*
Allowance = $Df \times (\frac{.75 - S}{2L}) =$ *1.42* *(.75 - .21)* *= +.78*
If limited on account of amidship superstructure ... *✓*
If limited on account of excess sheer ($1\frac{1}{2}$ in. per 100 ft.) ... *✓*

DRAFTS.

Moulded Depth *D* = *32' 9"*
Stringer Plate = *3/4"*
Freeboard *32' 9 3/4"*
Moulded draught *6' 4 1/2"*
Addition for keel below base line *2"*
Extreme draught *26' 7 1/4"*

F. W. ALLOWANCE

Displacement = *14115*

Tons per inch = *48*

14115 = *7.35*
40 × 48

TABULAR FREEBOARD (corrected for flush deck if required) =

Corrected for Coefficient $\frac{.806 + .68}{1.36} =$ *1.486* *7.30*

Correction for Depth ... *15.39*
" Superstructures ... *12.03*
" Sheer ... *.78*
" Camber ... *.03*
" Thickness of deck ...
" Scantlings, etc. ...

Summer Freeboard =

76.39

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

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



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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? *No, open*
Give particulars of the means of closing the openings in this bulkhead ✓
Has the bridge an efficient steel bulkhead at the after end? *No open*
Give particulars of the means of closing the openings in this bulkhead ✓
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 closed poop*
If the openings are not so protected, are the exposed parts of the casing efficiently constructed? ✓
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	$\frac{7}{16}$			
Scantlings of stiffeners	$8 \times 3\frac{1}{2} \times \frac{7}{16}$ Bulk angle			
Spacing of stiffeners, and if bracketed	$30" \frac{1}{2}$			
Height of sills of openings above deck	No openings	Open	Open	Open

(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.		160. T. Hatchways		160. T. Hatchways		20. T. Hatchways		20. T. Hatchways	
Item.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.
Height above top of DECK	24"		24"		24"		24"		
Thickness	Sides.....	.44	.44		.44		.44		
	Ends.....	.44	.44		.44		.44		
Remarks	Steel		Steel		Steel		Steel		



A hand-drawn technical sketch of a boat hull on aged, textured paper. The drawing is oriented horizontally. It shows the side profile of the hull with several key dimensions and structural lines:

- Dimensions:**
 - $107'$: A dimension line at the bow (left) indicating a section length.
 - $415'$: A long dimension line along the main hull body.
 - $34'5''$: A dimension line near the stern (right) indicating a section length.
 - $33'$: A dimension line at the very stern (right) indicating a section length.
- Structural Lines:**
 - A central longitudinal line runs the length of the hull.
 - Two main hull lines define the upper and lower profiles.
 - Vertical dashed lines are used to mark specific points along the hull's length.
 - Rectangular shapes are drawn at the bow and stern, possibly representing engine compartments or structural reinforcements.

Signed W. Baylon
Survivor



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