

# WRECK SECTION

27806

## 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. 68  
Port of Survey Mobile Ala  
Date of Survey 21st February 1931  
Name of Surveyor L. S. Taylor

Ship's Name. <i>S.S. Shenandoah</i>	Port of Registry and Nationality. <i>Wilmington U.S.A.</i>	Official Number. <i>217920</i>	Gross Tonnage. <i>6531</i>	Date of Build. <i>1919-6</i>	Particulars of Classification. <i>+ 100 A 1.</i>
Number in Register Book. <i>84157</i>	Owner. <i>The Texas Company</i>				Builder. <i>W. L. &amp; S. Co.</i>
Moulded dimensions. <i>45.0' x 56.0' x 32.83' (85% = 27.9')</i>					
Moulded displacement at a moulded draught of 85 per cent. of moulded depth. <i>142.30 Tons</i>					
Coefficient of fineness for use with tables. <i>.800</i>					

DEPTH FOR FREEBOARD.		CORRECTION FOR DEPTH.		CAMBER	
Moulded depth	32.83	(a) When D is greater than $\frac{L}{15}$		Standard	$\frac{56 \times 12}{50} = 13.45$
Stringer plate	.05	$(D - \frac{L}{15}) \times R = (32.83 - 27.9) \times 3 = 15.63$	+ 15.63	Ship	14.00
Sheathing in wells		(b) When D is less than $\frac{L}{15}$ (if allowed).		Difference	.55
$T(\frac{L-S}{L}) =$		$(\frac{L}{15} - D) \times R =$		Restricted to	
Depth D =	32.88	If restricted by height of superstructures		Allowance = $\frac{\text{Difference}}{4} \times (1 - \frac{S}{L}) = \frac{.55 \times .585}{4} = .08$	

#### SUPERSTRUCTURES.

	Mean Covered Length S	Effective Length S <sub>e</sub> (Uncorrected for Height)	Height.	Correction for Height.	Effective Length.
Poop enclosed	107.00	107.00	8.0		107.00
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	28.50	28.50	8.0		28.50
" overhang aft	6.00	4.50			4.50
" overhang forward					
F'cle enclosed	33.00	32.30	8.0		32.30
" overhang					
Trunks forward					
" aft					
Tonnage opening					

Sheer Forward

13.7 - 3 = 41.1  
43.2 - 3 = 129.6  
98.0 - 1 = 98.0  
268.7

Standard Sheer Forward

11.34 - 3 = 34.02  
45.84 - 3 = 137.52  
103.00 - 1 = 103.00  
274.54

TOTAL = 174.50 172.30 172.30  
Length of ship (L) = 415 415 415  
% Covered... = 42.05% 41.57% 41.57%  
Corresponding %, corrected for absence of forecastle if required A = Tanker B = 32.51  
Allowance ... = 42 x 32.51 = -13.66

#### SHEER.

Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.
A.P. 1	50.0	51.5	50.0	1	50.0
2	17.0	22.92	17.0	4	68.0
3	1.3	5.67	1.3	2	2.6
4				4	
5	13.7	11.34	13.7	2	27.4
6	43.2	45.84	43.2	4	172.8
F.P. 7	98.0	103.00	98.0	1	98.0

If excess sheer forward and deficient sheer aft:—

Actual sheer aft =  
Standard sheer aft =  
Actual sheer forward = 268.7  
Standard sheer forward = 274.54 = 97.86%

allow 97.86% of open T.

Length of enclosed superstructure L

Forward of amidships =  
Aft of amidships =

Mean effective sheer ... = 418.80  
Standard sheer .05 L + 5 = 23.27  
Difference (Df) = 25.75  
Allowance = Df x (.75 -  $\frac{S}{2L}$ ) = 2.48 (.75 - .21) = 1.34  
If limited on account of amidship superstructure =  
If limited on account of excess sheer (1 1/2 in. per 100 ft.) =

#### DRAFTS.

Moulded Depth D = 32' 10"  
Stringer Plate = 3/4"  
Freeboard 32' 10 3/4"  
Moulded draught 6' 3 1/2"  
Addition for keel below base line 2 1/4"  
Extreme draught 26' 9 3/4"

#### F. W. ALLOWANCE

Displacement = 14260  
Tons per inch = 48.5  
 $\frac{14260}{40 \times 48.5} = 7.35$

#### TABULAR FREEBOARD (corrected for flush deck if required) =

Corrected for Coefficient  $\frac{.800 + .68}{1.36} =$   
Correction for Depth ...  
Superstructures ...  
Sheer ...  
Camber ...  
Thickness of deck ...  
Scantlings, etc. ...

Summer Freeboard = 75.21

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 " " "

6' 3 1/4"  
13' 3 1/4"  
7' 1/4"  
6 1/2"  
6 1/4"  
10 3/4"  
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Note:—The Rules referred to below are the Load Line Regulations of the United States Department 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 Hinged steel or J. doors  
Has the bridge an efficient steel bulkhead at the after end? Yes  
Give particulars of the means of closing the openings in this bulkhead Steel plates secured by Hook Bolts 12" apart not lapped  
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 Yes  
Are the engine and boiler openings covered by a bridge, poop, raised quarter-deck, or enclosed by a strong steel deckhouse? Covered by fore  
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 Yes  
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	<u>7/16</u>	<u>7/16" Coaming 1/2"</u>	<u>3/8</u>	<u>Open</u>
Scantlings of stiffeners	<u>Two horizontal 9x3 1/2 x 1/2"</u>	<u>9" x 3 1/2 x 7/16" Bulk Angle</u>	<u>3 1/2 x 3 1/2 x 7/16"</u>	<u>Open</u>
Spacing of stiffeners, and if bracketed	<u>Bulk angle at 30"</u>	<u>30" Apart - Bracketed</u>	<u>Yes</u>	<u>Open</u>
Height of sills of openings above deck	<u>Yes</u>	<u>21"</u>	<u>12"</u>	<u>Open</u>

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 Hatch 9'0" x 15'0"		16 O.T. Cargo Hatchways 5'3" x 6'9"		14 O.T. Summer Hatchways 4'0" x 4'0"		2 Bulkhead Hatchways 4'0" x 4'0"		Ship.	Rule.
Item.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.		
Height above top of DECK	<u>24"</u>		<u>24"</u>		<u>30"</u>		<u>24"</u>			
COAMING Thickness	Sides.....	<u>7/16"</u>	Sides.....	<u>7/16"</u>	Sides.....	<u>7/16"</u>	Sides.....	<u>7/16"</u>		
	Ends.....	<u>7/16"</u>	Ends.....	<u>7/16"</u>	Ends.....	<u>7/16"</u>	Ends.....	<u>7/16"</u>		
SHIFTING BEAMS OR WEB PLATES.	Number.....		Number.....		Number.....		Number.....			
	Section and Scantlings.....	<u>Yes</u>	Section and Scantlings.....	<u>Yes</u>	Section and Scantlings.....	<u>Yes</u>	Section and Scantlings.....	<u>Yes</u>		
	Material.....		Material.....		Material.....		Material.....			
* FORE AND AFTERS.	Number.....		Number.....		Number.....		Number.....			
	Section and Scantlings.....	<u>Yes</u>	Section and Scantlings.....	<u>Yes</u>	Section and Scantlings.....	<u>Yes</u>	Section and Scantlings.....	<u>Yes</u>		
	Material.....		Material.....		Material.....		Material.....			
HATCHES Thickness	<u>Steel Hinged Plate</u>		<u>Steel Hinged</u>		<u>Steel Hinged</u>		<u>Steel Hinged</u>			
Remarks.....	<u>Covers</u>		<u>Covers</u>		<u>Covers</u>		<u>Covers</u>			

\* 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: \_\_\_\_\_ feet; aft: \_\_\_\_\_ feet. None

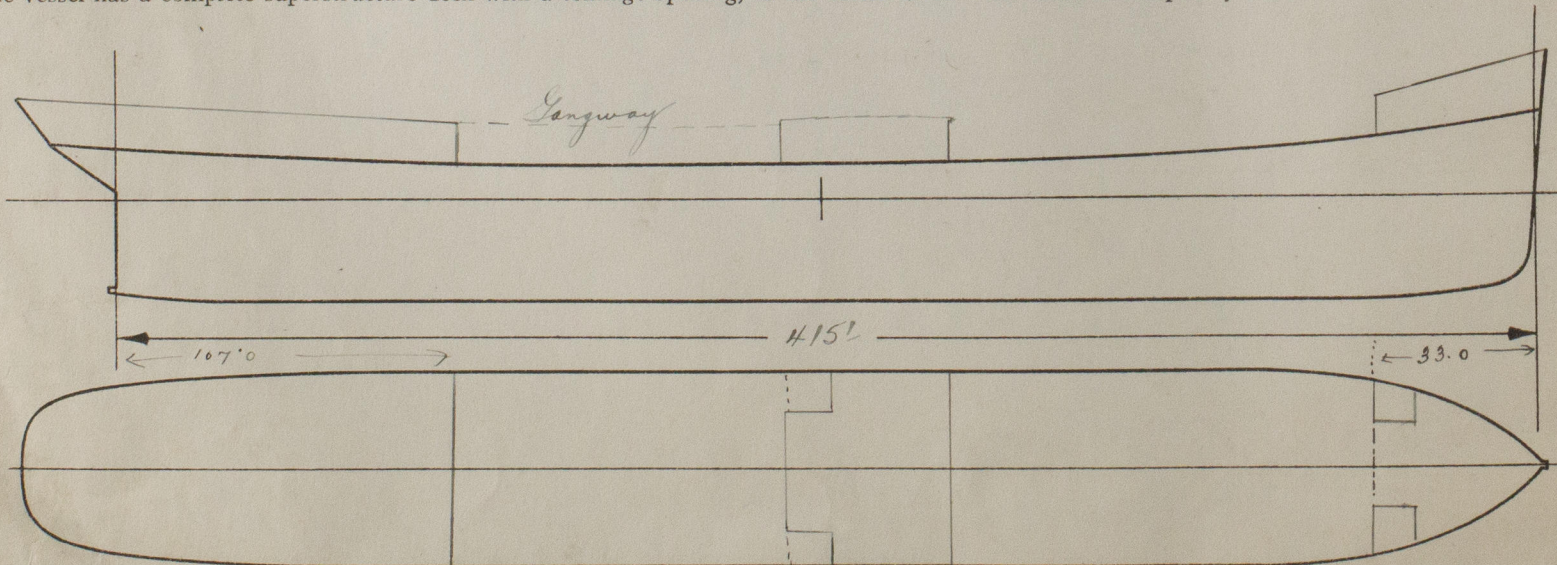
Area of freeing ports required by regulations (Rules 30 and 100) forward: \_\_\_\_\_ sq. ft.; aft: \_\_\_\_\_ sq. ft.

Particulars of freeing ports fitted { forward well } Open Rails Full Length sq. ft.  
on each side of vessel { after well } Open Rails Full Length 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? Bridge to Poop  
Is the gangway strong and efficiently braced fore and aft? Yes  
Are the crew berthed in the forecastle? (Rule 98). No  
State spacing of supports 9 feet  
In oil tankers, are the bulwarks open for at least half the length of the exposed portion of the weather deck? (Rule 100). No bulwarks  
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: "Harvester" "Occidental" "Illinois" "Argon" etc.

Fee: \$90.00

Expenses (if any)

Surveyor to Lloyd's Register of Shipping

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