

29610

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. 129
 Port of Survey *New York*
 Date of Survey *15 June 1931*
 Name of Surveyor *A. F. Allen*

Ship's Name. <i>S.S. "Reaper"</i>	Port of Registry and Nationality. <i>Wilmington U.S.A.</i>	Official Number. <i>220864</i>	Gross Tonnage. <i>6464</i>	Date of Build. <i>1920-11</i>	Particulars of Classification. <i>+100 A1</i> <i>Carv. Riv in bulk</i>
Number in Register Book. <i>82297</i>					
Owner <i>The Texas Co.</i>	Builder <i>Texas S.S. Co.</i>				Hull No. <i>24</i>

Moulded dimensions *415.0* × *56.0* × *32.83* (85% = *27.9*)
 Moulded displacement at a moulded draught of 85 per cent. of moulded depth... *14,830 Tons*
 Coefficient of fineness for use with tables... *.800*

DEPTH FOR FREEBOARD.		CORRECTION FOR DEPTH.		CAMBER	
Moulded depth	<i>32.83</i>	(a) When D is greater than $\frac{L}{15}$		Standard	$\frac{56 \times 12}{50} = \dots$ <i>13.45</i>
Stringer plate	<i>(.66")</i>	$(D - \frac{L}{15}) \times R = (32.88 - 27.67) \times 3 = +15.63$		Ship	<i>14.00</i>
Sheathing in wells	$T \left(\frac{L-S}{L} \right) =$	(b) When D is less than $\frac{L}{15}$ (if allowed).		Difference	<i>.55</i>
	<i>✓</i>	$(\frac{L}{15} - D) \times R = \dots$	<i>✓</i>	Restricted to	<i>✓</i>
Depth D =	<i>32.88</i>	If restricted by height of superstructures	<i>✓</i>	Allowance = $\frac{\text{Difference}}{4} \times (1 - \frac{S}{L}) = \frac{.55}{4} \times \frac{.585}{.4} = .08$	<i>.08</i>

SUPERSTRUCTURES.

	Mean Covered Length S	Effective Length S _e (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>28.50</i>	<i>28.50</i>	<i>8.0</i>	<i>✓</i>	<i>28.50</i>
" overhang aft	<i>6.00</i>	<i>4.50</i>			<i>4.50</i>
" overhang forward					
F'cle enclosed <i>Open</i>	<i>33.00</i>	<i>32.30</i>	<i>8.0</i>	<i>✓</i>	<i>32.30</i>
" overhang					
Trunks forward					
" aft					
Tonnage opening					

Sheer fwd

-	1	-
13.7	3	41.1
43.2	3	129.6
98.0	1	98.0
		<u>268.7</u>

Standard Sheer fwd

-	1	-
11.34	3	34.02
45.84	3	137.52
103.00	1	103.00
		<u>274.54</u>

TOTAL = $\frac{174.50}{415} = 42.05\%$ $\frac{172.30}{415} = 41.57\%$ $\frac{172.30}{415} = 41.57\%$
 Length of ship (L) = *415*
 % Covered... = *42.05%* *41.57%* *41.57%*
 Corresponding %, corrected for absence of forecastle if required } *A = Tanker* *B = 32.5%*
 Allowance ... = *42* $\times .32517$ = *-13.668*

SHEER.

Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.
A.P. 1	<i>50.00</i>	<i>51.50</i>	<i>50.00</i>	<i>1</i>	<i>50.00</i>
2	<i>17.00</i>	<i>22.92</i>	<i>17.00</i>	<i>4</i>	<i>68.00</i>
3	<i>1.30</i>	<i>5.67</i>	<i>1.30</i>	<i>2</i>	<i>2.60</i>
4	-	-	-	<i>4</i>	-
5	<i>13.70</i>	<i>11.34</i>	<i>13.70</i>	<i>2</i>	<i>27.40</i>
6	<i>43.20</i>	<i>45.84</i>	<i>43.20</i>	<i>4</i>	<i>172.80</i>
F.P. 7	<i>98.00</i>	<i>103.00</i>	<i>98.00</i>	<i>1</i>	<i>98.00</i>

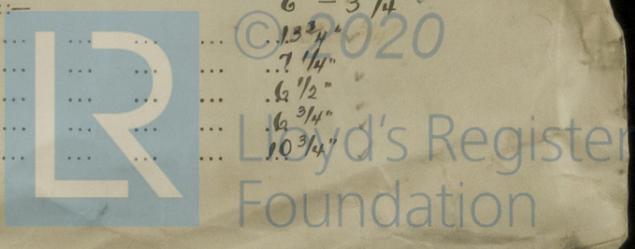
If excess sheer forward and deficient sheer aft:-
 Actual sheer aft = *✓*
 Standard sheer aft = *✓*
 Actual sheer forward = $\frac{268.7}{274.54} = 97.86\%$
 Standard sheer forward = *274.54*
 ∴ allow *97.86%* of open Fx.

Mean effective sheer ... = $\frac{18}{418.80} = 23.27$
 Standard sheer .05 L + 5 = $\frac{25.75}{25.75}$
 Difference (Df) = 2.48
 Allowance = $Df \times (.75 - \frac{S}{2L}) = 2.48 (.75 - .21) = +1.34$
 If limited on account of amidship superstructure = *✓*
 If limited on account of excess sheer (1 1/2 in. per 100 ft.) = *✓*

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 = <i>32' - 10"</i>	Displacement = <i>14260</i>	Corrected for Coefficient $\frac{.800 + .68}{1.36} =$	<i>66.15</i>
Stringer Plate = <i>3/4"</i>	Tons per inch = <i>48.5</i>		<i>71.98</i>
Freeboard = <i>6' - 3 1/4"</i>		Correction for Depth ...	
Moulded draught = <i>26' - 7 1/2"</i>	$\frac{14260}{40 \times 48.5} = 7.35$	" Superstructures ...	
Addition for keel below base line = <i>2 1/4"</i>		" Sheer ...	
Extreme draught = <i>26' - 9 3/4"</i>		" Camber ...	
		" Thickness of deck ...	
		" Scantlings, etc. ...	
			<i>16.97</i> <i>13.74</i> <i>+ 3.23</i>
			Summer Freeboard = <i>75.21</i>

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 " " " ...



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. thru steel w. 2 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 hose bolts 12" apart not passing to steel
 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?
 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	3/8"	7/16" 1/2"	3/8"	
Scantlings of stiffeners	Two longitudinal 9 x 3 1/2 x 1/2 B.A.	4 x 3 1/2 x 7/16 B.A.	3 1/2 x 3 1/2 x 7/16	
Spacing of stiffeners, and if bracketed	30" spacing Yes	30" T.B.	30" No	
Height of sills of openings above deck	No opening	22"	13"	

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"		207 Hatches 4'-0" x 4'-3"		1607 Hatches 7'-0" x 4'-0"		207 Hatch 7'-0" x 7'-0"		1007 Hatches 8'-3" x 7'-0"		407 Hatches 7'-6" x 7'-0"	
	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.
COAMING												
Height above top of DECK	24		24	30	24	24	24		24			
Thickness	Sides		7/16	7/16	7/16	7/16	7/16		7/16			
	Ends		7/16	7/16	7/16	7/16	7/16		7/16			
SHIFTING BEAMS OR WEB PLATES.	Number											
	Section and Scantlings	✓	✓	✓	✓	✓	✓		✓			
	Material											
* FORE AND AFTERS.	Number											
	Section and Scantlings	✓	✓	✓	✓	✓	✓		✓			
	Material											
HATCHES Thickness	7/16 Steel		7/16 Steel	7/16 Steel	7/16 Steel	7/16 Steel	7/16 Steel		7/16 Steel			
Remarks	Stiffened		Stiffened	Stiffened	Stiffened	Stiffened	Stiffened		Stiffened			

* 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.

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

No. Ft. x Ft. _____ = _____ sq. ft.

Particulars of freeing ports fitted on each side of vessel
 forward well } _____ = _____ sq. ft.
 after well } _____ = _____ 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

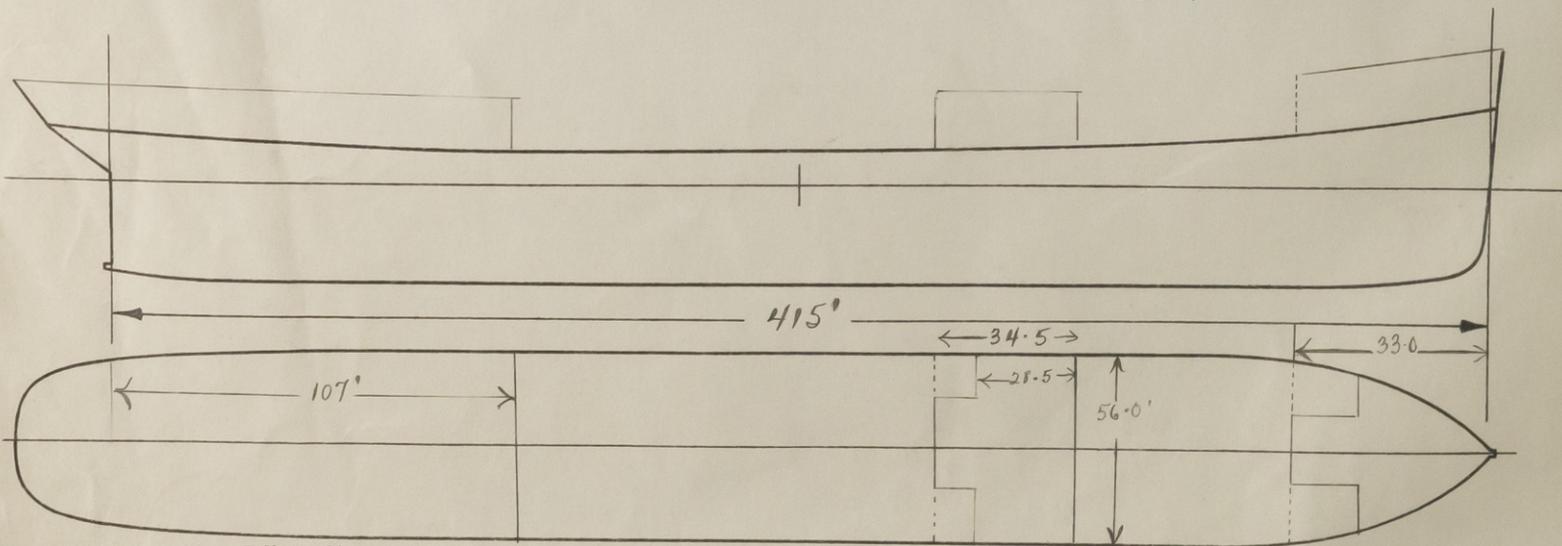
In oil tankers, what is the extent of the fore and aft gangway? Bridge to Poop Are the crew berthed in the forecastle? (Rule 96). No

Is the gangway strong and efficiently braced fore and aft? yes State spacing of supports 10 feet. average

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: "Harmster" "Occidental" "Illinois" "Argan" etc

Fee: \$90.00 Expenses (if any) ✓

(Signed) Albert T. Allen
 Surveyor to Lloyd's Register of Shipping.

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