

WRECK SECTION No. 545

Lloyd's Register of Shipping

New York Office Index No. 28083
 Port of Survey New York
 Date of Survey Nov 12 1930
 Name of Surveyor W. Bennett

SURVEYS FOR FREEBOARD - STEAMERS

(Under the Provisions of the U.S. Coast and Geodetic Survey Act of March 3, 1879)
new registered at Panama 8/12/30

Ship's Name "Alan Emery"	Port of Registry and Nationality <u>Los Angeles USA</u>	Official Number <u>21972</u>	Gross Tonnage <u>6664</u>	Date of Build <u>1919-11</u>	Particulars of Classification <u>+100 Carrying Petroleum in bulk</u>
Number in Register Book	Builder <u>J. B. Co.</u>	Hull No. <u>18</u>	Owner <u>Pan American T. Co.</u>	Moulded dimensions <u>430-0 x 59-0 x 33-25</u> (85% = 28.26)	Moulded displacement at a moulded draught of 85 per cent. of moulded depth <u>16,750 x 995 = 16,670 tons</u>
Coefficient of fineness for use with tables <u>.814</u>					

DEPTH FOR FREEBOARD.	CORRECTION FOR DEPTH.	CAMBER
Moulded depth <u>33.25</u>	(a) When D is greater than $\frac{L}{15}$ $(D - \frac{L}{15}) \times R = (33.31 - 28.67) \times 3 = +13.92$	Standard $\frac{59 \times 12}{50} = \dots$ <u>14.16</u>
Stringer plate ... <u>69"</u> <u>.06</u>	(b) When D is less than $\frac{L}{15}$ (if allowed). $(\frac{L}{15} - D) \times R = \dots$ <u>4.64</u>	Ship <u>14.75</u>
Sheathing in wells } $T(\frac{L-S}{L}) = \dots$ <u>✓</u>	If restricted by height of superstructures <u>✓</u>	Difference <u>.59</u>
Depth D = <u>33.31</u>		Restricted to
		Allowance = $\frac{\text{Difference}}{4} \times (1 - \frac{S}{L}) = \frac{.59 \times .552}{4} = \dots$ <u>.08</u>

SUPERSTRUCTURES.

	Mean Covered Length S	Effective Length S _e (Uncorrected for Height)	Height.	Correction for Height.	Effective Length.
Poop enclosed	<u>133.00</u>	<u>133.00</u>	<u>8.0</u>	<u>✓</u>	<u>133.00</u>
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	<u>36.46</u>	<u>36.46</u>	<u>8.0</u>	<u>✓</u>	<u>36.46</u>
" overhang aft					
" overhang forward					
Fore enclosed open	<u>40.38</u>	<u>23.28</u>	<u>8.0</u>	<u>✓</u>	<u>23.28</u>
" overhang					
Trunks forward					
" aft					
Tonnage opening					

Sheer forward
 - 4 -
 - 2 -
 33.0 4 132.00
 112.37 1 112.37
244.37

Standard Sheer forward
 - 1 -
 6.62 4 26.48
 26.5 2 53.00
 59.6 4 238.40
 106.0 1 106.00
433.88

TOTAL = 209.84 192.74 192.74
 Length of ship (L) = 430 430 430
 % Covered... = 48.8% 44.82% 44.82%
 Corresponding %, corrected for absence of forecastle if required } A = 42.0 Tanker A = 35.82% Correction for Bridge less than 2 L if required } Tanker does not apply
 Allowance ... = 42.0 x .3582 = - 15.04

SHEER.

no Sheer for 172' amidships.

Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.
A.P. 1	<u>56.25</u>	<u>53.0</u>	<u>56.25</u>	1 1	<u>56.25</u>
2	<u>16.00</u>	<u>29.8</u>	<u>16.00</u>	4 4	<u>64.00</u>
3	<u>.25</u>	<u>13.25</u>	<u>.25</u>	2 4	<u>1.00</u>
4		<u>3.31</u>		4 2	
5				2 4	
6		<u>6.62</u>		4 2	
7		<u>26.5</u>		2 4	
8	<u>33.00</u>	<u>59.6</u>	<u>33.00</u>	4 1	<u>132.00</u>
F.P. 9	<u>112.37</u>	<u>106.0</u>	<u>112.37</u>	1 1	<u>112.37</u>

If excess sheer forward and deficient sheer aft:-

Actual sheer aft =
 Standard sheer aft =
 Actual sheer forward = $\frac{244.37}{423.88} = 57.65\%$
 Standard sheer forward =
 .. allow 57.65% of open forecastle

Mean effective sheer = 15.21
 Standard sheer .05 L + 5 = 26.50
 Difference (Df) = 11.29
 Allowance = $Df \times (\frac{.75 - S}{2L}) = 11.29 \times (\frac{.75 - 244}{2 \times 430}) = + 5.71$
 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 = <u>33' - 3"</u>	Displacement = <u>15625</u>	Corrected for Coefficient $\frac{.814 + .68}{1.36} = \frac{1.494}{1.36} = \dots$ <u>76.79</u>
Stringer Plate = (or Wood Deck) <u>3/4"</u>	Tons per inch = <u>52.7</u>	Correction for Depth <u>13.92</u>
Freeboard <u>6' - 9 1/4"</u>		" Superstructures <u>15.04</u>
Moulded draught <u>26' - 6 1/2"</u>	$\frac{15625}{40 \times 52.7} = 7.41$	" Sheer <u>5.71</u>
Addition for keel below base line <u>2 1/2"</u>		" Camber <u>.08</u>
Extreme draught <u>26' - 9"</u>		" Thickness of deck
		" Scantlings, etc.
		<u>19.63</u> <u>15.12</u> <u>+ 4.51</u>
		Summer Freeboard = <u>81.30</u>

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

Tropical Fresh Water Line above centre of Disc	6' - 9 1/4"
Fresh Water Line	13 3/4"
Tropical Line	7 1/4"
Winter Line	6 1/2"
Winter North Atlantic Line	6 3/4"

Tanker

Lloyd's Register Foundation
 1999-0205/12
 29.11.30

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) Steel plates secured by bolts 12" apart this plate + bulkhead
 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 m.f. door on P. side only
 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 as in Poop
 Has the fore-castle 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 poops
 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:

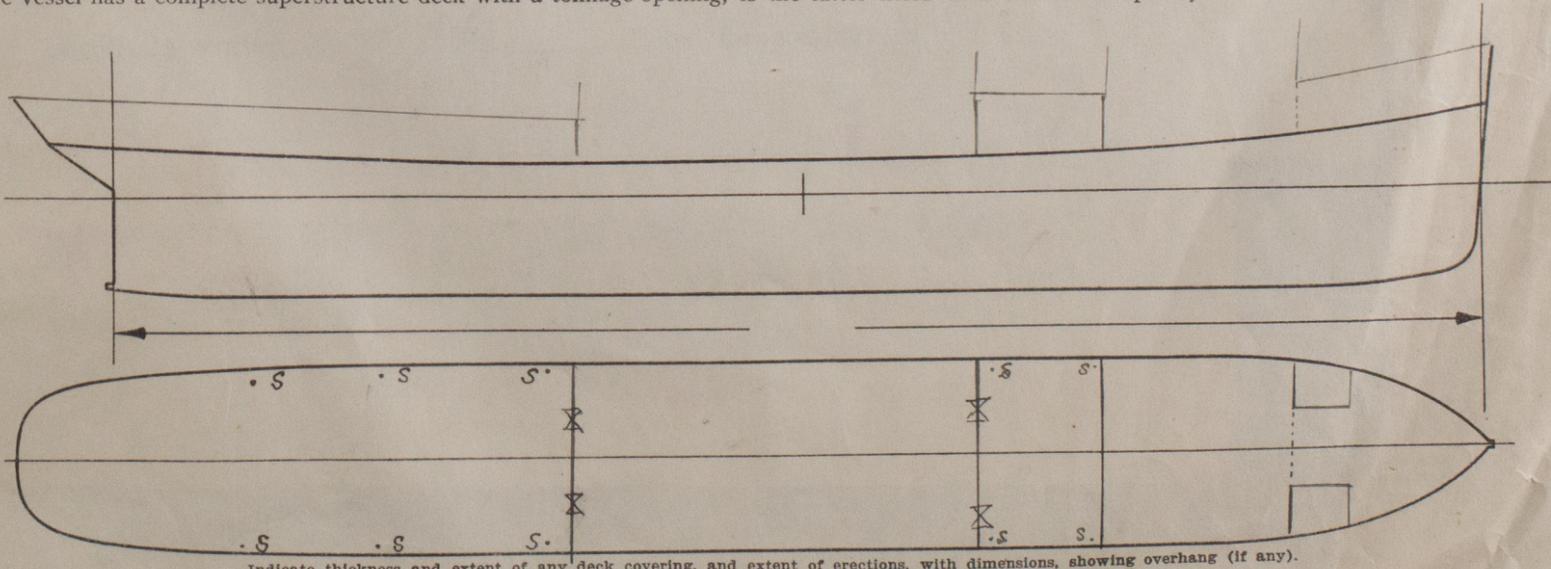
	Poop or Raised Quarter-Deck bulkhead	Bridge front bulkhead	Bridge after bulkhead	Fore-castle bulkhead
Thickness of bulkhead plating	.46; coaming .50	.46; coaming .50	.31	
Scantlings of stiffeners	13 x 4 x 4 x 31.8 Ls	13 x 4 x 4 x 31.8 Ls	4" x 3 1/2 x .44 o.a.	open
Spacing of stiffeners, and if bracketed	42" lugged	40" lugged	42" bracketed at top	
Height of sills of openings above deck	18"	22"	19"	

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. 8'0" x 15'3"		18 O.T. Hatchways 4'0" x 4'0"		10 O.T. Hatchways 6'0" x 4'0"		Hatchways on Poop		Ship.	Rule.
	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.		
Height above top of DECK	30"		18"		30"		30"			
Thickness	Sides.....	.44	.375		.375		.44			
	Ends.....	.44					.44			
SHIFTING BEAMS OR WEB PLATES.	Number.....						2			
	Section and Scantlings.....	Nil					16 x .35			
	Material.....						4 x 3 1/4 x .44 Steel			
* FORE AND AFTERS.	Number.....	3								
	Section and Scantlings.....	11 9x.50					Nil			
	Material.....	11 2 1/2 x 2 1/2 x .50								
HATCHES Thickness	1/2" steel		.38 steel		.38 steel		3"			
Remarks.....	cover		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? Not applicable
 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. ✓
 Particulars of freeing ports fitted { forward } ✓ = ✓ sq. ft. ✓
 on each side of vessel { after } ✓ = ✓ 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? All fore aft Are the crew berthed in the fore-castle? (Rule 96) No
 Is the gangway strong and efficiently braced fore and aft? Yes 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) 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? ✓



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: "Sunbeam" "Altair"

Fee: \$ 90.00

Expenses (if any) ✓

Signed W. Bennett
 Surveyor to Lloyd's Register of Shipping.

