

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.—STEAM SHIPS.

PARTICULARS RELATING TO ALL STEAM SHIP, EITHER FLUSH DECKED, OR WITH TOP GALLANT FORECASTLE, SHORT POOP, AND BRIDGE HOUSE DISCONNECTED, OR WITH TOP GALLANT FORECASTLES HAVING LONG POOPS, OR RAISED QUARTER DECKS CONNECTED WITH BRIDGE HOUSES, OR OTHERWISE.

Port of Survey Newcastle-on-Tyne
Date of Survey 8th June 1931
Name of Surveyor Thomas S. Shute

Ship's Name	Port of Registry and Nationality.	Official Number.	Gross Tonnage.	Date of Build.	Particulars of Classification.
<u>"Pan. Bolivar"</u>	<u>Los Angeles.</u>	<u>✓</u>	<u>✓</u>	<u>New Vessel.</u>	<u>100. A. 1. "Carrying petroleum in bulk."</u> (Contemplated.)
Number in Register Book <u>✓</u>	<u>British</u>	<u>U.S.A.</u>			

Registered dimensions from Ship's Register.	LENGTH.	BREADTH.	DEPTH.	UNDER DECK TONNAGE.
	<u>484.2</u>	<u>65.50</u>	<u>65.5</u> <u>36.80</u>	<u>8817.59</u>
Length on LOADLINE.	<u>483.0</u>	mean Frame Depth <u>95 1/2</u> Rule <u>78</u> <u>2 x 2 1/4</u> <u>= 5.0</u> Spar <u>2</u> + <u>38</u>	Sheer <u>- 59</u> Ceiling <u>+ 2</u> Tanks <u>6.0</u> Double Bottom <u>+ 76.0</u> Fore Deep Tank Floors <u>+ 23.0</u>	Peak Included
CORRECTED DIMENSIONS.	<u>483.0</u>	<u>65.42</u> <u>62</u>	<u>36.41</u>	<u>8916.59</u>

Moulded Depth as measured..... 36' 9"

Addition for Keel below base line for draught record..... 2" inches.

NOTE.—If the depth is measured when vessel is afloat, the details of measurement should be reported.

CORRECTION FOR LENGTH.

Length of Ship on Loadline.....	<u>483.0</u>	
Length in Table	<u>441.0</u>	
Difference	<u>42.0</u>	
Correction for 10ft., Table A.	<u>1.7</u>	Table C. <u>.8</u>
× Difference divided by 10	<u>7.14</u>	(if required.) <u>3.06</u>
If the length covered divide by 2	<u>+ 7.4</u>	<u>+ 3.2</u>

CORRECTION FOR IRON DECK.

Proportion covered, if less than 1/10th length covered	<u>.43</u>	<u>.4278</u>
Thickness of usual wood deck, less stringer	<u>3.28</u>	<u>3 1/4</u>
	<u>139</u>	<u>- 1 1/2</u>

CORRECTION FOR ROUND OF BEAM.

Breadth at Gunwale amidships.....	<u>64.3</u>	
Round of Beam	<u>16</u>	
Normal round.....	<u>16 1/2</u>	
Difference	<u>4</u>	<u>÷ 2 = 1/8</u>
Proportion of Deck uncovered (Para. 19)	<u>.07</u>	<u>✓ Nil.</u>

NOTE.—The round of beam should be reported on the full breadth of vessel at the gunwale.

Freeboard, Table A	<u>125.00</u>	<u>10' 5"</u>
Correction for Sheer	<u>+ 5.27</u>	<u>+ 5 1/4</u>
Correction for Length	<u>130.27</u>	<u>10' 10 1/4"</u>
Allowance for Deck Erections	<u>+ 7.14</u>	<u>+ 7 1/4</u>
Correction for Round of Beam.....	<u>137.41</u>	<u>11' 5 1/2"</u>
Correction for fall in Sheer (if any).....	<u>- 13.00</u>	<u>- 1' 1"</u>
Correction for Iron Deck (if required)	<u>124.41</u>	<u>10' 4 1/2"</u>
Additions for non-compliance with provisions of Para. 11 (d) and (e) ‡	<u>+ .07</u>	<u>✓</u>
Other Corrections (if any)	<u>124.48</u>	<u>✓</u>
	<u>- 1.39</u>	<u>- 1 1/2"</u>
	<u>123.09</u>	<u>10' 3"</u>

Winter Freeboard	<u>10' 3"</u>
Summer Freeboard <u>(6 1/2 x 7 1/2)</u>	<u>9' 8"</u>
Indian Summer Freeboard	<u>9' 1"</u>
N.A. Winter Freeboard	<u>✓</u>
Correction necessary because clearside amidships, measured in accordance with the Statute is not taken at the intersection of the wood or iron deck with side.	<u>1 3/4</u>

Winter Freeboard from deck line	<u>10' 4 1/4"</u>
Summer " " " "	<u>9' 9 3/4"</u>
Indian Summer " " " "	<u>9' 2 3/4"</u>
N.A. Winter " " " "	<u>✓</u>

Correction necessary because clearside amidships, measured in accordance with the Statute is not taken at the intersection of the wood or iron deck with side.

Winter Freeboard from deck line

Summer " " " "

Indian Summer " " " "

N.A. Winter " " " "

Correction necessary because clearside amidships, measured in accordance with the Statute is not taken at the intersection of the wood or iron deck with side.

Winter Freeboard from deck line

Summer " " " "

Indian Summer " " " "

Co-efficient of fineness..... .773
Any modification necessary { bottom longitudinal
[Para. 4 (a) to (e)]*
Co-efficient as corrected79
Displacement coefficient at 85% depth moulded = .797

Sheer { Stem..... 95.19 } 146 50 ÷ 2 = 73.25 ... Mean
at { Sternpost ... 51.31 }

Sheer at 1/2 of the length from { Stem 24.93 } 37.80 ÷ 2 = 18.90 ... Mean
{ Sternpost 12.87 }

Gradual mean Sheer 37.21

Standard mean Sheer [Table, Para. 18] 58.30

Difference..... 21.09 ÷ 4 = 5.27

§ If limited as Para. 18 (f) + 5 1/4

Rise in Sheer from amidships { At front of bridge house.....
[Para. 18 (e)] { At after end of forecastle

¶ Fall in Sheer { Sheer @ 1/2 L from Stem = 11 1/2
" " 5/8 " " = Nil.
Para. 18 (d) { " " 3/4 " " = Nil.
Length uncovered { " " 1/2 " " = Nil.
No sheer for 1/2 length amidships.

ALLOWANCE FOR DECK ERECTIONS:—

Freeboard, Table C.....	<u>10' 5" - 3' 3"</u>	<u>7' 2"</u>
Correction for Length, if required (Para. 12, 13, and 14)	<u>+ 3 1/4</u>	<u>+ 3 1/4</u>
Freeboard by Table A, corrected for sheer, and for length, if required (Para. 12, 13, and 14)	<u>11' 5 1/2"</u>	<u>11' 5 1/2"</u>
Difference	<u>4' 0 1/4"</u>	<u>4' 0 1/4"</u>
Percentage as below.....	<u>26.94%</u>	<u>26.94%</u>
	<u>13.00</u>	<u>13.00</u>

Correction for R. Q. Dk. if engine and boiler openings not covered by bridge house (Para. 11) ✓

Allowance for Deck Erections 13"

	Length.	Length allowed.	Height.
Forecastle.....	<u>49.75</u>	<u>49.75</u> ✓	<u>8.0</u>
Bridge House	<u>41.5</u>	<u>39.86</u> <u>89</u>	<u>8.0</u>
† Raised Qr. Dk.			
Poop.....	<u>117.0</u>	<u>117.0</u> ✓	<u>8.0</u>
Total	<u>208.25</u>	<u>206.61</u> <u>64</u>	<u>4.27</u> <u>8</u>
Length of Ship	<u>483</u>	<u>483</u>	
Corresponding percentage { <u>26.94%</u> (Para. 11, 12, 13, and 14) }			

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

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

© If the frames, skin planking, or ceiling are of unusual thickness the breadth of vessel to inside of ceiling should be reported if possible.
† In vessels obtaining an allowance for deck erections under Para. 11 where the sheer drops abaft amidships the height of the R.Q.D. is to be taken from the level of the top of the amidship beam.
§ In flush-decked vessels the total standard mean sheer means the sheer measured at the stem and sternpost. In vessels having poops and forecastles, it means the sheer measured at points distant one-eighth of the vessel's length from stem and sternpost.

‡ State dimensions of freeing port area on back of this form.

¶ The Surveyor should state whether the fall in sheer as reported is measured relatively to the straight line of keel or to the water line. If measured relatively to water line the vessel's draft at time of survey, and also the usual load draft forward and aft should be reported.

Do all the Frames extend to the top height in the Poop? Yes Raised Quarter Deck? Yes Bridge House? Yes Forecastle? Yes
 To what height do the Reverse Frames extend? Longitudinal Framing Where Transverse Framing = Bull angle.
 Has the Poop or Raised Quarter Deck an efficient Iron Bulkhead at the fore end? Yes
 Give particulars of the means for closing the openings in Bulkhead Two openings = 5'1" x 3'1". Steel coaming = 18". Stormboards full height in riveted grooves.
 Is the Poop or Raised Quarter Deck connected with the Bridge House? No Has the Bridge House an efficient Bulkhead at the fore end? Yes
 Give particulars of the means for closing the openings in Bulkhead One opening = 4'10" x 2'8". Steel coaming = 18". Steel door with riveted hinges.
 What is the thickness of the Bridge Front plating? 4 1/2 and Coaming plate? None
 Give scantlings and spacing of the Stiffeners Bull angle 10 x 3 1/2 x .42. Spaced 2' 3/2 - 3 1/2.
10 x 3 1/2 x .44. " 2' 6".
 Are bracket plates fitted at each end of the Stiffeners? Lugged 6' x 6" Are hor'l. brackets fitted connecting Bridge Bulk'd. with Bulwarks? Yes.
 Has the Bridge House an efficient Iron Bulkhead at the after end? Yes.
 How are the openings closed? Two openings = 5'1" x 3'0 1/2". Steel coaming = 16". Stormboards full height in riveted grooves.
 Is the Forecastle at least as high as the main or top-gallant rail? 8'0" Has the Forecastle an efficient Iron or Wood Bulk'd. at after end? Yes.
 Are the Engine and Boiler openings covered by a Bridge, Poop, Raised Quarter Deck, or enclosed by a Strong Iron or Steel Deckhouse? Yes
 If the openings are not so protected are the exposed parts of the Casings efficiently constructed? Yes.
 Give thickness of plating; scantlings and spacing of Stiffeners .30. Coamings .34 Stiffeners 3' x 2 1/2" x .30. Spaced 1' 9/2 - 6".
 What is the height of the exposed Casings? 7'6" Are suitable means provided for closing all openings in them in bad weather? Yes.
 Are the Weather Deck Hatchways efficiently constructed and at least equal to the requirements of Section 28 of the Rules for 1904-5? Give particulars below:— Yes
Cargo Hatch Forward. O.T. Hatches

Position and Size.		Upper D ^o . 9'0" x 12'0"		Upper D ^o . 6'0" x 4'0"							
Item.		Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.	Ship.	Rule.
COAMING.	Height above top of DECK	2'6"	2'0"		2'6"						
	Thickness {	Sides.....	.44	.44	.40						
		Ends.....	.44	.44	.40						
SHIFTING BEAMS OR WEB PLATES.	Number										
	Section and Scantlings	None.		✓							
	Material										
* FORE AND AFTERS.	Number										
	Section and Scantlings	None.		✓							
	Material										
HATCHES Thickness		Steel Covers .60. Stiffened with B.A. 6 1/2 x 3 x .40. Spaced 3'0"		Steel Covers .60 Two Stiffeners 3x3x.40							
Remarks.....											

* The depth of Fore and Afters should be stated from the underside of the hatches in all cases.

(If the sill of the lowest side scuttle will be less than 6 inches above the Indian Summer Load Line if assigned under the tables, state vertical distance from top of deck at side amidships to lower edge of lowest side scuttle.)

Sheer
 1. 95.19 1 95.19
 2. 24.93 4 99.72
 3. - 2 -
 4. - 4 -
 5. - 2 -
 6. - 1 -
 7. - 2 -
 8. 12.87 4 51.48
 9. 51.31 1 51.31
 8 297.70
 37.21
 mean and 5/16"

The following information is to be given in all Cases of vessels dealt with under Paras. 11, 12 (under 15 feet Moulded depth) and under Shelter Deck Rules.

What is the thickness of the Bridge Sheerstrake? ✓ Strake between Main and Bridge Sheerstrakes? ✓
 Delete the words { The Crew are, ~~are not~~, berthed in the bridge house. Poop.
 that do not apply { The arrangements to enable them to get backwards and forwards from their quarters are, ~~are not~~ satisfactory.

Length of Bulwarks in well

Area of Freeing Ports required by Para. 11 (e) each side of vessel

Ft. Tenths. Ft. Tenths. No.

x

x

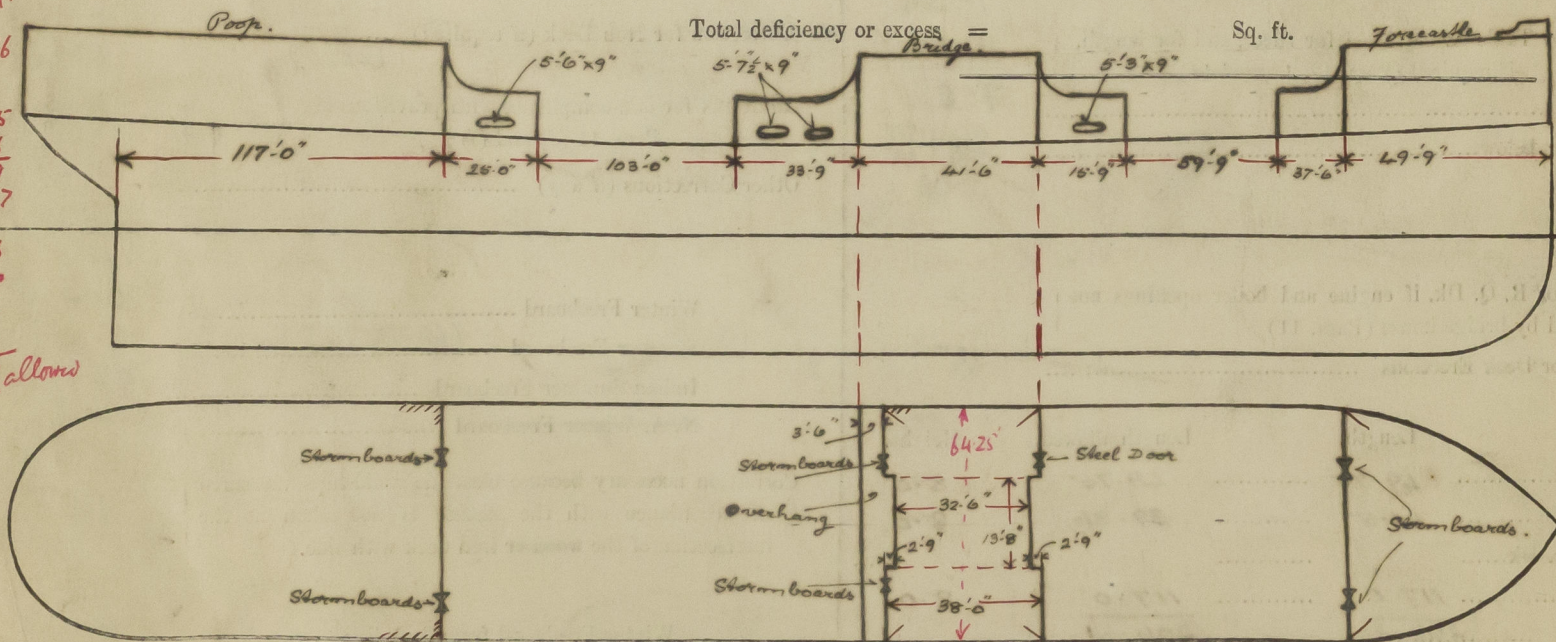
x

x

Freeing Ports (each side of vessel)

Gangway fitted in after well only constructing Poop & Bridge.
 Scuppers: Forecastle of Bridge = small flap scuppers on to the open deck P+S.
 Poop = Flap Scuppers 3 1/2" P+S. on to the open deck. also one 2" P+S. overboard with storm valves.

Bridge
 Projection fwd. raft
 2 x 25' 2 1/2" x 27 1/2" = 2.16
 64' 25" =
 Overhang aft 6.25
 - projection 2.16
 4.09
 x .75 = 3.07
 Proj. fwd. 2.16
 closed 32.50
 Proj aft 2.16
 Overhang 3.07
 39.89 allowed



Show hereon line of Floors or Tank Top with position of any Breaks in same; also height of Peak Tank tops, &c., &c.

State any special features in the construction of the Vessel

Plans in London. Swan, Hunter & Wigham Richardson Ltd. No 1465.

This is a duplicate vessel, so far as the dimensions are concerned, of the same Builder's No 1441 & 43. "Pan Norway" & "Pan Arabia". assignment contained in the Secretary's Letter dated 14th October 1930.

Owners Pan American Petroleum & Transport Co. Ltd.

Address

approx Fee £ 15 : 0 : 0

Received by me

See L.R. 11

Thomas S. Shute