

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD - STEAM SHIPS.

Sir W. G. Armstrong, Whitworth & Co. Ltd. 908.

REMARKS RELATING TO ALL STEAM SHIPS EITHER FLUSH DECKED, OR WITH
GALLANT FORECASTLES, SHORT POOPS AND BRIDGE HOUSES DISCONNECTED, OR
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 17th Jan 1920
Name of Surveyor W. T. Hudson.

Shelter Deck and Linnage opening at after end, 16'6" x 4'5 1/2"

Ship's Name.	Port of Registry and Nationality.	Official Number.	Gross Tonnage.	Date of Build.	Particulars of Classification.
<u>TAIROA</u>	<u>Southampton British</u>	<u>✓</u>	<u>✓</u>	<u>1920</u>	<u>100-A-1 Shelter Deck with Freeboard (Contemplated)</u>

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

LENGTH.	BREADTH.	DEPTH.	UNDER DECK TONNAGE.
<u>478.0</u>	<u>63.2</u>	<u>31.25</u>	<u>7418.41</u>
<u>477.09</u>	Frame Depth <u>9</u> Rule <u>" 4</u> <u>4'2" x 2</u> SIDES INSULATED	INSULATION Ceiling <u>+20</u> Sheer <u>+64</u> DROOP OF TANK TO MARGIN <u>= 1'</u> <u>= +0.4</u>	Peak <u>INSULATED</u> Tanks CORRECTION FOR RISE OF TANK AT FORE END <u>= -2.75</u>
<u>477.09</u>	<u>62.84</u>	<u>32.13</u>	<u>7415.66</u>

Moulded Depth as measured 34'4"
Addition for Keel below base line for draught record 2 1/2 inches.

Efficient of fineness .77
Any modification necessary [Para. 4 (a) to (e)]* -0.02 Cell D.B.
Efficient as corrected .75

CORRECTION FOR LENGTH.
Length of Ship or Loadline 477.09
Length in Table 412.0
Difference 65.09
Correction for 10ft., Table A. 1.4 Table C. ✓
× Difference divided by 10 11.06 (if required.)
If 1/10ths length covered divide by 2 5.53 = +5 1/2 ✓

CORRECTION FOR IRON DECK.
Proportion covered, if less than 1/10ths length covered Complete Shelter Deck.
Thickness of usual wood deck, less stringer -3 1/2 ✓

Sheer { Stem 105 } 159 ÷ 2 = 79.5 Mean 36.23
at { Sternpost 54 } 64
Sheer at 1/2 of the length from { Stem 58.5 } 89.0 ÷ 2 = 44.5 Mean
{ Sternpost 30.5 } 55 80.9
Gradual mean Sheer 79.5 + 80.9 = 80.2
Standard mean Sheer [Table, Para. 18] 57.7 Correction
Difference 22.5 ÷ 4 = 5.62
\$ If limited as Para. 18 (f) -5 3/4 ✓

CORRECTION FOR ROUND OF BEAM.
Breadth at Gunwale amidships 61.83
Round of Beam 11
Normal round 15 1/2
Difference ✓
Proportion of Deck uncovered (Para. 19) all covered.

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

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

Fall in Sheer { Para. 18 (d) } ÷ 2 =
Length uncovered ✓ Correction

ALLOWANCE FOR DECK ERECTIONS :-
Freeboard, Table C. 6-1 1/4
Correction for Length, if required (Para. 12, 13, and 14) Not
Freeboard by Table A, corrected for sheer, and for length, if required (Para. 12, 13, and 14) 8-9 1/2
Difference 2-8 1/4
Percentage as below 94.5 ✓

Correction for R. Q. Dk. if engine and boiler openings not covered by bridge house (Para. 11) ✓
Allowance for Deck Erections -2-6 1/2 ✓

	Length.	Length allowed.	Height.
Forecastle.....	<u>448.01</u>	<u>448.01</u> ✓	
Bridge House.....	<u>4.75</u>		
† Raised Qr. Dk.	<u>24.33</u>	<u>24.33</u> ✓	
Poop.....	<u>477.09</u>	<u>472.34</u> ✓	
Total		<u>2.37 = 1/2 Diff</u>	
Length of Ship		<u>474.71</u>	
Corresponding percentage (Para. 11, 12, 13, or 14)	<u>94.5</u> ✓	<u>477.09</u>	<u>.995</u> ✓

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 " " "

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 6-5 ✓
Summer Freeboard 5-10 1/2 ✓
Indian Summer Freeboard 5-4 ✓
N.A. Winter Freeboard 6-0 ✓

Winter Freeboard from deck line 6-6 1/2 ✓
Summer " " " 6-0 ✓
Indian Summer " " " 5-5 1/2 ✓
N.A. Winter " " " 6-0 ✓

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.

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 aft main 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.

SHELTER DECK WITH TONNAGE OPENING AFT

Do all the Frames extend to the top height in the Poop, Shelter Deck, Raised Quarter Deck? Bridge House? Forecastle?
To what height do the Reverse Frames extend? Channel Frames with reverse frames up to 2nd deck.
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 Openings 4'-0", closed with storm boards full height in riveted girders and steel coamings 10".
Is the Poop or Raised Quarter Deck connected with the Bridge House? Has the Bridge House an efficient Bulkhead at the fore end?
Give particulars of the means for closing the openings in Bulkhead
What is the thickness of the Bridge Front plating? and Coaming plate?
Give scantlings and spacing of the Stiffeners.
Are bracket plates fitted at each end of the Stiffeners? Are hor'l. brackets fitted connecting Bridge Bulk'd. with Bulwarks?
Has the Bridge House an efficient Iron Bulkhead at the after end? Openings 4'-0", closed with storm boards full height in riveted girders and steel coamings 10".
How are the openings closed?
Is the Forecastle at least as high as the main or top-gallant rail? Shelter Deck. 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
What is the height of the exposed Casings? 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:—

Position and Size.	No. 1 SHELTER DECK	No. 2 SHELTER DECK	No. 3 BRIDGE DECK	No. 4 BRIDGE DECK	No. 5 and 6 SHELTER DECK	No. 7 SHELTER DECK
Item.	18-0 x 16-6	23-9 x 16-6	14-3 x 16-6	7-1 x 18-0	19-0 x 16-6	16-7 x 16-6
Height above top of DECK	2-6	2-6	2-6	2-6	2-6	2-6
COAMING Thickness	Sides 4-4 Ends 4-4	Sides 4-4 Ends 4-4	Sides 4-4 Ends 4-4	Sides 4-4 Ends 4-0	Sides 4-4 Ends 4-4	Sides 4-4 Ends 4-4
SHIFTING BEAMS OR WEB PLATES	3 Webs. 4 x 3 x 40 (Top & Bottom) 14 x 9 x 36	4 Webs. Same as No. 1	3 Webs. Same as No. 1	One Web Same as No. 1	3 Webs. Same as No. 1	3 Webs. Same as No. 1
* FORE AND AFTERS	None	None	None	None	None	None
HATCHES Thickness	3	3	3	3	3	3
Remarks	fore + aft	fore + aft	fore + aft	fore + aft	fore + aft	fore + aft

* 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.)

The following information is to be given in all Cases of vessels built 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.
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 =

Sq. ft.

Ft. Tenths. Ft. Tenths. No.

Freeing Ports
(each side of vessel) =

Sq. ft.

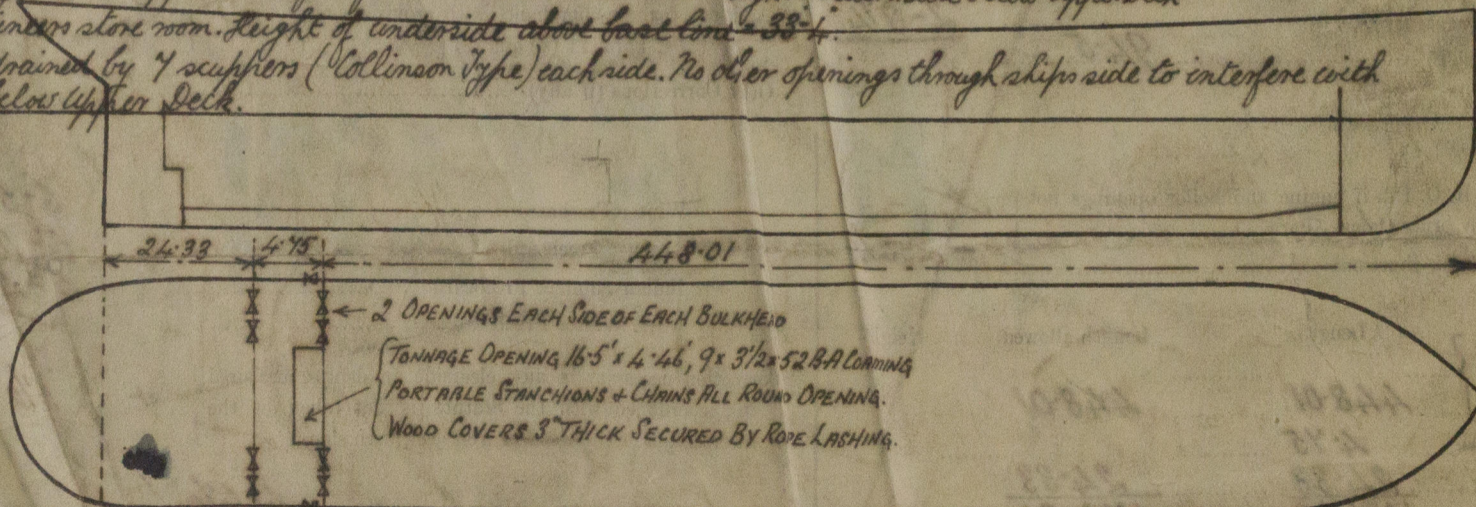
Height above base line to sill of lowest Mutton Port fitted

between 2nd St. & Upper St. and frames 60+62 = 28-6. For position of remainder of

Mutton & Coaling Ports see approved Profile forwarded herewith. One scullight on each side below Upper Deck

in way of Engineers store room. Height of underside above base line = 33-4.

Upper Deck drained by 7 scuppers (Collinson type) each side. No other openings through ship's side to interfere with load line below Upper Deck.



WASH PORT EACH SIDE 2-2 x 1-9. 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. This vessel (Jard No. 908) is a Sister Vessel to % Paranza (Jard No. 888), both vessels built by Messrs. G. Armstrong, Whitworth & Co. Ltd. Four approved plans are forwarded herewith; namely, Midship Section, Profile & Deck Plans, Plan of Hatches, and Arrangement of

Owners Shas, Savill & Albion Co. Ltd.

Address London.

Fee £ 8 : 8 : 0.

Received by me

6/8/20

Mutton Ports. The holds with the exception of No. 3 after hold are all insulated & the thickness of same on tank top = 10 1/2".
Please return plans as soon as possible. With