

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.—STEAM SHIPS.

Index No. 28764  
(For London Office only.)

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

Port of Survey Birkenhead  
Date of Survey 8<sup>th</sup> March 1920  
Name of Surveyor John Needham

Ship's Name ARIA  
Tullagar  
Number in Register Book 143649

Port of Registry and Nationality British  
Official Number 143649  
Gross Tonnage (425) approx.  
Date of Build 1920  
Particulars of Classification 100 A1 Experimental. Electrically welded. Subject to Annual Survey.

Length on Loadline.	LENGTH.	BREADTH.	DEPTH.	UNDER DECK TONNAGE.
150	150	23.7	10.1	259.67
CORRECTED DIMENSIONS.	150	23.37	11.14	259.67

Moulded Depth as measured 11-6 to M D  
11-6 to 9-0  
Addition for Keel below base line for draught record.....inches.

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

Co-efficient of fineness..... .665  
Any modification necessary [Para. 4 (a) to (e)]\*  
Co-efficient as corrected .....

CORRECTION FOR LENGTH.

Length of Ship on Loadline.....	150
Length in Table .....	158
Difference .....	8
Correction for 10ft., Table A. ....	.9
× Difference divided by 10 .....	1.08 (if required.)
If 1/10ths length covered divide by 2 .....	.54
	+ 1/2

Sheer { Stem 51.5 } 78.5 ÷ 2 = 39.25 Mean 36 12.73  
      { Sternpost 27 }  
Sheer at 1/2 of the length from { Stem 26.5 } 41.5 ÷ 2 = 20.75 Mean 20.75  
      { Sternpost 1.25 }  
Gradual mean Sheer .....

CORRECTION FOR IRON DECK.

Proportion covered, if less than 1/10ths length covered ..... 2 1/2  
Thickness of usual wood deck, less stringer .....

Rise in Sheer { At front of bridge house .2 }  
from amidships { At after end of forecastle 1.6 }  
[Para. 18 (e)] ÷ 2 =  
Fall in Sheer { Para. 18 (d) } ÷ 2 =  
Length uncovered .....

CORRECTION FOR ROUND OF BEAM.

Breadth at Gunwale amidships... 23.7  
Round of Beam .....

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

ALLOWANCE FOR DECK ERECTIONS:—

Freeboard, Table C.....	<u>2 1/2</u>
Correction for Length, if required (Para. 12, 13, and 14) .....	-
Freeboard by Table A, corrected for sheer, and for length, if required (Para. 12, 13, and 14) .....	<u>1-4 1/4</u>
Difference .....	<u>1-13 1/4</u>
Percentage as below.....	<u>74.2%</u>
	<u>10.4</u>
Correction for R. Q. Dk. if engine and boiler openings not covered by bridge house (Para. 11) .....	<u>+ .15</u>
Allowance for Deck Erections .....	<u>10.05</u>
	<u>- 10</u>

Freeboard, Table A .....	<u>1-4 1/2</u>
Correction for Sheer .....	<u>- 3/4</u>
Correction for Length .....	<u>+ 1/2</u>
Allowance for Deck Erections .....	<u>1-4 3/4</u>
Correction for Round of Beam.....	<u>- 10</u>
Correction for fall in Sheer (if any).....	<u>0-6 3/4</u>
Correction for Iron Deck (if required) .....	<u>- 2 1/2</u>
Additions for non-compliance with provisions of Para. 11 (d) and (e) .....	<u>0-4 1/4</u>
Other Corrections (if any) <u>Height of R. Q. D.</u> .....	<u>4-0</u>
	<u>4-4 1/4</u>

Length.	Length allowed.	Height.
Forecastle..... <u>25.9</u>	<u>25.9</u>	<u>7'</u>
Bridge House .....	<u>9.0</u>	<u>7'</u>
† Raised Qr. Dk..... <u>88.25</u>	<u>88.25</u>	<u>4'</u>
Poop.....		
Total .....	<u>123.15</u>	<u>= .821</u>
Length of Ship .....	<u>150.0</u>	
Corresponding percentage (Para. 11, 12, 13, or 14) .....	<u>74.2%</u>	

Winter Freeboard .....	<u>4-4 1/4</u>
Summer Freeboard .....	<u>4-2 1/2</u>
Indian Summer Freeboard .....	<u>-</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 <del>water</del> iron deck with side. ....	<u>1</u>
Winter Freeboard from deck line .....	<u>4-5 1/4</u>
Summer " " " " .....	<u>4-3 1/2</u>
Indian Summer " " " " .....	<u>-</u>
N. A. Winter " " " " .....	<u>-</u>

FREEBOARD recommended amidships from centre of Disc to top of Statutory Deck Line, W<sup>h</sup>d (Iron/Deck) :-

Fresh Water Line above centre of Disc .....	<u>16.3.20</u>
Indian Summer Line " " " " .....	
Winter Line below " " " " .....	
Winter North Atlantic Line " " " " .....	

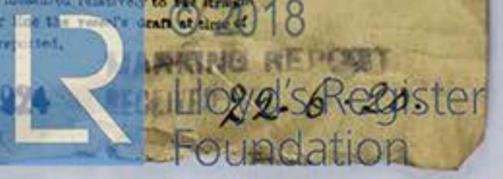
Winter Freeboard from deck line 4-5 1/4  
Summer " " " " 4-3 1/2  
Indian Summer " " " " -  
N. A. Winter " " " " -

† In vessels obtaining an allowance for deck erections under Para. 11 where the sheer drops abeam 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.

RECEIVED 12.12.31

MARKING FORM RECEIVED 8 DEC 1924



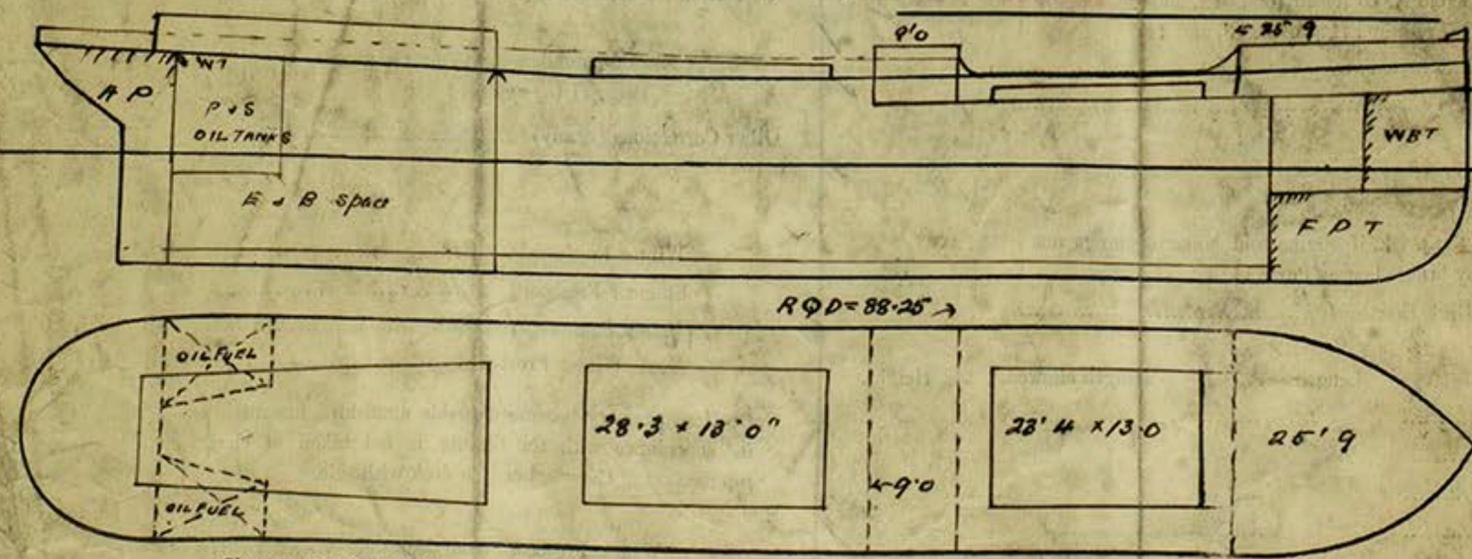
Do all the Frames extend to the top height in the Poop?  Raised Quarter Deck? *yes* Bridge House? *yes* Forecastle? *yes*  
 To what height do the Reverse Frames extend? *across floors in E & B space only.*  
 Has the Poop or Raised Quarter Deck an efficient Iron Bulkhead at the fore end? *yes*  
 Give particulars of the means for closing the openings in Bulkhead *wrapings*  
 Is the Poop or Raised Quarter Deck connected with the Bridge House? *yes* Has the Bridge House an efficient Bulkhead at the fore end? *yes*  
 Give particulars of the means for closing the openings in Bulkhead *no openings*  
 What is the thickness of the Bridge Front plating? *.24* and Coaming plate? *.28*  
 Give scantlings and spacing of the Stiffeners *5 x 2 1/2 x .40 B.H. - 30" apart*  
 Are bracket plates fitted at each end of the Stiffeners? *yes* Are hor'l. brackets fitted connecting Bridge Bulk'd. with Bulwarks? *no*  
 Has the Bridge House an efficient Iron Bulkhead at the after end? *yes*  
 How are the openings closed? *wrap*  
 Is the Forecastle at least as high as the main or top-gallant rail? *yes* Has the Forecastle an efficient Iron or Wood Bulk'd. at after end? *yes*  
 Are Engine and Boiler openings covered by a Bridge, Poop, Raised Quarter Deck, or enclosed by a Strong Iron or Steel Deckhouse? *by R. Q. D. Strong steel deckhouse*  
 If the openings are not so protected are the exposed parts of the Casings efficiently constructed?   
 Give thickness of plating; scantlings and spacing of Stiffeners *coaming .30 - rem. .24. Stiffeners 3 1/2 x 2 1/2 x .30 spaced 30" apart.*  
 What is the height of the exposed Casings? *6'6"* 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*

Position and Size.	No 2 = 28'3" x 13'0"		No 1 = 25'4" x 13'0"		Ship.	Rule.	Ship.	Rule.	Ship.	Rule.
	Ship.	Rule.	Ship.	Rule.						
COAMING	Height above top of DECK	C 3'0 Side 2'6"	C 3'0 Side 2'6"							
	Thickness	Sides .44 Ends .40	Sides .44 Ends .40							
SHIFTING BEAMS OR WEB PLATES	Number	2	2							
	Section and Scantlings	3/2 x 1/2 x 1/2	3/2 x 1/2 x 1/2							
* FORE AND AFTERS	Number	3	3							
	Section and Scantlings	8'7"	8'7"							
HATCHES	Thickness	2 1/2 W.P.	2 1/2 W.P.							
	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.)

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? *.24* Strake between Main and Bridge Sheerstrakes? *.46*  
 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, ~~not~~ satisfactory.  
 Length of Bulwarks in well *26'6"*  
 Area of Freeing Ports required by Para. 11 (e) each side of vessel = *9.15* Sq. ft.  
 Ft. Tenths. Ft. Tenths. No. }  
 M.D. 2. 5 x 1. 41 x 3 *panels* } Freeing Ports = *10.57* Sq. ft.  
 (each side of vessel) = *21.15 F*  
 P.P. 2. 5 x 1. 41 x 3 " " } = *21.75 A.*  
 Total deficiency or excess = *1.42* Sq. ft.



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 *"Electrically Welded."*

Owners *Messrs. T. & J. Brocklebank.*

Address *Liverpool.*

Fee £ *2 : 2 : 0* Received by me

