

Lloyd's Register of British & Foreign Shipping. No 17118.

SURVEYS FOR FREEBOARD.-STEAM SHIPS. 25043

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 Greenock
Date of Survey while building
Name of Surveyor J Bennett

Vardulia
ex. Verdun

| | | | | | |
|---------------------------------------|---|-----------------------------------|----------------------------|-------------------------------|--|
| Ship's Name. <u>Russell</u> No 691 | Port of Registry and Nationality. <u>Glasgow</u> <u>British</u> | Official Number. <u>137835</u> | Gross Tonnage. <u>✓</u> | Date of Build. <u>1917</u> | Particulars of Classification. <u>100 A1</u> <u>(Contemplated)</u> |
|---------------------------------------|---|-----------------------------------|----------------------------|-------------------------------|--|

| | | | | |
|---|-------------------------|---|--|---|
| Registered dimensions from Ship's Register. | LENGTH. <u>423.3</u> | BREADTH. <u>56</u> | DEPTH. <u>28.7</u> | UNDER DECK TONNAGE. <u>5360.9</u> |
| Length on LOADLINE. | <u>420.47</u> | Frame Depth Rule <u>10 1/2</u> <u>6</u> <u>4 1/2</u> <u>- 7 1/2</u> | Ceiling <u>+ .20</u> Sheer <u>+ 1.43</u> <u>4 drop on TT</u> <u>+ .16</u> | Peak Tanks <u>- 3 tons for</u> <u>9 1/2 framing</u> <u>forward of 3/4 ft</u> |
| CORRECTED DIMENSIONS. | <u>420.47</u> | <u>55.25</u> | <u>30.49</u> | <u>5357.9</u> |

Moulded Depth as measured..... 31 - 3 3/4 ✓
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>420.47</u> | |
| Length in Table | <u>375.75</u> | |
| Difference | <u>44.72</u> | |
| Correction for 10ft., Table A. | <u>1.6</u> | Table C. <u>.8</u> |
| × Difference divided by 10 | <u>7.153</u> | (if required.) <u>3.57</u> |
| If 1/10ths length covered divide by 2 | <u>+ 7 1/4</u> | <u>+ 3 1/2</u> |

CORRECTION FOR IRON DECK.

| | |
|---|----------------------|
| Proportion covered, if less than 1/10ths length covered | <u>.48</u> |
| Thickness of usual wood deck, less stringer | <u>3 1/2 - 1 1/4</u> |

CORRECTION FOR ROUND OF BEAM.

| | |
|---|---------------|
| Breadth at Gunwale amidships..... | <u>54</u> |
| Round of Beam | <u>14</u> |
| Normal round..... | <u>13 1/2</u> |
| Difference | <u>1/2</u> |
| ÷ 2 = | <u>1/4</u> |
| Proportion of Deck uncovered (Para. 19) | <u>5.2</u> |

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

Co-efficient of fineness..... .75 ✓
 Any modification necessary [Para. 4 (a) to (e)]* } bell DB
 Co-efficient as corrected73 ✓

Sheer { Stem..... 138 } 207 ÷ 2 = 103.5 ... Mean
 at { Sternpost ... 69 }
 Sheer at 1/2 of the length from { Stem 75.9 }
 Sternpost 37.95 } 113.85 ÷ 2 = 56.925 Mean
55 = 103.5
 Gradual mean Sheer 103.5 ✓
 Standard mean Sheer [Table, Para. 18] 52.0 ✓
 Difference..... 51.5 ÷ 4 = 12.87 ✓
 § If limited as Para. 18 (f)..... - 1.0 3/4

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

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

ALLOWANCE FOR DECK ERECTIONS :-

| | |
|---|------------------|
| Freeboard, Table C..... | <u>4 - 9 3/4</u> |
| Correction for Length, if required (Para. 12, 13, and 14) | <u>3 1/2</u> |
| Freeboard by Table A, corrected for sheer, and for length, if required (Para. 12, 13, and 14) } | <u>5 - 1 1/4</u> |
| Difference | <u>7 - 5 1/2</u> |
| Percentage as below..... | <u>2 - 4 1/4</u> |
| | <u>30.6</u> |

Correction for R. Q. Dk. if engine and boiler openings not covered by bridge house (Para. 11) }
 Allowance for Deck Erections 8 3/4

| | | | |
|--|--------------|-----------------|-------------|
| | Length. | Length allowed. | Height. |
| Forecastle..... | <u>41-3</u> | <u>41.25</u> | <u>7-9</u> |
| Bridge House | <u>123-0</u> | <u>123</u> | <u>7-9</u> |
| † Raised Qr. Dk..... | | | |
| Poop..... | <u>37-9</u> | <u>37.75</u> | <u>7-9</u> |
| Total | | <u>202.00</u> | |
| Length of Ship | | <u>420.47</u> | <u>4804</u> |
| Corresponding percentage (Para. 11, 12, 13, or 14) } | | <u>30.6</u> | |

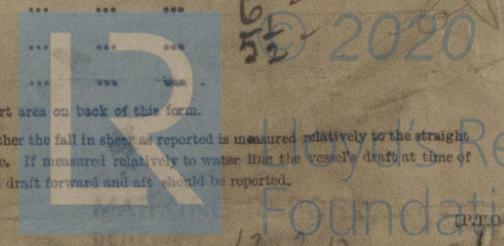
FREEBOARD recommended amidships from centre of Disc to top of Statutory Deck Line, Wood (Iron) Deck :-

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

| | |
|---|--------------------|
| Freeboard, Table A | <u>7 - 11</u> |
| Correction for Sheer | <u>- 1 - 0 3/4</u> |
| | <u>6 - 10 1/4</u> |
| Correction for Length | <u>+ 7 1/4</u> |
| | <u>7 - 8 1/4</u> |
| Allowance for Deck Erections | <u>6 - 8 3/4</u> |
| Correction for Round of Beam..... | <u>- 1 1/4</u> |
| Correction for fall in Sheer (if any)..... | <u>✓</u> |
| Correction for Iron Deck (if required) | <u>- 1 1/4</u> |
| | <u>6 - 7</u> |
| Additions for non-compliance with provisions of Para. 11 (d) and (e) † | |
| Other Corrections (if any) | |
| Winter Freeboard | <u>6 - 7</u> |
| Summer Freeboard | <u>6 - 1 1/4</u> |
| Indian Summer Freeboard | <u>5 - 7 1/2</u> |
| N. A. Winter Freeboard | |
| Correction necessary because clearside amidships, measured in accordance with the statute is not taken at the intersection of the <u>steel</u> wood or iron deck with side. | <u>1 3/4</u> |
| Winter Freeboard from deck line | <u>6 - 8 3/4</u> |
| Summer " " " " | <u>6 - 3</u> |
| Indian Summer " " " " | <u>5 - 9 1/4</u> |
| N. A. Winter " " " " | <u>6 - 3 1/4</u> |

The Builders state they cannot get in to have a and for this vessel

3357-0173



† 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 stern-posts. In vessels having poops and forecastles, it means the sheer measured at points distant one-eighth of the vessel's length from stem and stern-post.

† 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? to upper and second decks alternately
 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 shifting boards full height in permanent channels
 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 steel doors
 What is the thickness of the Bridge Front plating? .40 and Coaming plate? .44
 Give scantlings and spacing of the Stiffeners 8 1/2 x 3 1/2 x .64 BA spaced 30 apart
 Are bracket plates fitted at each end of the Stiffeners? yes 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? shifting boards full height in permanent channels
 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 the Engine and Boiler openings covered by a Bridge, Poop, Raised Quarter Deck, or enclosed by a Strong Iron or Steel Deckhouse? by bridge
 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 yes
 What is the height of the exposed Casings? yes 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

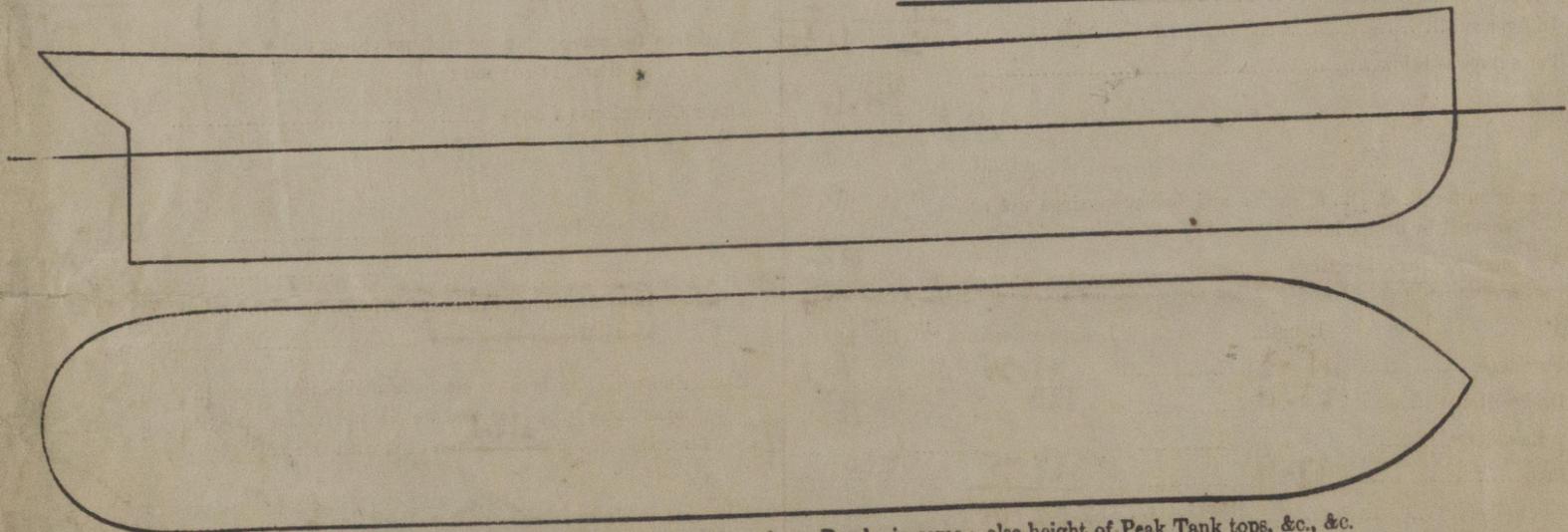
| Position and Size. | No 1 24 x 18 | | No 2 30 x 18 | | No 3 18 x 16 1/2 | | No 4 33 x 18 | | No 5 24 x 18 | | |
|--|------------------------|------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------------------|----------------------------------|--------------------------------------|----------------------------------|------------------------------|----------------------------------|
| | Ship. | Rule. | Ship. | Rule. | Ship. | Rule. | Ship. | Rule. | Ship. | Rule. | |
| COAMING | | | | | | | | | | | |
| Height above top of DECK | 30 | 24 | 30 | 24 | 30 | 18 | 30 | 24 | 30 | 24 | |
| Thickness | Sides | .46 | .50 | .50 | .44 | .44 | .54 | .54 | .44 | .44 | |
| | Ends | .40 | .40 | .40 | .40 | .40 | .40 | .40 | .40 | .40 | |
| SHIFTING MEANS OR WEB PLATES | Number | 3 | 4 | 4 | 2 | 2 | 5 | 5 | 3 | 3 | |
| | Section and Scantlings | 35 x 28 x 3/4 5 x 3 x 1/4 | 3 1/2 x 27 x 3/4 5 x 3 x 1/4 | 3 1/2 x 25 x 3/4 5 x 3 x 1/4 | 3 1/2 x 24 x 3/4 5 x 3 x 1/4 | 26 x 20 x 3/4 3 1/2 x 3 1/2 x 5/8 | 25 1/2 x 18 x 3/4 4 x 3 x 1/4 | 26 x 20 x 3/4 3 1/2 x 3 1/2 x 5/8 | 25 1/2 x 18 x 3/4 4 x 3 x 1/4 | 32 x 26 x 3/4 5 x 3 x 1/4 | 31 1/2 x 24 x 3/4 5 x 3 x 1/4 |
| | Material | Steel | Steel | Steel | Steel | Steel | Steel | Steel | Steel | Steel | Steel |
| * FORE AND AFTERS. | Number | | | | | | | | | | |
| | Section and Scantlings | none | | | | | | | | | |
| | Material | | | | | | | | | | |
| HATCHES Thickness | No 1 3/4 | | | | | | | | | | |
| Remarks | others 3" | | | | | | | | | | |

* When the Fore and Afters are of wood the depth should be stated from the underside of the hatches.
 (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? _____ 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 _____ Sq. ft.
 Area of Freeing Ports required by Para. 11 (a) each side of vessel = _____ Sq. ft.
 Ft. Tenths. Ft. Tenths. No. } Freeing Ports (each side of vessel) = _____ Sq. ft.
 Total deficiency or excess = _____ 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 cellular double bottom
Sister vessel to SS 'Blair Stuart' built at the yard No 17027
Displacement scale and tons per inch scale forwarded herewith
vessel does not carry passengers
Owners Builders Russell & Co
 Address Port Glasgow

Approved photo of hull section and longitudinal plan sent herewith
 Lloyd's Register Foundation

Fee £ _____ Received by me _____