

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

Having Raised Quarter deck, bridge & Forecastle

(Type of Superstructures.)

Port of Survey Hull

Date of Survey Jan 31<sup>st</sup> 1933

Name of Surveyor M. Malcolm

Particulars of Classification +100A1

Ship's Name Continental Coaster Nationality and Port of Registry British London Official Number 124058 Gross Tonnage 531 Date of Build 1907-3

Moulded Dimensions: Length 164.8 Breadth 26.5 Depth 13.4

Moulded displacement at moulded draught = 85 per cent. of moulded depth 1010 tons

Coefficient of fineness for use with Tables .714

S.S. Off. No. 3-10,19

S.S. Son. No. 2-28

| Depth for Freeboard (D)   | Depth correction   | Round of Beam correction   |
|---|--|--|
| Moulded depth ... <u>13.33</u>  | (a) Where D is greater than Table depth<br>(D-Table depth) R = <u>13.36 - 10.99 = 2.37</u>           | Moulded Breadth (B) <u>26.50</u>   |
| Stringer plate ... <u>.03</u>   | (b) Where D is less than Table depth (if allowed)<br>(Table depth-D) R = <u>10.99 - 13.36 = 2.37</u> | Standard Round of Beam = $\frac{B \times 12}{50} = \frac{26.50 \times 12}{50} = 6.36$                            |
| Sheathing on exposed deck<br>$T \left( \frac{L-S}{L} \right) =$ <u>none</u> | If restricted by superstructures   | Ship's Round of Beam = <u>6 1/2"</u>   |
| Depth for Freeboard (D) = <u>13.36</u>                                      |  | Difference <u>.14</u>  |
|   |  | Restricted to  |
|   |  | Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.14}{4} \times .7885 = .027$ |

## DEDUCTION FOR SUPERSTRUCTURES.

|                         | Mean Covered Length (S) | Equivalent Enclosed Length (S <sub>1</sub> ) | Height      | Height Correction | Effective Length (E) |
|-------------------------|-------------------------|--|-------------|-------------------|----------------------|
| Poop enclosed ...       |                         |  |             |                   |                      |
| overhang ...            |                         |  |             |                   |                      |
| D. enclosed ...         | <u>86.3</u>             | <u>86.30</u>                                 | <u>4.04</u> |                   | <u>86.30</u>         |
| overhang ...            |                         |  |             |                   |                      |
| Bridge enclosed ...     | <u>10.5</u>             | <u>10.50</u>                                 | <u>7.0</u>  |                   | <u>10.50</u>         |
| overhang aft ...        |                         |  |             |                   |                      |
| overhang forward ...    | <u>19.91</u>            | <u>19.91</u>                                 | <u>6.4</u>  |                   | <u>19.91</u>         |
| F'cle enclosed ...      | <u>2.0</u>              | <u>54</u>                                    |             |                   | <u>54</u>            |
| overhang ...            | <u>1.09</u>             |  |             |                   |                      |
| Trunk aft ...           |                         |  |             |                   |                      |
| forward ...             |                         |  |             |                   |                      |
| Tonnage opening aft ... |                         |  |             |                   |                      |
| forward ...             |                         |  |             |                   |                      |
| Total ...               | <u>117.80</u>           | <u>117.25</u>                                |             |                   | <u>117.25</u>        |

Standard Height of Superstructure 6.0

" " R.Q.D. 3.43

Deduction for complete superstructure 22.48

Percentage covered  $\frac{S}{L} = \frac{117.25}{164.8} = 71.48$

" "  $\frac{S_1}{L} = \frac{117.25}{164.8} = 71.15$

" "  $\frac{E}{L} = \frac{117.25}{164.8} = 71.15$

Percentage from Table, Line A. 64.41

(corrected for absence of forecastle (if required))

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = -14.48

## SHEER CORRECTION.

| Station             | Standard Ordinate | S | M | Product       | Actual Ordinate | Effective Ordinate | S | M | Product       |
|---------------------|-------------------|---|---|---------------|-----------------|--------------------|---|---|---------------|
| A.P. ...            | <u>26.48</u>      | 1 |   | <u>26.48</u>  | <u>29.75</u>    | <u>29.75</u>       | 1 |   | <u>26.48</u>  |
| 1/2 L from A.P. ... | <u>11.78</u>      | 4 |   | <u>47.12</u>  | <u>16.0</u>     | <u>15.41</u>       | 4 |   | <u>47.12</u>  |
| 3/4 L " ...         | <u>2.91</u>       | 2 |   | <u>5.82</u>   | <u>6.0</u>      | <u>3.85</u>        | 2 |   | <u>5.82</u>   |
| Amidships ...       |                   | 4 |   | <u>0</u>      | <u>0</u>        |                    | 4 |   |               |
| 3/4 L from F.P. ... | <u>5.83</u>       | 2 |   | <u>11.66</u>  | <u>5</u>        | <u>4.59</u>        | 2 |   | <u>9.18</u>   |
| 1/2 L " ...         | <u>23.57</u>      | 4 |   | <u>94.28</u>  | <u>18.3</u>     | <u>18.37</u>       | 4 |   | <u>73.48</u>  |
| F.P. ...            | <u>52.96</u>      | 1 |   | <u>52.96</u>  | <u>42.0</u>     | <u>42.0</u>        | 1 |   | <u>42.00</u>  |
| Total ...           |                   |   |   | <u>238.32</u> |                 |                    |   |   | <u>204.08</u> |

Mean actual sheer aft = Excess

Mean standard sheer aft = 3.43

Mean actual sheer forward = Deficient

Mean standard sheer forward = 3.43

Length of enclosed superstructure forward of amidships = Deficient sheer

" " aft of " = Deficient sheer

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{34.24}{18} \left( .75 - \frac{35.74}{2 \times 164.8} \right) = .75$

If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

| Deduction for Tropical Freeboard.   | Deduction for Fresh Water.                           | TABULAR FREEBOARD corrected for Flush Deck (if required) |
|---|--|--|
| Addition for Winter and Winter North Atlantic Freeboard.  | Displacement in salt water at summer load water line | Correction for coefficient <u>.714 + .65 = 1.36</u>      |
| Depth to Freeboard Deck = <u>17.40</u>  | $\Delta =$   | <u>1.394</u>   |
| Summer freeboard = <u>4.65</u>  | Tons per inch immersion at summer load water line    | <u>1.36</u>  |
| Moulded draught (d) = <u>12.75</u>  | T =  | <u>1.36</u>  |
| Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>3.19</u> | Deduction = $\frac{\Delta}{40 T}$ inches =           | <u>3.00</u>  |
| Addition for Winter North Atlantic Freeboard (if required) =  |  | <u>14.48</u>   |
|   |  | <u>.75</u>   |
|   |  | <u>48.50</u>   |
|   |  | <u>52.25</u>   |
|   |  | <u>14.49</u>   |
|   |  | <u>37.76</u>   |
|   |  | <u>55.76</u>   |

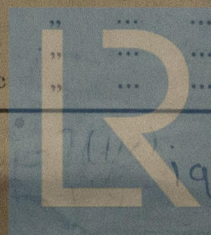
Raised Quarter

Summer Freeboard = 55.76

## SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—

|  |       |                                |     |
|--|-------|--------------------------------|-----|
| Tropical Fresh Water Line above Centre of Disc | ...   | Tropical Fresh Water Freeboard | ... |
| Fresh Water Line                               | "     | Fresh Water                    | "   |
| Tropical Line                                  | "     | Tropical                       | "   |
| Winter Line                                    | below | Winter                         | "   |
| Winter North Atlantic Line                     | "     | Winter North Atlantic          | "   |

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PARTICULARS OF PROTECTION TO OPENINGS, ETC.

| HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS  |                       |  |               |                         |   |  |  |  |  |
|--|-----------------------|--|---------------|-------------------------|---|--|--|--|--|
| Description of Hatchway  |                       | Not. B. Well.  | Not. R.Q. Dh. | On R.Q. Dh. to A. peak. | Casing Top.   |  |  |  |  |
| Dimensions of Hatchway   |                       | 36'-8" x 16'   | 22'-9" x 16'  | 22' dia.                | (Bunker) 7' x 18'   |  |  |  |  |
| COAMINGS   | Height above Deck     | 30"  | 46"           | 12"                     | 3" angle  |  |  |  |  |
|  | Thickness             | 4"   | 4"            | 3"                      | 4"  |  |  |  |  |
|  | Stiffeners            | 7" B.F.  | 7" B.F.       | ✓                       | ✓   |  |  |  |  |
|  | Brackets, Stays       | bkts.  | bkts.         | ✓                       | ✓   |  |  |  |  |
| HATCH BEAMS  | Number                | 5  | 3             |                         |   |  |  |  |  |
|  | Spacing               | even   | even          |                         |   |  |  |  |  |
|  | Scantling and Sketch  | 27" x 4" top angles 3 1/2 x 3 1/2 x 4" btm - 3 x 3 x 3 1/2 | as No. 1      | ✓                       | ✓   |  |  |  |  |
|  | Bearing Surface       | 3  | 3             |                         |   |  |  |  |  |
| FORE AND AFTERS  | Number                |  |               |                         |   |  |  |  |  |
|  | Spacing               |  |               |                         |   |  |  |  |  |
|  | Unsupported Lengths   |  |               |                         |   |  |  |  |  |
|  | Scantling* and Sketch | none   | none          | ✓                       | Repairing proposed to fit one fixed beam in center fore & aft fitted with fore & after each side (portable) 3 x 3 x 3 1/2 |  |  |  |  |
|  | Bearing Surface       |  |               |                         | Keels at each end fixed beam.   |  |  |  |  |
| HATCH COVERS   | Material              | W.W.   | W.W.          | Steel                   | K.P.  |  |  |  |  |
|  | Thickness             | 2 1/2"   | 2 1/2"        | W.T. with               | 2 1/2" to be renewed  |  |  |  |  |
|  | How fitted            | f. & a.  | f. & a.       | Clips                   | Thent.  |  |  |  |  |
|  | Bearing Surface       | 3  | 3             |                         | 3   |  |  |  |  |
| Spacing of Cleats  |                       | 24"  | 24"           | ✓                       | 24"   |  |  |  |  |
| Number of Tarpaulins   |                       | 2  | 2             | ✓                       | 1 to be supplied  |  |  |  |  |
| <p>*Are wood fore and afters steel shod at all bearing surfaces? <del>wood covers &amp; tarpaulins to be</del></p> <p>Are battens and wedges efficient and in good condition? <del>examined in place.</del></p> <p>Are tarpaulins in good condition and in accordance with rule requirements? <del>Lashings to be supplied</del> yes</p> <p>Are lashings provided in accordance with rule requirements? <del>yes</del></p> |                       |  |               |                         |   |  |  |  |  |

Particulars of fiddle, funnel and ventilator coamings:—

~~Fiddle framing to be repaired & hinged steel storm cover to be provided.~~  
~~Funnel cape to be repaired.~~  
~~Fiddle ventilator coamings & covers to be repaired.~~  
~~Engine Room skylight flaps & glasses to be repaired.~~  
~~Mushroom vents on casing top to be repaired.~~

Particulars of Flush Bunker Scuttles:—

none

Particulars of Companionways:—

Steel trunk at fore-castle front on centerline, 1'-10" x 2'-6" leading to file store. opening 1'-9" x 4'-3", sill 15", closed by hinged wood doors, with spring lock, manipulated from both sides, ~~spring lock to be repaired.~~

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

File dh: 6' dia. 3'0" high x .3 to f'de accomdn.  
 Well: 10' dia. coamings 3'0" high x .3 to hold  
 Bde dh: 5' " 18" high x .25, covers to be repaired  
 R.Q. Dh: 10' " 3'0" high x .3 to hold.

Ventilators constructed in accordance with Rule. ~~wood plugs and canvas covers to be provided.~~  
 Efficient closing provided.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

File deck: 2' dia. F.N. 12" high to F. Peak tank  
 Well: 2' " 18" " B.B. tank  
 R.Q. Dh: 2' " 2'3" " A.P. tank

Efficient means of closing provided for air pipes

Particulars of Gangway Cargo and Coaling Ports:—

none



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Particulars of Scuppers and Sanitary Discharge Pipes :-

Scuppers on R.Q. dk. in Well of gunwall bar type.  
Sanitary discharge pipes, at Forecastle Sidehouses, lead above upper deck.

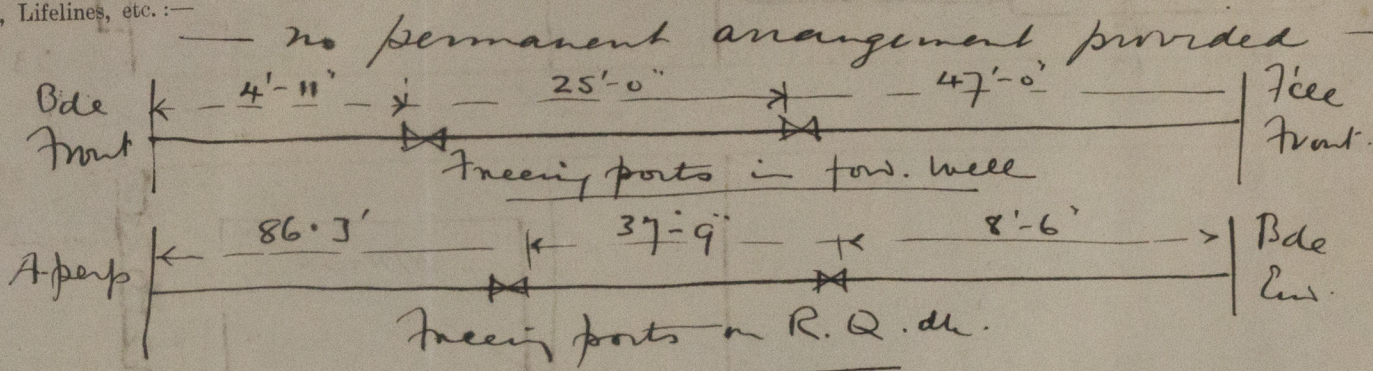
Particulars of Side Scuttles :-

In Forecastle; fitted with deadlights.  
Side scuttles of substantial construction.

Particulars of Guard Rails :-

Idle dk. 3'-0" high, 2 rail, Stanchions 5 ft apart.  
Well. Steel bulwarks 3'-8" high, substantially constructed & stayed.  
R.Q. dk. 3'-0" "  
~~Bulwark deck steel bulwark to upper lip not a bulwark supporting angles riveted to brimband.~~

Particulars of Gangways, Lifelines, etc. :-



Particulars of Freeing Arrangements.

|              | Length of Bulwark | Height of Bulwark | Size of Freeing Ports | Number each side | Area each side | Rule area each side |
|--------------|-------------------|-------------------|-----------------------|------------------|----------------|---------------------|
| R.Q. dk.     | 86.3'             | 3'-0"             | 2'-3" x 2'-0"         | 2                | 17 1/2         | 17.25               |
| Forward Well | 47.0'             | 3'-8"             | 3'-0" x 2'-1"         | 2                | 12.48          | 11.2                |

State position of each freeing port ... After Well = R.Q. dk. 3'  
(F. and A. position and height above deck edge) Forward Well = 7"  
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :- hinges steel shutters.  
Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.

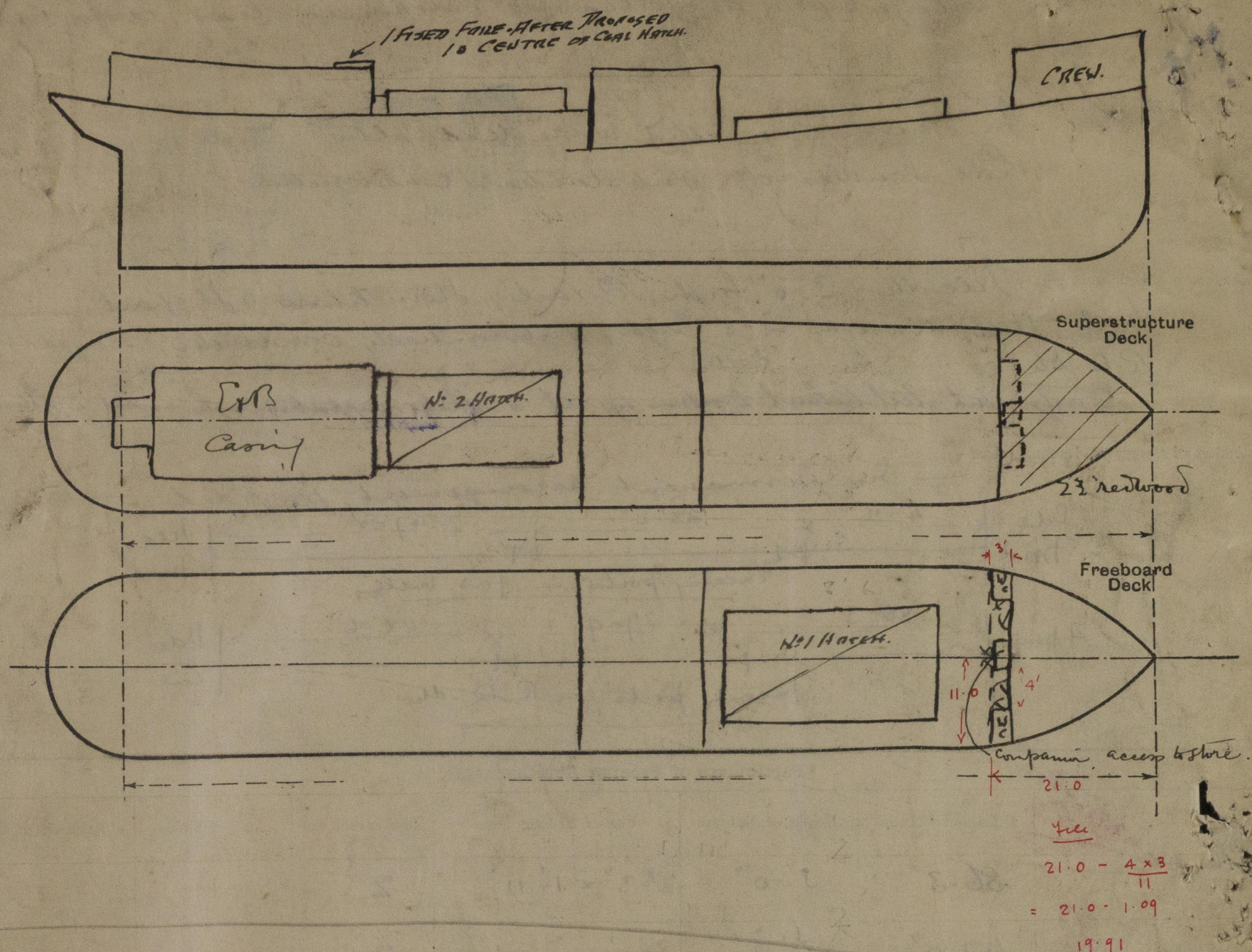
|   | Coaming | Plating | Stiffeners     | Spacing | End Attachments of Stiffeners | Size of Openings | Height of Sills | Height of Casings |
|---|---------|---------|----------------|---------|-------------------------------|------------------|-----------------|-------------------|
| Poop Bulkhead   |         |         |                |         |                               |                  |                 |                   |
| Raised Quarter Deck Bulkhead  |         |         |                |         |                               |                  |                 |                   |
| Bridge, After Bulkhead  | .3      | .3      | not accessible |         |                               | none             | ✓               | 4-0 }<br>7-0 }    |
| Bridge, Forward Bulkhead  | .4      | .4      |                |         |                               | none             | ✓               | 7-0               |
| Forecastle Bulkhead   | .25     | .25     | 3 x 3 x 3      | 30"     | none                          | 4' x 1'-10"      | 18'             | 6-4'              |
| Trunk, Aft  |         |         |                |         |                               |                  |                 |                   |
| Trunk, Forward  |         |         |                |         |                               |                  |                 |                   |
| Exposed Machinery Casings on Freeboard or Raised Quarter Deck                       | .30     | .26     | 2 x 2 x 3      | 36"     | bkt. top.                     | 4' x 1'-10"      | 2'-10"          | 7-0               |
| Exposed Machinery Casings on Superstructure Decks                                   |         |         |                |         |                               |                  |                 |                   |
| Machinery Casings within Superstructures not fitted with Class I Closing Appliances |         |         |                |         |                               |                  |                 |                   |
| Deckhouses on Flush Deck Ships  |         |         |                |         |                               |                  |                 |                   |

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

|   |  |
|---|--|
| Poop Bulkhead   | ✓  |
| Raised Quarter Deck Bulkhead  | ✓ no opening   |
| Bridge, After Bulkhead  | ✓ no opening   |
| Bridge, Forward Bulkhead  | ✓ no opening   |
| Forecastle Bulkhead   | hinges steel doors, spring locks, yes. <del>to be repaired</del>           |
| Exposed Machinery Casings on Freeboard or Raised Quarter Deck                       | hinges steel doors, spring locks, or clips, yes. <del>to be repaired</del> |
| Exposed Machinery Casings on Superstructure Decks                                   |  |
| Machinery Casings within Superstructures not fitted with Class I Closing Appliances |  |
| Deckhouses on Flush Deck Ships  |  |



Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



State any special features in the construction of the ship:—

Survey for freeboard held in dry dock.  
 Vessel now under survey for complete S.S. 2<sup>nd</sup> No 3 and alterations per approved plans, which are enclosed herewith (Please return plans when 2 plans.  
 Please note that the arrangement of the 1<sup>st</sup> hatch beam has been modified from the plan submitted and approved 31/12/32. 5 sets only are now to be fitted of rig as per page 2. Hatch covers 2 1/2' thick are proposed.

Builder's name and yard number

R. Williamson & Son

Names of sister ships

Owners

W.A. Wilson

Fee £

6 : 16 : -

Received by me



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