

Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.—STEAM SHIPS. 2408

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 Barron.  
Date of Survey White Building  
Name of Surveyor J. Hodgson

| Ship's Name.   | Port of Registry and Nationality. | Official Number. | Gross Tonnage.  | Date of Build. | Particulars of Classification.                          |
|--|-----------------------------------|------------------|-----------------|----------------|---|
| <u>STRATHNAVER</u><br><u>Vickers Armstrongs No 663</u><br>Number in Register Book <u>35213</u> | <u>London.</u><br><u>British</u>  | <u>✓</u>         | <u>27547.14</u> | <u>1931.</u>   | <u>+ 100 A1 with freeboard</u><br><u>(Contemplated)</u> |

| Registered dimensions from Ship's Register. | LENGTH.      | BREADTH.  | DEPTH.                                     | UNDER DECK TONNAGE.  |
|---|--------------|---|--|--|
|   | <u>638.4</u> | <u>80.25</u>  | <u>33.10</u>                               | <u>3403.</u><br><u>12352.20</u>                                      |
| Length on LOADLINE.                         | <u>630.0</u> | Frame Depth <u>10</u><br>Rule <u>9</u><br><u>for sparving</u><br><u>allow + 25.30</u> | Ceiling <u>+ 20</u><br>Sheer <u>+ 1.61</u> | Peak Included.<br>Tanks<br>Deduct<br>Cruiser Stern.<br><u>106.10</u> |
| CORRECTED DIMENSIONS.                       | <u>630.0</u> | <u>80.34</u>  | <u>34.91</u>                               | <u>12247.10</u>  |

Co-efficient of fineness..... .69  
Any modification necessary {  
[Para. 4 (a) to (e)]\*  
Co-efficient as corrected ..... .69  
Note: Tank rises 3" from Centre to Side  
Tonnage measured to 15 inside frame each side in cargo spaces underSheer { Stem..... 156 } 240 ÷ 2 = 120 Mean 36  
          { Sternpost... 84 }  
Sheer at  $\frac{1}{2}$  of the length from { Stem 94.2 } 144 ÷ 2 = 72 Mean 130.91  
  { Sternpost 49.2 }  
Gradual mean Sheer ..... 120 + 130.91 ..... 125.45  
Standard mean Sheer [Table, Para. 18] ..... 73 Correction  
Difference..... 52.45 ÷ 4 = 13.11  
§ If limited as Para. 18 (f) ..... 1.1  
Depth (130.91 - 73) ÷ 36 = + 1.61Rise in Sheer { At front of bridge house.....  
from amidships {  
[Para. 18 (e)] { At after end of forecastle .....Fall in Sheer {  
Para. 18 (d) { ÷ 2 = 81.2  
Length uncovered ..... Correction

## ALLOWANCE FOR DECK ERECTIONS:—

Freeboard, Table C..... 7-12  
Correction for Length, if required (Para. 12, 13, and 14) .....  
Freeboard by Table A, corrected for sheer, and for length, if required (Para. 11, 12, 13, and 14) } 9-1  
Difference ..... 1-11 1/2  
Percentage as below..... 81.1%  
23 1/2 x 81.1 = 19.06 = 1-7Correction for R. Q. Dk. if engine and boiler openings not covered by bridge house (Para. 11) }  
Allowance for Deck Erections ..... 1-7

|                          | Length.                               | Length allowed. | Height.         |
|--------------------------|---------------------------------------|-----------------|-----------------|
| Forecastle..... (Closed) | <u>493.2</u>                          | <u>493.2</u>    | <u>9' 9" 8'</u> |
| Bridge House { open.     | <u>11.6</u> x <u>3/4</u>              | <u>8.7</u>      |                 |
| Raised Q. Dk. { closed   | <u>26.8</u> - allow full.             | <u>26.8</u>     | <u>8'</u>       |
| op..... { open           | <u>44</u> { <u>13.8</u> - allow full. | <u>32.8</u>     |                 |
| Total                    | <u>548.8</u>                          | <u>542.35</u>   | <u>86.17</u>    |
| Length of Ship           | <u>630</u>                            |                 |                 |

Corresponding percentage {  
(Para. 11, 12, 13, and 14) } 81.1%FREEBOARD recommended amidships from centre of Disc to top of Statutory Deck Line, Wood (Steel) Deck:—  
As assigned by Board of Trade.  
Fresh Water Line above centre of Disc ..... 8'-8"  
Indian Summer Line " " " " ..... 7 1/4  
Winter Line below " " " " ..... 7"  
Winter North Atlantic Line " " " " ..... 7"© 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-post. 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.

2m. 7.27. T.

The displacement at a draft of 85% of depth i.e. 81-10 1/2 = 30,100 tons  
Tons per inch " " " " " " " " = 94.5Moulded Depth as measured..... 32'-6" 1/2 F deckAddition 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..... 630  
Length in Table ..... 450  
Difference ..... 180  
Correction for 10ft., Table A. .... 1.7 Table C. ....  
× Difference divided by 10 ..... 30.6 (if required.)  
If  $\frac{1}{10}$ ths length covered divide by 2 15.3 + 1-3 1/4

## CORRECTION FOR IRON DECK.

Proportion covered, if less than  $\frac{1}{10}$ ths length covered .....  
Thickness of usual wood deck, less stringer ..... 3 1/2  
Composition on wood deck. 1 1/2 difference - 2"

## CORRECTION FOR ROUND OF BEAM.

Breadth at Gunwale amidships..... 80  
Round of Beam ..... 4 1/2 (6" in well aft)  
Normal round..... 20  
Difference ..... 20 ÷ 2 = 10"  
Proportion of Deck uncovered (Para. 19) ..... 129 34 + 1 1/2  
10 x 129 = 1290

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

Freeboard, Table A ..... 10-2  
Correction for Sheer ..... 1-1  
Correction for Length ..... 1-3 1/4  
Allowance for Deck Erections ..... 10-4 1/4  
Correction for Round of Beam..... 1-7  
Correction for fall in Sheer (if any).....  
Correction for Steel Deck (if required) ..... 2  
8-8 1/2  
Additions for non-compliance with provisions of {  
Para. 11 (d) and (e) }  
Other Corrections (if any) for scantlings 9 to correspond.  
to a Summer Moulded draft of 29'-0" + 6 1/2Winter Freeboard ..... 9-3  
Summer Freeboard ..... 8-8  
Indian Summer Freeboard .....  
N.A. Winter Freeboard .....Correction necessary because clearside amidships, measured in accordance with the Statute is not taken at the intersection of the wood or steel deck with side.  
Top of Composition 1 1/2 above steel deck.Winter Freeboard from deck line ..... 9-3  
Summer " " " " ..... 8-8  
Indian Summer " " " " .....  
N.A. Winter " " " " .....Comparison N.A. Winter " " " " .....  
1 1/2 above on  
Winter (Steel) Deck:— 8'-8" 8-8 all voyages  
7 1/4  
7" 7"

+ State dimensions of freising 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  
22 AUG 1931



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 4 deck forward & 4 deck aft.*  
 Has the Poop or Raised Quarter Deck an efficient Iron Bulkhead at the fore end? *Yes. See sketch.*  
 Give particulars of the means for closing the openings in Bulkhead *Hinged steel and teak doors with steel coamings*  
 Is the Poop or Raised Quarter Deck connected with the Bridge House? *No*. Has the Bridge House an efficient Bulkhead at the fore end? *Combined with*  
 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? *Yes*.  
 How are the openings closed? *Hinged teak doors with steel coamings*  
 Is the Forecastle at least as high as the main or top-gallant rail? *✓* Has the Forecastle an efficient Iron or Wood Bulk'd. at after end? *✓*  
 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 and two tiers of strong superstructures and tier of deck above bridge*  
 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 *✓*  
 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:—  
*Yes.*

| Position and Size.                   | N <sup>o</sup> 1 E (Bridge Deck) 13-6 x 16-0 | N <sup>o</sup> 2 E (Bridge Deck) 19-6 x 16-0 | N <sup>o</sup> 3 D Deck (Upper Bridge) 19-3 x 16-0 | N <sup>o</sup> 4 D Deck 12-9 x 14-9     | N <sup>o</sup> 5 Upper Deck 18-9 x 16-0 | N <sup>o</sup> 6 |
|--------------------------------------|--|--|--|---|---|------------------|
| Item.                                | Ship.  | Rule.  | Ship.  | Rule.                                   | Ship.                                   | Rule.            |
| Height above top of DECK             | 30   | 30   | 30   | 30                                      | 30                                      | 30               |
| COAMING: Sides                       | 44   | 44   | 44   | 44                                      | 44                                      | 44               |
| Ends                                 | 44   | 44   | 44   | 44                                      | 44                                      | 44               |
| SHIPPING BEAMS OR WEB PLATES: Number | None   | as approved                                  | None   | as approved                             | one                                     | as approved      |
| Section and Scantlings               | None   | as approved                                  | None   | as approved                             | one                                     | as approved      |
| Material                             | Steel  | as approved                                  | Steel  | as approved                             | Steel                                   | as approved      |
| * FORE AND AFTERS: Number            | 4  | 4  | 4  | 4                                       | 4                                       | 4                |
| Section and Scantlings               | I 12 x 5.36                                  | I 12 x 6.50                                  | I 12 x 5.36  | None                                    | None                                    | None             |
| Material                             | riveted 1/2" Steel cover                     | riveted 1/2" Steel cover                     | riveted 1/2" Steel cover                           | None                                    | None                                    | None             |
| HATCHES Thickness                    | 3/4" Steel                                   | 3/4" Steel                                   | 3/4" Steel   | 3" 4" plating                           | 3" 4" plating                           | 3"               |
| Remarks                              | Hatch framed Bridge 1/2" 2nd Deck            | Hatch framed Bridge 3/4" Upper Deck          | Hatch framed D Deck 1/2" F (upper deck)            | Hatch framed D Deck 1/2" F (upper deck) | Hatch framed D Deck 1/2" F (upper deck) |                  |

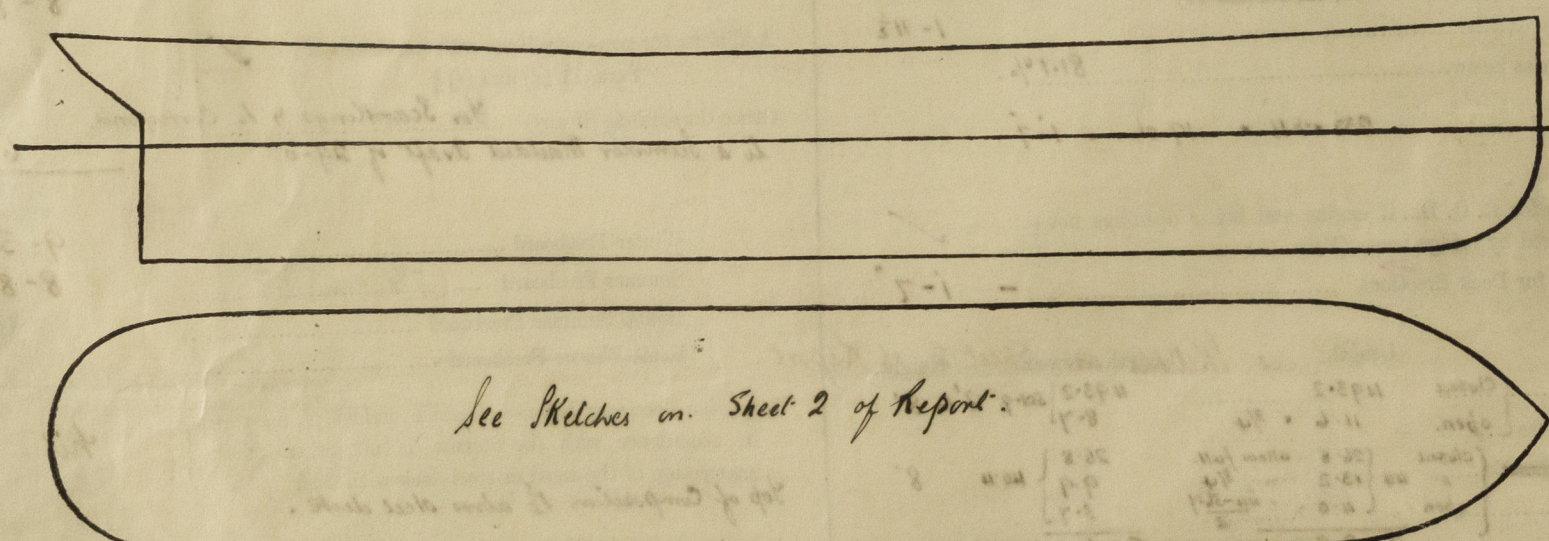
\* The depth of Fore and Afters should be stated from the underside of the hatches in all cases.  
 (If the sill of the lowest side scuttle will be less than 6 inches above the Indian Summer Load Line if assigned under the tables, state vertical distance from top of deck at side amidships to lower edge 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? *1/2"* Strake between Main and Bridge Sheerstrakes? *1/2"*

Delete the words { The Crew ~~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 aft *81.2'*  
 Area of Freeing Ports required by Para. 11 (a) each side of vessel = *16.2* Sq. ft.  
 Ft. Tenth. Ft. Tenth. No.  

$$\begin{matrix} 2.0 & \times & 1.5 & \times & 3 \\ & \times & & \times & \end{matrix}$$
 Freeing Ports (each side of vessel) = *9.* Sq. ft.  
 Total deficiency or excess = *7.2* 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

Builder's name and yard number *Vickers Armstrongs Ltd N<sup>o</sup> 663*

Names of sister vessels *The vessel is somewhat similar in size and arrangement to the same Builders Nos 598, 619, 624, 637. (Orama, Grants, Oxford, Grants)*

Owners *Peninsular & Oriental Steam Navigation Co Ltd*

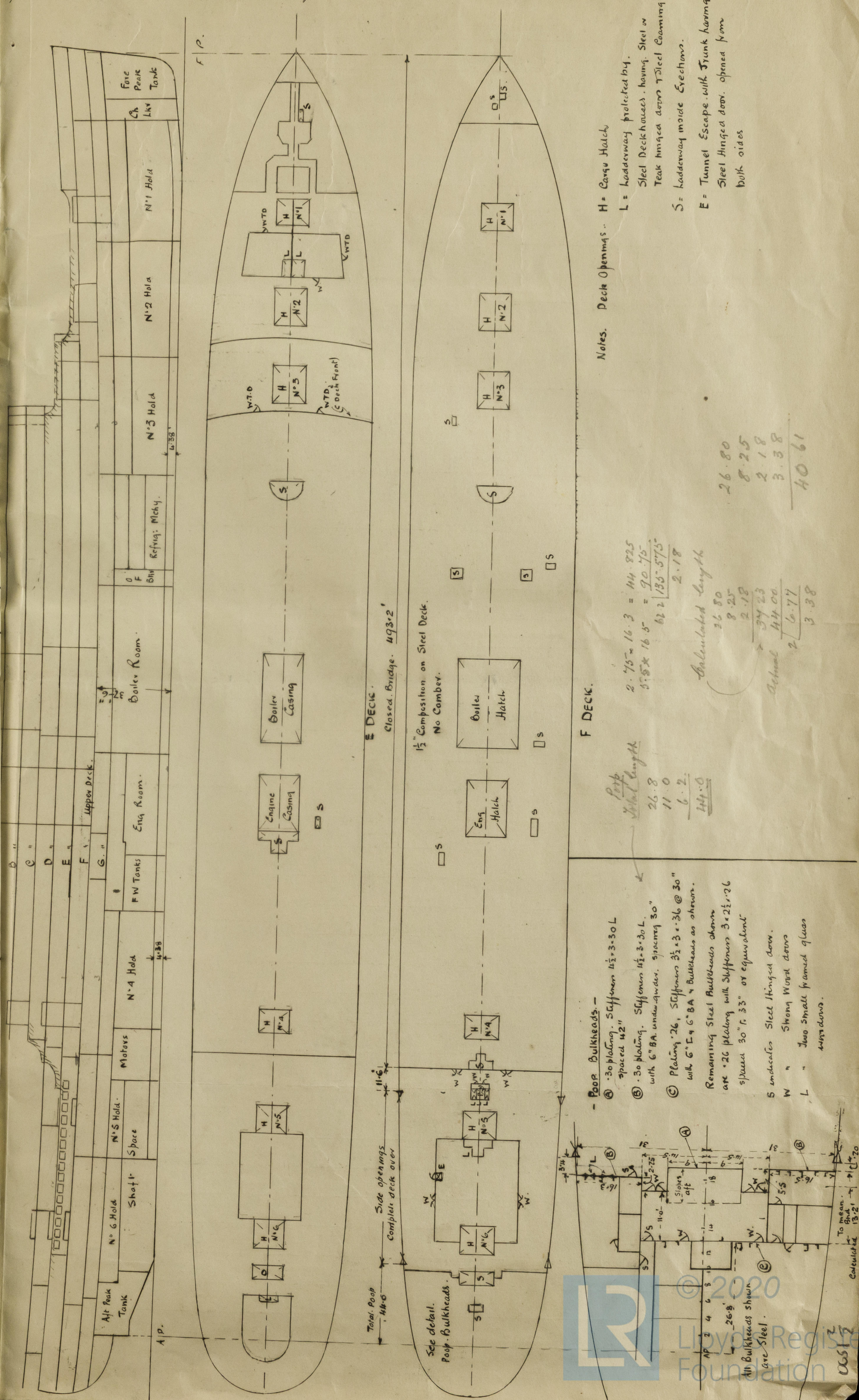
Address

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Continuation of Freeboard Report N<sup>o</sup> 2408 T.S.S. 'STRATHNAVER' Vickers Arms Works 663



Notes. Deck Openings. H = Cargo Hatch. L = Ladderway protected by. Steel Deckhouses having Steel or Teak hinged doors & steel coamings. S = Ladderway inside Deckhouse. E = Tunnel Escape with Trunk having Steel hinged door, opened from bulk sides.

2.75 x 16.3 = 44.825  
 5.5 x 16.5 = 90.75  
 62.2 x 13.5 = 839.7  
 2.18  
 26.80  
 8.25  
 2.18  
 34.23  
 44.00  
 2 6.77  
 3.38  
 40.61

Perp. Length  
 26.8  
 11.0  
 6.2  
 44.0

- Poor Bulkheads -  
 (A) 30 plating, Stiffeners 1/2" x 3" x 30 L spaced 42"  
 (B) 30 plating, Stiffeners 1/2" x 3" x 30 L with 6" BA under-plates, spacing 30"  
 (C) Plating 26, Stiffeners 3/4" x 3" x 36 @ 30" with 6" BA under-plates as shown.  
 Remaining Steel Bulkheads shown are 26 plating with Stiffeners 3/4" x 3" x 36 spaced 30" or 33" or equivalent.  
 S indicates Steel hinged door.  
 W " Strong Wood door.  
 L " Two small framed glass windows doors.

