

Lloyd's Register of Shipping.

Index. No. 21420
(For London Office only.)

SURVEYS FOR FREEBOARD.

No. 100531.

| | | | | | |
|---|---|---|-------------------------------|--|---|
| Computation of Freeboard for Steamer, FORECASTLE & BRIDGE | | | | | Port of Survey <u>LIVERPOOL:</u> |
| (Type of Superstructures.) | | | | | Date of Survey <u>7th JUNE 1932 and subsequently</u> |
| Ship's Name <u>"LA. ROSARINA"</u> | Nationality and Port of Registry <u>BRITISH - Japan</u> <u>W. HARTL PL.</u> | Official Number <u>132823.</u> | Gross Tonnage <u>8345.</u> | Date of Build <u>1912:</u> <u>6: no:</u> | Name of Surveyor <u>J. Y. Callalou Sen.</u> |
| Moulded Dimensions: Length <u>440.0</u> Breadth <u>58.58</u> Depth <u>38.00</u> | | | | | Particulars of Classification <u>8-100-A1:</u> |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>18360</u> tons | | | | | <u>W. 3-8-24. Shelter 100</u> |
| Coefficient of fineness for use with Tables <u>.772</u> | | | | | <u>With freeboard</u> |
| Depth for Freeboard (D) | | Depth correction | | Round of Beam correction | |
| Moulded depth <u>38.00</u> | | (a) Where D is greater than Table depth (D-Table depth) R = $(38.05 - 29.33) \times 3 = 26.16$ | | Moulded Breadth (B) <u>58.58</u> | |
| Stringer, plate05 | | (b) Where D is less than Table depth (if allowed) (Table depth - D) R = | | Standard Round of Beam = $\frac{B \times 12}{50} = 14.06$ | |
| Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ | | If restricted by superstructures | | Ship's Round of Beam <u>Shelter 100</u> = <u>14 1/2</u> | |
| Depth for Freeboard (D) = <u>38.05</u> | | | | Difference <u>-44</u> | |
| | | | | Restricted to | |
| | | | | Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{44}{4} \times .6405 = -0.71$ | |

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) | |
|----------------------------|-------------------------|--|-------------|-------------------|----------------------|--|
| Poop enclosed | | | | | | Standard Height of Superstructure <u>7.50</u> |
| " overhang | | | | | | " " R.Q.D. |
| R.Q.D. enclosed | | | | | | Deduction for complete superstructure <u>42.00</u> |
| " overhang | | | | | | Percentage covered $\frac{S}{L} = 38.64$ |
| " enclosed | <u>135.0"</u> | <u>135.00</u> | <u>8.0"</u> | | <u>135.00</u> | " " $\frac{S_1}{L} = 35.95$ |
| " overhang aft | | | | | | " " $\frac{E}{L} = 35.95$ |
| " overhang forward | | | | | | Percentage from Table, Line A. (corrected for absence of forecastle (if required)) |
| " enclosed | <u>35.0"</u> | <u>23.17</u> | <u>7.6"</u> | | <u>23.17</u> | Percentage from Table, Line B. <u>24.05</u> (corrected for absence of forecastle (if required)) |
| " overhang | | | | | | Interpolation for bridge less than 2L (if required) |
| Trunk aft | | | | | | Deduction = <u>42.00</u> x <u>.2405</u> = <u>-10.10</u> |
| " forward | | | | | | |
| Tonnage opening aft | | | | | | |
| " forward | | | | | | |
| Total | <u>170.00</u> | <u>158.17</u> | | | <u>158.17</u> | |

SHEER CORRECTION.

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|------------------------|-------------------|---|---|---------------|-----------------|--------------------|---|---|---------------|
| A.P. | <u>54.00</u> | 1 | | <u>54.00</u> | <u>36.</u> | <u>36.00</u> | 1 | | <u>36.00</u> |
| 1/4 L from A.P. | <u>24.03</u> | 4 | | <u>96.12</u> | <u>16.</u> | <u>16.20</u> | 4 | | <u>64.80</u> |
| 3/4 L " | <u>5.94</u> | 2 | | <u>11.88</u> | <u>4.</u> | <u>4.05</u> | 2 | | <u>8.10</u> |
| Amidships | | 4 | | | | | 4 | | |
| 3/4 L from F.P. | <u>11.88</u> | 2 | | <u>23.76</u> | <u>8.</u> | <u>7.90</u> | 2 | | <u>15.80</u> |
| 1/4 L " | <u>48.07</u> | 4 | | <u>192.28</u> | <u>31.</u> | <u>31.60</u> | 4 | | <u>126.40</u> |
| F.P. | <u>108.00</u> | 1 | | <u>108.00</u> | <u>72.</u> | <u>72.00</u> | 1 | | <u>72.00</u> |
| Total | | | | <u>486.04</u> | | | | | <u>323.10</u> |

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{162.94}{18} \times (.75 - .1932) = +5.04$

If limited on account of midship superstructure.

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

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

| | |
|---|-----|
| Depth to Freeboard Deck = <u>38.05</u> | Ft. |
| Summer freeboard = <u>9.23</u> | |
| Moulded draught (d) = <u>28.82</u> | |
| Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>7.21</u> <u>7 1/4"</u> | |
| Addition for Winter North Atlantic Freeboard (if required) = <u>NIL</u> | |

Deduction for Fresh Water.

| | |
|--|-------------------------|
| Displacement in salt water at summer load water line | $\Delta =$ <u>16311</u> |
| Tons per inch immersion at summer load water line | T = <u>51.0</u> |
| Deduction = $\frac{\Delta}{40T}$ inches | = <u>7.99</u> |
| | <u>8"</u> |

TABULAR FREEBOARD corrected for Flush Deck (if required)

| | |
|---|---------------|
| Correction for coefficient <u>.772 + .680 = 1.452</u> | <u>84.00</u> |
| <u>1.36</u> | <u>89.69</u> |
| Depth Correction | <u>26.16</u> |
| Deduction for superstructures | <u>-10.10</u> |
| Sheer correction | <u>5.04</u> |
| Round of Beam correction | <u>.07</u> |
| Correction for Thickness of Deck amidships | <u>-</u> |
| Other corrections, scantlings, etc. | <u>-</u> |
| <u>31.25</u> <u>10.17</u> <u>+21.03</u> | |
| Summer Freeboard = <u>110.72</u> | |

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

| | | | |
|---|----------------|---------------------------------------|---------------------|
| Tropical Fresh Water Line above Centre of Disc | <u>15 1/4"</u> | Tropical Fresh Water Freeboard | <u>9' - 2 3/4"</u> |
| Fresh Water Line " " | <u>8"</u> | Fresh Water " " | <u>7' - 11 1/2"</u> |
| Tropical Line " " | <u>7 1/4"</u> | Tropical " " | <u>8' - 6 3/4"</u> |
| Winter Line below " " | <u>7 1/4"</u> | Winter " " | <u>8' - 7 1/2"</u> |
| Winter North Atlantic Line " " | <u>-</u> | Winter North Atlantic " " | <u>9' - 10"</u> |

15 JUN 1932

W512-0337E(12)

RECEIVED
5- AUG 1932

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

| HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS | | | | | | |
|---|--|---|------------|------------|------------|--|
| Description of Hatchway | Nº1 | Nº2 | Nº3 | Nº4 | Nº5. | |
| Dimensions of Hatchway | 27'-0"x16' | 27'-0"x16' | 27'-0"x16' | 27'-0"x16' | 27'-0"x16' | |
| COAMINGS { Height above Deck Thicknes... Sides Stiffeners... Ends Brackets, Stays | 32" .48. 40. 8x3x3/8 A. NONE. | | AS: Nº1. | | | |
| HATCH BEAMS { Number Spacing Scantling and Sketch Bearing Surface | 5 5'-4" 5x3x.50 9'-15" 2@ 2 1/2 x 3 x 3/8 6x6x.74 3 | 2 9'-0" 5x3x.50 11'-0" 6x6x.74 3 | AS: Nº1. | | | |
| FORE AND AFTERS { Number Spacing Unsupported Lengths Scantling* and Sketch Bearing Surface | NONE. | | | | | |
| HATCH COVERS { Material Thickness... How fitted Bearing Surface | W.W. 4" F.V.A. 5" | W.W. 3 1/2." F.V.A. 5" | AS: Nº2. | | | |
| Spacing of Cleats | 22" | 22" | AS: Nº2. | | | |
| Number of Tarpaulins | 3 | 3 | | | | |

*Are wood fore and afters steel shod at all bearing surfaces? YES.

Are battens and wedges efficient and in good condition? YES.

Are tarpaulins in good condition and in accordance with rule requirements? YES.

Are lashings provided in accordance with rule requirements? YES.

Particulars of fiddley, funnel and ventilator coamings:— FIDDLY: FUNNEL & VENT. COAMINGS ARE INEFFICIENT. CONDITION: ✓

FIDDLEY. GRATING STORM FLAPS ARE HINGED AND STRONGLY CONSTRUCTED. (ONE OF)
ENGINE ROOM SKYLIGHT AND GALLEY SKYLIGHT OF STEEL STRONGLY CONSTRUCTED.

Particulars of Flush Bunker Scuttles:—

"NONE."

Particulars of Companionways:—

Companionway in after deck house leading to Store and Crew accommodation.
Entrance by wood door ^{1 ft. 5 in.} 4'-10" x 26" x 16 1/2" sill. Strongly constructed, looks efficient
and capable of being operated from both sides.

Companion to Crew. accommodation under-fcb head:- 1. STAIRS: SIDE: 5'-4" x 2'-0", SILL: 8 1/2" wood door with lock and hasp. Strongly constructed and efficient

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

PARTICULARS OF VENTILATORS IN POSITIONS ON REEFBOARD AND SUPERSTRUCTURE:
 FELE. HEAD. [1@ 20" Coaming, x 13" Drain x 3/8" Thick led to Stores;
 2@ 21" " x 9" " x 3/16" " " " Lower Fele;
 2@ 35" " x 23" " x 3/8" " " " No. 1 HOLD.
 FWD. WELL. [1@ 36" " x 24" " x 3/8" " " " No. 1, 2, 3. HOLDS.
 BRIDGE. DK. [1P: 15: 12" DIAM x 27" Coaming x 1/4" led to Bunkers;)
 AFTER. DK. [6@ 36" Coaming x 24" Drain x 3/8" led to No. 4 V. HOLDS:
 1@ 33" " x 24" " x 3/8" " " TUNNEL. ESCAPE.
 3@ 9" " x 8" " x 1/4" " " CREWS. ACCOM:
 1@ 20" " x 14" " x 5/16" " " A. P. STORE:

Wood plugs and canvas covers are on board for all ventilators as required.

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

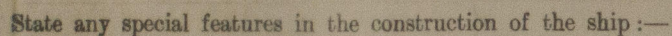
| Particulars of Air Pipes in exposed positions on Deckboard, raised quarter, & superstructure. | | | | | |
|---|----------|---------------|--------|-------------|-----------------------------|
| 1 @ C-1. | Air pipe | on Fela head | 6 1/2" | To lip x 4" | Diam led to Fore Peak Tank. |
| 1 @ C-1. | " | in Fwd. wall. | 9" | " x 3 1/2" | " " No 2. DB: " |
| 2 @ C-1. | " | " | 17" | " x 3 1/2" | " " No 3. DB: " |
| 2 @ C-1. | " | " | 17" | " x 2 3/4" | " " No 7. D.B. " |
| 2 @ C-1. | " | " | 8" | " x 4" | " " AFT. PEAK. " |

Wood plugs and canvas covers

Particulars of Gangway Cargo and Coaling Ports:—

✓ "None."

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:—



TUNNEL: ESCAPE:- STEEL DOOR. 5'2 X 1'8" SILL. 10" STRONGLY CONSTRUCTED ~~HAS~~ EFFICIENT.

"E" SMALL ACCESS HATCH TO EACH HATCH - 22" X 20" LOADING 18" HIGH. WITH 3" COPE STY/TURN. WOOD PLUGS. TARPULINGS. CLEATS. 10" APART. EFFICIENT BATTENING ARRANGEMENT.

" HATCH TO STORE UNDER FCL: 47" x 32" x 3' Coaming: 2 1/2" Rst bars, wood coam, tarpaulin and efficient locking bar.

"G" " HATCHES ON BRIDGE DECK: 48" x 36" x 18" Coaming: 2 1/2" " " " tarpaulins cleats 20" apart and efficient Batten arrangements.

"H" BUNKER HATCH ON BOAT DECK: 7'5" x 10'3" x 26" Coaming: 2 1/2" Rost bars, wood cwn, tarpaulin cleats 24" apart and efficient battening arrangement.

"J", " " " " " 11-0" x 10-0" x 7 1/2" BA ✓ " 2 1/2 " " wood grating, corn: " " 22" ✓ " " "

Vessel afloat. Survey for Entrance arrangement only.

Builder's name and yard number: PALMER'S Co's YARD: 710 812.

Names of sister ships

Owners.

HOULDER: LINE. LTD.

Fee £ 16

Received by me