

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Guns Rpt 17868

| | | |
|--|--|--------------------------------------|
| Computation of Freeboard for Steamer, <u>Sailing Ship, Tanker</u> | | Port of Survey <u>Quincy</u> |
| having <u>a Prop, 1 Bridge and a Forecastle</u> <u>detached</u> | | Date of Survey <u>9th March 1932</u> |
| <div style="display: flex; justify-content: space-between;"> 2x <u>EVERITA</u> (Type of Superstructures.) </div> | | Name of Surveyor <u>F. L. Palmer</u> |
| Ship's Name <u>"ETHELARIC"</u> | Nationality and Port of Registry <u>British Whitley</u> | Official Number <u>137074</u> |
| | | Gross Tonnage <u>3232</u> |
| | | Date of Build <u>1917-2</u> |
| Moulded Dimensions: Length <u>335.0</u> Breadth <u>47-958</u> Depth <u>24-10</u> | | |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>Not determined</u> tons | | |
| Coefficient of fineness for use with Tables <u>.794</u> <u>(Scale attached to 1906 Report)</u> | | |

| Depth for Freeboard (D) | Depth correction | Round of Beam correction |
|--|--|--|
| Moulded depth <u>24.83</u> | (a) Where D is greater than Table depth (D - Table depth) R = <u>(24.87 - 22.33) 2.54</u> | Moulded Breadth (B) <u>47.80</u> |
| Stringer plate <u>1.04</u> | <u>2.54 x 2.5877 = +6.55</u> ✓ | Standard Round of Beam = $\frac{B \times 12}{50} = \frac{573.6}{50} = 11.472$ |
| Sheathing on exposed deck ✓ | (b) Where D is less than Table depth (if allowed) (Table depth - D) R = ✓ | Ship's Round of Beam = <u>12</u> |
| T $\left(\frac{L-S}{L} \right) =$ ✓ | | Difference <u>.54</u> ✓ |
| Depth for Freeboard (D) = <u>24.87</u> ✓ | If restricted by superstructures ✓ | Restricted to |
| | | Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.54^2}{4} \times \frac{.5038}{.07} = .068$ |

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|----------------------------------|-------------------------|--|----------|-------------------|----------------------|
| Prop enclosed ... | 31.00 | 31.00 | 7-11 1/2 | | 31.00 |
| " overhang ... | .50 | .25 | | | .25 |
| R.Q.D. enclosed | ✓ | | | | |
| " overhang | ✓ | | | | |
| Bridge enclosed... | 100.04 | 100.04 | 7-11 1/2 | | 100.04 |
| " overhang aft | .50 | .37 | | | .37 |
| " overhang forward | .50 | .25 | | | .25 |
| F'cle enclosed <i>Equivalent</i> | 32.67 | 32.67 | 7-11 1/2 | | 32.67 |
| " overhang ... | 2.5 | 1.66 | | | 1.66 |
| Trunk aft ... | ✓ | | | | |
| " forward ... | ✓ | | | | |
| Tonnage opening aft | ✓ | | | | |
| " " forward | ✓ | | | | |
| Total ... | 167.76 | 166.24 | | | 166.24 |

Standard Height of Superstructure ⁵ 6.86 ✓

" " R.Q.D. ✓

Deduction for complete superstructure ⁷ 37.66 ✓

Percentage covered $\frac{S}{L} = 50.06\%$

" " $\frac{S_1}{L} = 49.62$

" " $\frac{E}{L} = 49.62$

Percentage from Table, Line A.
(corrected for absence of forecastle (if required)) ✓

Percentage from Table, Line B.
(corrected for absence of forecastle (if required)) • 35.68

Interpolation for bridge less than 2L (if required) ✓ • 298L

Deduction = 37.67 • 3568 = - 13.44

[illegible]

| <p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p>Depth to Freeboard Deck = <u>24.87</u> Ft.</p> <p>Summer freeboard = <u>4.067</u></p> <p>Moulded draught (d) = <u>20.810</u></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>5.20 = 5$\frac{1}{4}$"</u></p> <p>Addition for Winter North Atlantic Freeboard (if required) =</p> | <p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line $\Delta =$ <u>7658</u></p> <p>Tons per inch immersion at summer load water line $T =$ <u>32.38</u></p> <p>Deduction = $\frac{\Delta}{40 T}$ inches = <u>5.91 = 6" 6"</u></p> | <p>TABULAR FREEBOARD <small>corrected for Flush Deck (if required)</small></p> <p>Correction for coefficient $\frac{.794 + .68}{1.36} = \frac{1.474}{1.36}$</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th></th> <th style="text-align: center;">+</th> <th style="text-align: center;">-</th> </tr> <tr> <td>Depth Correction</td> <td style="text-align: center;">6.55</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Deduction for superstructures</td> <td style="text-align: center;">-</td> <td style="text-align: center;">13.44</td> </tr> <tr> <td>Sheer correction</td> <td style="text-align: center;">-</td> <td style="text-align: center;">.94</td> </tr> <tr> <td>Round of Beam correction</td> <td style="text-align: center;">-</td> <td style="text-align: center;">.07</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td></td> <td style="text-align: center;">6.55</td> <td style="text-align: center;">14.45</td> </tr> </table> <p style="text-align: right;">Summer Freeboard = <u>48.87</u></p> | | + | - | Depth Correction | 6.55 | - | Deduction for superstructures | - | 13.44 | Sheer correction | - | .94 | Round of Beam correction | - | .07 | Correction for Thickness of Deck amidships | - | - | Other corrections, scantlings, etc. | - | - | | 6.55 | 14.45 |
|--|--|--|--|---|---|-------------------------|------|---|--------------------------------------|---|-------|-------------------------|---|-----|---------------------------------|---|-----|--|---|---|--|---|---|--|------|-------|
| | + | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Depth Correction | 6.55 | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Deduction for superstructures | - | 13.44 | | | | | | | | | | | | | | | | | | | | | | | | |
| Sheer correction | - | .94 | | | | | | | | | | | | | | | | | | | | | | | | |
| Round of Beam correction | - | .07 | | | | | | | | | | | | | | | | | | | | | | | | |
| Correction for Thickness of Deck amidships | - | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Other corrections, scantlings, etc. | - | - | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6.55 | 14.45 | | | | | | | | | | | | | | | | | | | | | | | | |

| SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood , Steel, Deck:— | | | | 4-0 ³ / ₄ ✓ | | |
|---|-------|-----|----------------------------------|-----------------------------------|-----------|-------------------------------------|
| Tropical Fresh Water Line above Centre of Disc | ... | ... | 11 ¹ / ₄ " | Tropical Fresh Water Freeboard | ... | 3-1 ¹ / ₂ " ✓ |
| Fresh Water Line | " | " | 6" | Fresh Water | 1906 feet | 3-6 ³ / ₄ " ✓ |
| Tropical Line | " | " | 5 ¹ / ₄ " | Tropical | assigned | 3-7 ¹ / ₂ " ✓ |
| Winter Line | below | " | 5 ¹ / ₄ " | Winter | assigned | 4'-6" ✓ |
| Winter North Atlantic Line | " | " | ✓ | Winter North Atlantic | " | ✓ |

Everita

Particulars of fiddley, funnel and ventilator coamings:—

Particulars of Flush Bunker Scuttles:—

Particulars of Companionways :—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:— All ventilators are constructed in accordance with the Rules and coaming closed with wood plugs and canvas cover.

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

Particulars of Gangway Cargo and Coaling Ports:—

Particulars of Scuppers and Sanitary Discharge Pipes — 4 — 6" *scuppers in fore well each side*

Particulars of Side Scuttles :

Particulars of Guard Rails :—

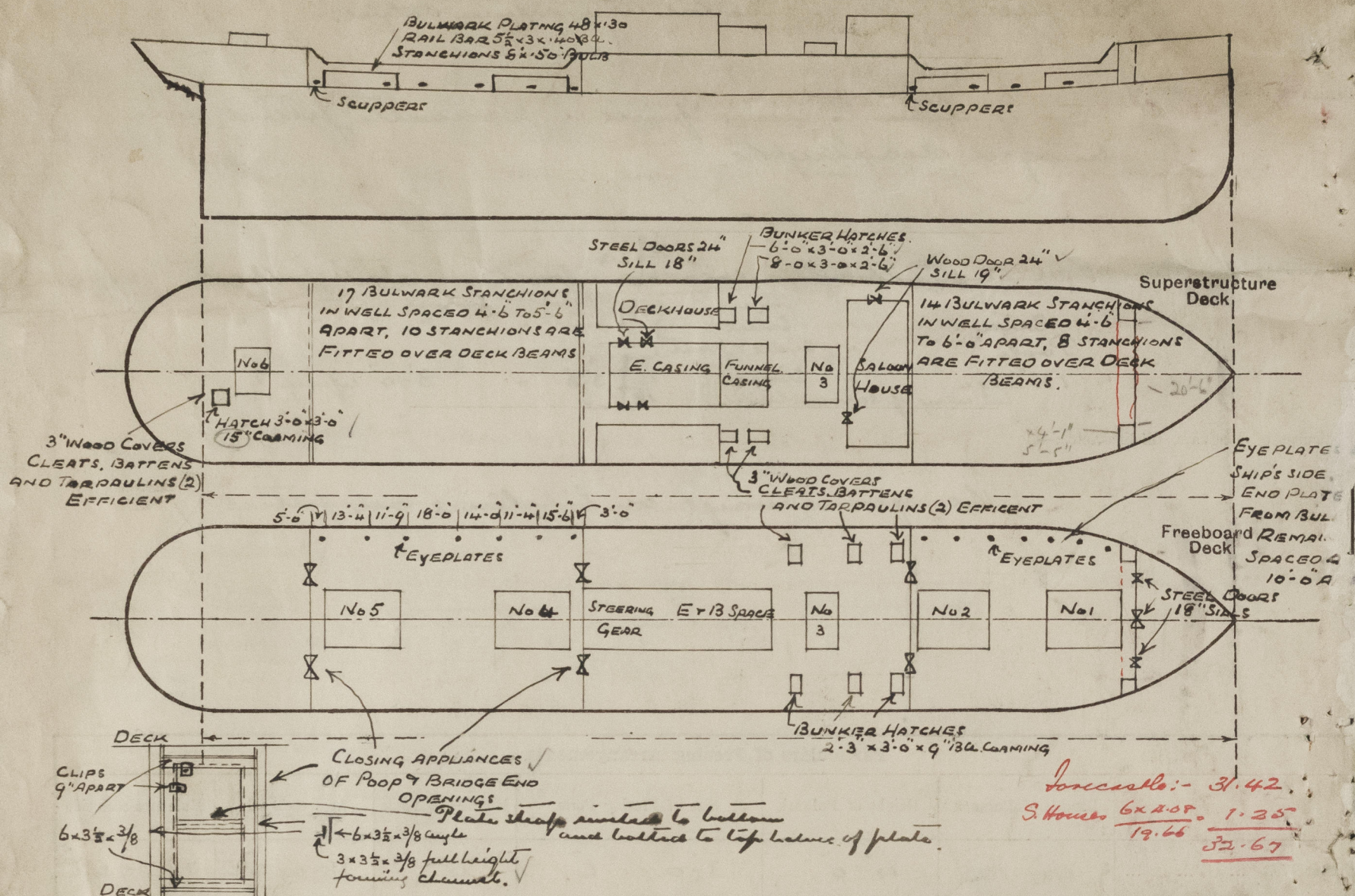
Particulars of Gangways, Lifelines, etc. :—

Lifelines are provided in the fore and aft wells

| | Coaming | Plating | Stiffeners | Spacing | End Attachments of Stiffeners | Size of Openings | Height of Sills | Height of Casings |
|--|-----------|---------|------------------------|---------|-------------------------------|-------------------------------|-----------------|-------------------|
| Poop Bulkhead | 24" x 40" | .28 | 6 x 3 1/2" x 38" angle | 2' - 4" | None | 6' - 6" x 4' - 0 1/2" | 9" | 7' - 11 1/2" |
| Raised Quarter Deck Bulkhead ... | — | — | — | — | — | — | — | — |
| Bridge, After Bulkhead | None | .28 | 6 x 3 1/2" x 38" angle | 3' - 2" | None | 6' - 6" x 3' - 0" | 9" | 7' - 11 1/2" |
| Bridge, Forward Bulkhead | 24" x 44" | .38 | 8 x 3 1/2" x 39" B.G. | 2' - 2" | plate bracing top & bottom | 4' - 0" x 3' - 0" | 28" | 7' - 11 1/2" |
| Forecastle Bulkhead | None | .28 | 4" plate flange | 2' - 8" | none | 3 steel 45° x 26" winged door | 18" | 7' - 11 1/2" |
| Trunk, Aft | — | — | — | — | — | — | — | — |
| Trunk, Forward | — | — | — | — | — | — | — | — |
| Exposed Machinery Casings on Free-board or Raised Quarter Decks ... | — | — | — | — | — | — | — | — |
| Exposed Machinery Casings on Super-structure Decks | 18" x 34" | .32 | 5 x 3" x 40" angle | 3' - 0" | none | 4' - 6" x 24" | -18" | 7' - 11 1/2" |
| Machinery Casings within Superstructures not fitted with Class I Closing Appliances | X | — | — do — | — do — | — do — | 4' - 6" x 24" | +8" | — |
| Deckhouses on Flush Deck Ships ... | — | — | — | — | — | — | — | — |

0265 $\frac{2}{2}$

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.

Timber Cargo arrangements

Provision is made for steering in the event of a breakdown of the main steering arrangements by the use of the hand gear.

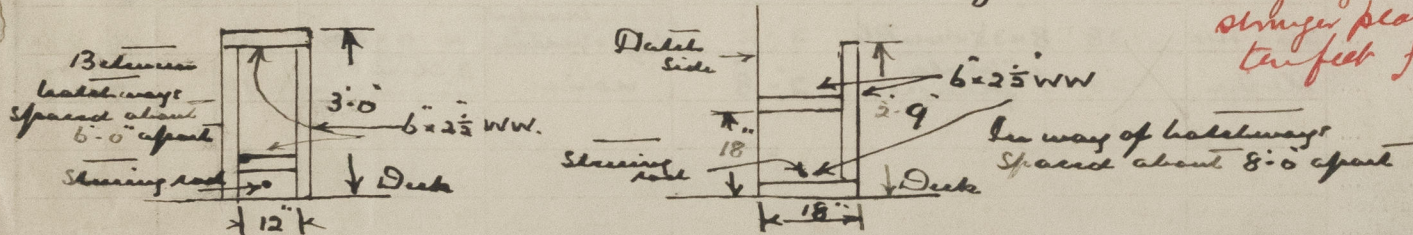
The double bottom tanks have adequate longitudinal subdivisions as required by Rule LXXXII.

Wood uprights are secured by wire rope lashings to bulwark stanchions.

Eyeplates are efficiently riveted to stringer plating, the plate is of sufficient thickness.

Arrangement of protecting the steering rods and chains along and between Nos 4 & 5 hatchways.

String angle pockets, riveted to stringer plates spaced not more than 12 feet fitted up for top.



Builder's name and yard number *Rapier & Sons Ltd, No 506.*

Names of sister ships ☒

Owners *Harrowing S. S. Co Ltd, (Robert Harrowing & Co. Ltd)*

Fee £ *11* : *18* : *0*
Refused 16/6

Received by me

M. G. 20-81
Kel 17
20-98

AE 21-17 7666
AE 20-17 7278
388

AE 20-80 7278
388
7666