

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

Now GALAXIAS OF PIRAEUS

| Computation of Freeboard for Steamer, Sailing Ship, Tanker | | | |
|--|----------------------------------|---|---------------|
| having <u>Forecastle Bridge combined & Poop</u> | | | |
| (Type of Superstructures.) | | | |
| Ship's Name | Nationality and Port of Registry | Official Number | Gross Tonnage |
| <u>TRENGLIS</u> | <u>British</u> | <u>137869</u> | <u>4393</u> |
| | | <u>St. Ives</u> | <u>1918-3</u> |
| Date of Build | | | |
| Moulded Dimensions: Length <u>400'</u> Breadth <u>51.79'</u> Depth <u>26.87'</u> | | | |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>10615</u> tons | | | |
| Coefficient of fineness for use with Tables <u>.786</u> | | | |
| Particulars of Classification <u>+100 A1</u> <u>2. 703-11.30</u> <u>Shelly Deck</u> <u>with freeboard.</u> | | | |
| Depth for Freeboard (D) | | Depth correction | |
| Moulded depth <u>26.87</u> | | (a) Where D is greater than Table depth | |
| Stringer plate <u>.48</u> | | (D - Table depth) R = | |
| Sheathing on exposed deck | | <u>(26.91 - 26.67) 3.00 = + 0.72"</u> | |
| T $\left(\frac{L-S}{L} \right) =$ | | (b) Where D is less than Table depth (if allowed) | |
| Depth for Freeboard (D) = <u>26.91</u> | | (Table depth - D) R = | |
| | | If restricted by superstructures | |
| Round of Beam correction | | Round of Beam correction | |
| Moulded Breadth (B) <u>51.79'</u> | | Moulded Breadth (B) | |
| Standard Round of Beam = $\frac{B \times 12}{50} =$ | | <u>12.43"</u> | |
| Ship's Round of Beam = | | <u>12.0"</u> | |
| Difference | | <u>.43"</u> | |
| Restricted to | | | |
| Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) =$ | | <u>.43</u> <u>4</u> <u>x .0080 = .0034</u> | |

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|-------------------------|-------------------------------|--|------------|----------------------|-------------------------|
| Poop enclosed ... | 27.04 29.33 | 27.04 | 4'-11 1/2" | / | 27.04 |
| " overhang ... | 2.29 | 1.14 | | | 1.14 |
| R.Q.D. enclosed ... | | | | | |
| " overhang ... | | | | | |
| Bridge enclosed ... | | | | | |
| " overhang aft ... | | | | | |
| " overhang forward ... | | | | | |
| F'cle enclosed ... | 363.71 366.0 | 363.71 | 4'-11 1/2" | / | 363.71 |
| " overhang ... | 2.29 | 1.72 | | | 1.72 |
| " Trunk aft ... | | | | | |
| " forward ... | | | | | |
| Tonnage opening aft ... | 4.67 | 3.19 | 4'-11 1/2" | / | 3.19 |
| " " forward ... | | | | | |
| Total ... | 400.00 | 396.80 | | | 396.80 |

Standard Height of Superstructure 7.50

" " R.Q.D. /

Deduction for complete superstructure 42.00

Percentage covered $\frac{S}{L} = 100\%$

" " $\frac{S_1}{L} = 99.2\%$

" " $\frac{E}{L} = 99.2\%$

Percentage from Table, Line A. 99.01%

(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 = $42.00 \times .9901 = -41.58$

Percentage from Table, Line A. 99.01%

(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 = $42.00 \times .9901 = -41.58$

SHEER CORRECTION.

| Station | Standard Ordinate | S M | Product | Actual Ordinate | Effective Ordinate | S M | Product |
|-------------------------------|-------------------|-----|---------|-----------------|--------------------|-----|---------|
| A.P. ... | 50.00 | 1 | 50.00 | 57.0 | 57.00 62.50 | 1 | 62.50 |
| $\frac{1}{6}$ L from A.P. ... | 22.25 | 4 | 89.00 | 23.0 | 23.7 27.81 | 4 | 111.24 |
| $\frac{2}{6}$ L " ... | 5.50 | 2 | 11.00 | 5.6 | 5.9 6.88 | 2 | 13.76 |
| Amidships ... | / | 4 | / | 0 | / / | 4 | / |
| $\frac{2}{6}$ L from F.P. ... | 11.00 | 2 | 22.00 | 9.6 | 11.82 13.22 | 2 | 26.44 |
| $\frac{1}{6}$ L " ... | 14.50 | 4 | 178.00 | 45.7 | 47.4 52.90 | 4 | 211.60 |
| F.P. ... | 100.00 | 1 | 100.00 | 120.0 | 120.00 125.50 | 1 | 125.50 |
| Total ... | | | 450.00 | | | | 551.04 |

Mean actual sheer aft = Excess.

Mean standard sheer aft = Excess.

Mean actual sheer forward = Excess.

Mean standard sheer forward = Excess.

Length of enclosed superstructure forward of amidships =

L

aft of

=

70

5.50

C.S.S.

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left(\frac{75 - 8}{2L} \right) = \frac{101.04}{18} (75 - 50) = -1.40''$$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

| <p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> | <p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>Tons per inch immersion at summer load water line</p> <p>T = 42</p> <p>Deduction = $\frac{\Delta}{40T}$ inches</p> <p style="text-align: right;">= 6.74 = 6 ⁵/₄</p> | <p>TABULAR FREEBOARD corrected for Fresh Deck (if required)</p> <p>Correction for coefficient</p> <p>Depth Correction</p> <p>Deduction for superstructures</p> <p>Sheer correction</p> <p>Round of Beam correction</p> <p>Correction for Thickness of Deck amidships</p> <p>Other corrections, scantlings, etc.</p> | <p>71.50</p> <p>77.07</p> <p style="font-size: 2em; transform: rotate(-15deg);">S.F.B.</p> <p style="font-size: 1.5em;">20.6.32</p> | | | | | | | | | | | | |
|--|--|---|---|---|----|-------|---|------|---|---|---|---|----|-------|---|
| <p style="text-align: right;">Ft.</p> <p>Depth to Freeboard Deck = 26.91</p> <p>Summer freeboard = 2.90</p> <p>Moulded draught (d) = 24.01</p> | <p>$\Delta = 11320$</p> <p>Tons per inch immersion at summer load water line</p> <p>T = 42</p> <p>Deduction = $\frac{\Delta}{40T}$ inches</p> <p style="text-align: right;">= 6.74 = 6 ⁵/₄</p> | <p>$\frac{736+68}{136} = \frac{1466}{136}$</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%; text-align: center;">+</th> <th style="width: 50%; text-align: center;">-</th> </tr> <tr> <td style="text-align: center;">72</td> <td style="text-align: center;">41.58</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">1.40</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td style="text-align: center;">72</td> <td style="text-align: center;">42.98</td> </tr> </table> <p style="text-align: right;">- 42.26</p> <p style="text-align: right;">Summer Freeboard = 34.81</p> | + | - | 72 | 41.58 | - | 1.40 | - | - | - | - | 72 | 42.98 | <p style="text-align: center;">71.50</p> <p style="text-align: center;">77.07</p> <p style="font-size: 2em; transform: rotate(-15deg);">S.F.B.</p> <p style="font-size: 1.5em;">20.6.32</p> |
| + | - | | | | | | | | | | | | | | |
| 72 | 41.58 | | | | | | | | | | | | | | |
| - | 1.40 | | | | | | | | | | | | | | |
| - | - | | | | | | | | | | | | | | |
| - | - | | | | | | | | | | | | | | |
| 72 | 42.98 | | | | | | | | | | | | | | |

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck:—883 2-10 1/4

| | | | | | |
|--|-----|--------|--------------------------------|------|-----------|
| Tropical Fresh Water Line above Centre of Disc | 323 | 12 3/4 | Tropical Fresh Water Freeboard | 560 | 1 - 10 |
| Fresh Water Line | 171 | 6 1/4 | Fresh Water | 712 | 2 - 4 3/4 |
| Tropical Line | 152 | 6 | Tropical | 731 | 2 - 4 3/4 |
| Winter Line below | 152 | 6 | Winter | 1035 | 3 - 4 3/4 |
| Winter North Atlantic Line | | 6 | Winter North Atlantic | | 4 |

21 JUN 1932

MARKING FORM

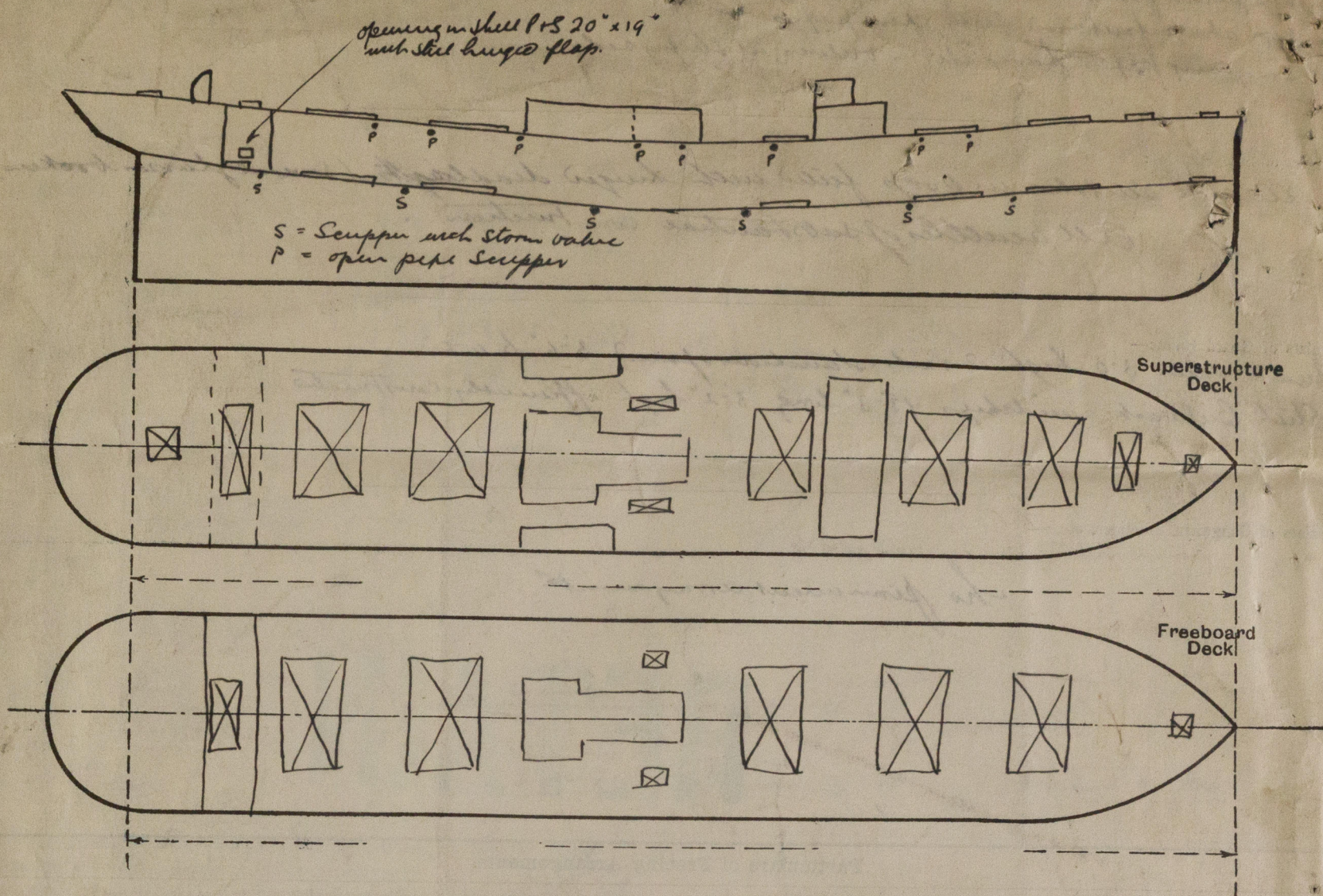
MARKING FORM

MARKING FORM

MARKING FORM

RECEIVED 12 JUL 1957

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchway, 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:—



Vessel surveyed afloat nothing done towards special survey

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

Builder's name and yard number

J Readhead & Sons Ltd.

Names of sister ships

Owners

Hain S S Co Ltd.

Fee £

12 : 15

Received by me



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