

PRELIMINARY
PROPOSED LENGTHENING

LLOYD'S REGISTER OF SHIPPING

SURVEYS FOR FREEBOARD

(COMPUTATION FOR ~~STEAMER, SAILING SHIP, TANKER~~)

For LONDON OFFICE ONLY

Received

Index No.

Govt. Copy

Owners C11

| | | | | | |
|---|-----------------|--|-------------------------------|---------------|---|
| Ship's Name "PATRICIA" | Official Number | Nationality and Port of Registry Panamanian Panama | Gross Tonnage 17736 | Date of Build | Port of Survey London |
| Moulded Dimensions: Length 83.33' Breadth 44.37' Depth 44.37' Freeboard Length 594.98 + 79.00 = 673.98' Moulded displacement at moulded draught = 85 per cent. of moulded depth 48862 tons (excluding bossing) 8074 Coefficient of fineness for use with Tables USE .808 (as in sister vessel) | | | | | Date of Survey 8.7.63. Surveyor's Signature Particulars of Classification + 100 A1. OIL TANKER |

| | | |
|--|--|---|
| DEPTH FOR FREEBOARD (D). Moulded depth 44.37 Stringer plate09 Wood Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 44.46 | DEPTH CORRECTION. (a) Where D is greater than Table depth (D-Table depth) R = (b) Where D is less than Table depth (if allowed) (Table depth-D) R = (44.93 - 44.46) 3 = - 1.41" If restricted by superstructures YES. | ROUND OF BEAM CORRECTION. Moulded Breadth (B) 83.33' Standard Round of Beam = $\frac{B \times 12}{50} =$ 20.00 Ship's Round of Beam = 19.69 Difference .31 Restricted to Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.31}{4} \times .6096 = +.05$ |
|--|--|---|

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|----------------------------|-------------------------|--|--------|-------------------|----------------------|
| Poop enclosed (Eq. 11) | 139.72 | 139.72 | 8.73 | ✓ | 139.72 |
| " overhang | | | | | |
| R.Q.D. enclosed | | | | | |
| " overhang | | | | | |
| Bridge enclosed (Eq. 11) | 43.77 | 43.77 | 8.30 | ✓ | 43.77 |
| " overhang aft | 4.80 | 3.60 | 8.30 | ✓ | 3.60 |
| " overhang forward | | | | | |
| F'cle enclosed | 76.07 | 76.07 | 7.70 | ✓ | 76.07 |
| " overhang | | | | | |
| Trunk aft | | | | | |
| " forward | | | | | |
| Tonnage opening aft | | | | | |
| " " forward | | | | | |
| Total | 264.36 | 263.16 | | | 263.16 |

Standard Height of Superstructure **7.50'**

" " R.Q.D. **-**

Deduction for complete superstructure **42.00"**

Percentage covered $\frac{S}{L} =$ **39.22.**

" " $\frac{S_1}{L} =$ **39.04**

" " $\frac{E}{L} =$ **30.04**

Percentage from Table, Line A **TANKER. 30.04**
(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" x .3004 = -12.62"**

SHEER CORRECTION.

allowance for excess height of Poop
 $\frac{1}{3} \times 136.52 / 673.98 \times (1.23 \times 12) = 1.00"$

| Station | Standard Ordinate | S | M | Product | Actual Ordinate | Effective Ordinate | S | M | Product |
|----------------------------------|-------------------|---|---|---------|-----------------|--------------------|---|---|---------|
| A.P. | 77.40 | 1 | | 77.40 | 32.09 | 32.09 | 1 | | 32.09 |
| $\frac{1}{2}$ L from A.P. | 34.44 | 4 | | 137.76 | 2.81 | 2.81 | 4 | | 11.24 |
| $\frac{2}{3}$ L " | 8.51 | 2 | | 17.02 | 0 | 0 | 2 | | |
| Amidships | 0 | 4 | | 0 | 0 | 0 | 4 | | 0 |
| $\frac{2}{3}$ L from F.P. | 17.03 | 2 | | 34.06 | 0 | 0 | 2 | | 0 |
| $\frac{1}{2}$ L " | 68.88 | 4 | | 275.52 | 5.15 | 5.15 | 4 | | 20.60 |
| F.P. | 154.80 | 1 | | 154.80 | 62.99 | 62.99 | 1 | | 62.99 |
| Total | | | | 696.56 | | | | | 126.92 |

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{569.64}{18} - 1.00 \times \left(.75 - .1961 \right) = +16.98"$

If limited on account of midship superstructure. ✓

Mean actual sheer aft
 Mean standard sheer aft =

Mean actual sheer forward
 Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

" " aft of " =

.8539
 $\left(\frac{.75 - .1961}{.75 - .1961} \right) = +16.98"$
 If limited to maximum allowance of 1½ ins. per 100ft. ✓

DEFICIENT

TANKER

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **13.551**
 Summer freeboard = **3.422**
 Moulded draught (d) = **10.129**
 Keel allowance =
 Extreme draught =
 Deduction for Tropical freeboard and addition for =

Winter freeboard = $\frac{d}{4}$ inches =

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta =$
 Tons per inch immersion at summer load water line
 $T =$

Deduction = $\frac{\Delta}{40 T}$ inches

TABULAR FREEBOARD corrected for Flush Deck (if required).

Correction for coefficient

Depth Correction
 Deduction for superstructures
 Sheer correction
 Round of Beam correction
 Correction for Thickness of Deck amidships
 Other corrections, scantlings, etc.

| | + | - |
|--|--------------|---------------|
| Depth Correction | | |
| Deduction for superstructures | | 12.62 |
| Sheer correction | 16.98 | |
| Round of Beam correction | .05 | |
| Correction for Thickness of Deck amidships | | |
| Other corrections, scantlings, etc. | | |
| 17.03 | 12.62 | + 4.41 |

Summer Freeboard = **134.74 = 3422 1/2**

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Winter~~ 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 " " |

3422 1/2

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014784-014793-0266

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

ESTIMATED Δ @ .85 D

$$\text{ORIGINAL } 41,840. + \left(\frac{79.00 \times 37.71 \times 83.33}{38} \times .99 \right) = 48,862$$

Trade of ship.....

Names of sister ships.....

Builder's name and yard number.....

Owners

Fee £.....:.....:

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950", paragraph 11.)



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