

LLOYD'S REGISTER OF SHIPPING

SURVEYS FOR FREEBOARD

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

For LONDON OFFICE ONLY

Received _____
 Index No. _____
 Govt. Copy _____
 Owners CII _____

| | | | | | |
|--|-------------------------------|---|-------------------------------|------------------------------|--|
| Ship's Name Tina Onassis | Official Number 328 | Nationality and Port of Registry Monrovia Liberia | Gross Tonnage 27853 | Date of Build 1953 | Port of Survey Hamburg |
| Moulded Dimensions: Length 220.50m Breadth 29.00m Depth 15.735m Freeboard Length 220.50m Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 68600 m³ Coefficient of fineness for use with Tables 0.8021 | | | | | Date of Survey 2.59 |
| Surveyor's Signature Brinus J. Hauer | | | | | Particulars of Classification 100 A 1 OIL TANKER |
| Class contemplated | | | | | |

| DEPTH FOR FREEBOARD (D). | | DEPTH CORRECTION. | | ROUND OF BEAM CORRECTION. | |
|------------------------------------|----------------|--|--|---|---|
| Moulded depth ... | 15.735m | (a) Where D is greater than Table depth (D - Table depth) R = 8.33(15.771 - 14.700) 39 = +268mm | | Moulded Breadth (B) | 29.00m |
| Stringer plate ... | 0.036m | (b) Where D is less than Table depth (if allowed) (Table depth - D) R = | | Standard Round of Beam = $\frac{B \times 25}{50}$ | 580 |
| Wood Sheathing on exposed deck | | | | Ship's Round of Beam equal | 550mm |
| $T \left(\frac{L-S}{L} \right) =$ | | | | Difference | -30 |
| Depth for Freeboard (D) = | 15.771 | If restricted by superstructures | | Restricted to | |
| | | | | Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S}{L} \right)$ | = $\frac{30}{4} \times 6305 = +5$ |

| DEDUCTION FOR SUPERSTRUCTURES. | | | | |
|--------------------------------|--------------------------------|---------------|-------------------|----------------------|
| Mean Covered Length (S) | Equivalent Enclosed Length (S) | Height | Height Correction | Effective Length (E) |
| 46.130 | 49.130 | 2966 | | 49.130 |
| Poop enclosed | | | | |
| " overhang | | | | |
| R.Q.D. enclosed | | | | |
| " overhang | | | | |
| Bridge enclosed | | | | |
| " overhang aft | | | | |
| " overhang forward | | | | |
| Fore enclosed | 32.344 | 3228 | | 32.344 |
| " overhang | | | | |
| Trunk aft | | | | |
| " forward | | | | |
| Tonnage opening aft | | | | |
| " forward | | | | |
| Total | 81.474 | 81.474 | | 81.474 |

| SHEER CORRECTION. | | | | |
|-------------------|-------------------|---|--------------|-----------------|
| Station | Standard Ordinate | S | Product | Actual Ordinate |
| A.P. | 2091 | 1 | 2091 | 1192 |
| 1/2 L from A.P. | 929 | 4 | 3716 | 238 |
| 1/2 L | 232 | 2 | 464 | 0 |
| Amidships | 0 | 4 | 0 | 0 |
| 1/2 L from F.P. | 464 | 2 | 928 | 0 |
| 1/2 L | 1858 | 4 | 7432 | 246 |
| F.P. | 4182 | 1 | 4182 | 1687 |
| Total | | | 18813 | 5619 |

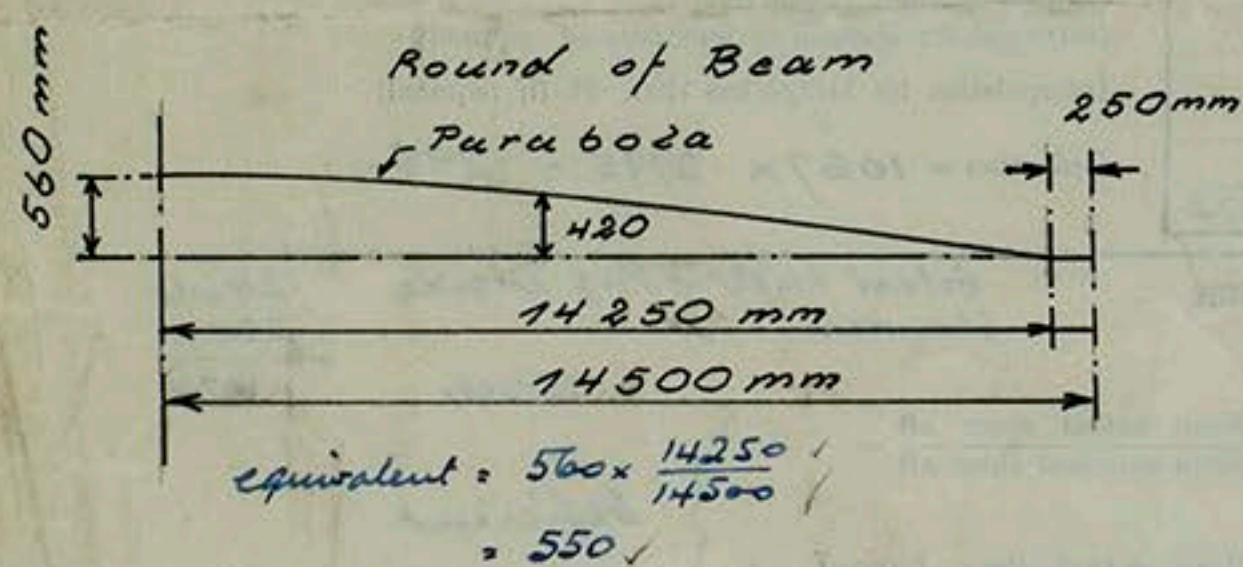
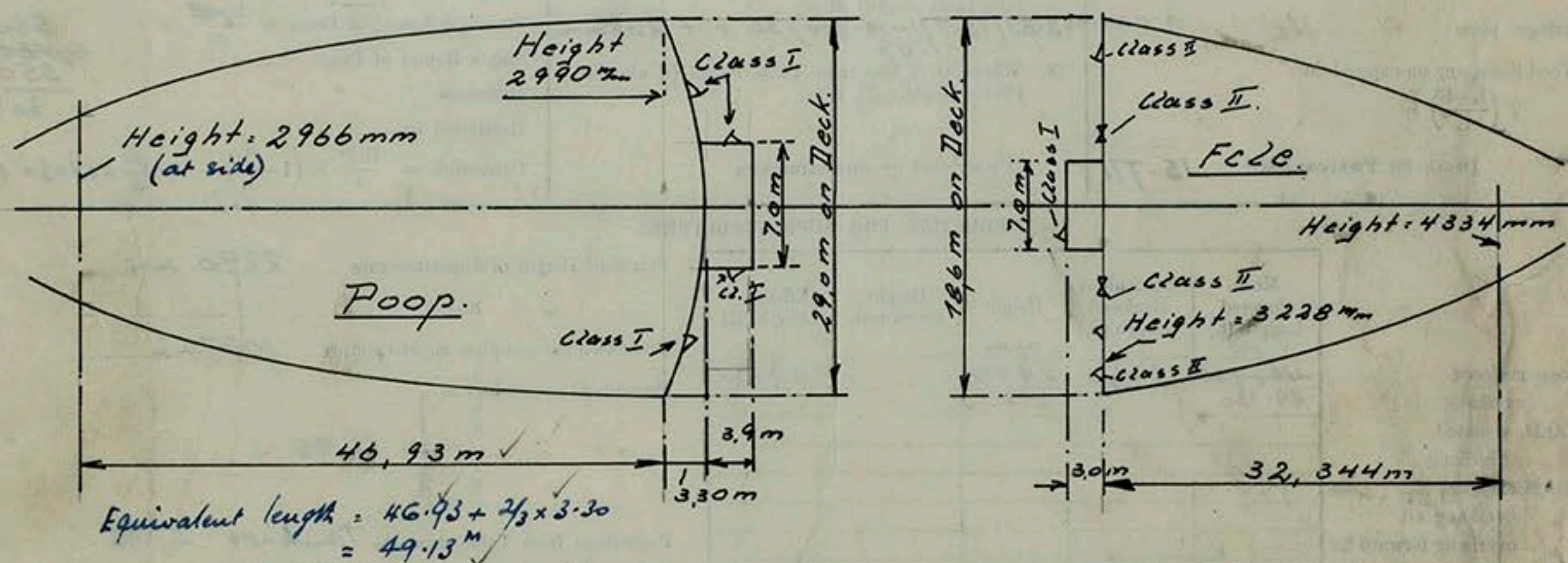
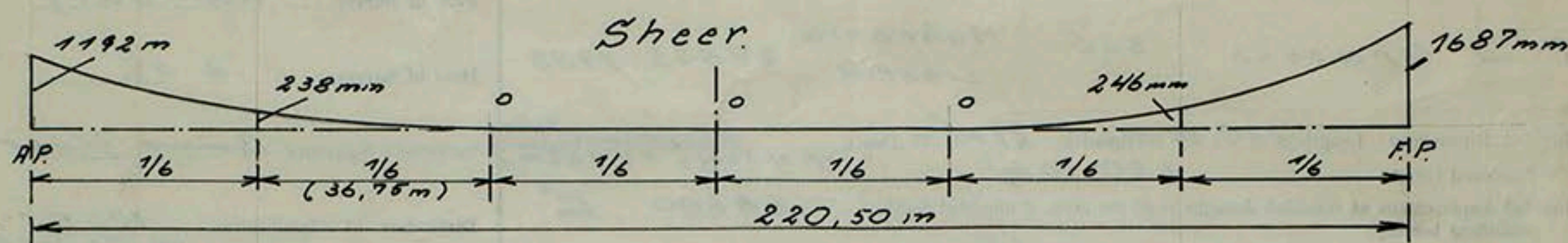
| DEDUCTION FOR TROPICAL FREEBOARD. | | | | |
|--|--------------|--|--|--|
| Depth to Freeboard Deck | 51.74 | | | |
| Summer freeboard | 13.62 | | | |
| Moulded draught (d) | 38.12 | | | |
| Keel allowance | | | | |
| Extreme draught | | | | |
| Deduction for Tropical freeboard and addition for | | | | |
| Winter freeboard = $\frac{d}{4}$ inches | 9.53 | | | |
| Addition for Winter North Atlantic Freeboard (if required) | 7.23 | | | |
| Total | 16.76 | | | |

| DEDUCTION FOR FRESH WATER. | | | | |
|--|---------------|--|--|--|
| Displacement in salt water at summer load water line | 58442 | | | |
| Tons per inch immersion at summer load water line | 143.42 | | | |
| Deduction = $\frac{\Delta}{40 T}$ inches | 10.19 | | | |
| Total | 10.19 | | | |

| TABULAR FREEBOARD | | | | |
|--|-------------|--|--|--|
| Correction for coefficient | 1.36 | | | |
| Depth Correction | 268 | | | |
| Deduction for superstructures | 298 | | | |
| Sheer correction | 414 | | | |
| Round of Beam correction | 5 | | | |
| Correction for Thickness of Deck amidships | 185 | | | |
| Other corrections, scantlings, etc. | 872 | | | |
| Summer Freeboard | 4153 | | | |

| SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Steel, Deck :- | | | | |
|--|--------------|--|--|--|
| Tropical Fresh Water Line above Centre of Disc | 19.74 | | | |
| Fresh Water Line | 10.14 | | | |
| Tropical Line | 9.12 | | | |
| Winter Line | 9.12 | | | |
| Winter North Atlantic Line | 16.34 | | | |

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.



| Draught | Ton per inch immersion (Freshwater) | Displacement Moulded m ³ |
|---------|-------------------------------------|-------------------------------------|
| 36" | 141,736 | 54 585 m ³ |
| 37" | 142,506 | 56 305 m ³ |
| 38" | 143,246 | 58 030 m ³ |
| 39" | 143,986 | 59 780 m ³ |

Measured to Bottom of Keel.
Keelplate = 35mm.

Sheer aft.
at A.P. = $1192 + \frac{676}{32} (2966 - 2290)$
= 1868
at 4/6 = $238 + \frac{676}{32} (\frac{10 \cdot 18^2}{46 \cdot 93})$
= 270

Trade of ship

International

Names of sister ships

X

Builder's name and yard number

Howaldtswerke A.G. Yard No 885

Owners

Palmas Transportation Company

Fee £ see F.E.- Report.

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