

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD.

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

| | | | | | |
|---------------------------------------------------------------------------------------------|-----------------|----------------------------------|---------------|-------------------------------|---------------------------------------------------------|
| Ship's Name <i>Avon Venture</i> | Official Number | Nationality and Port of Registry | Gross Tonnage | Date of Build <i>1931.</i> | Port of Survey |
| Moulded Dimensions: Length <i>455</i> Breadth <i>61.75</i> Depth <i>34.14</i> | | | | | Date of Survey <i>14.12.54</i> |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) | | | | | Surveyor's Signature <i>A. Heil.</i> |
| Coefficient of fineness for use with Tables <i>.802</i> | | | | | Particulars of Classification <i>Tanker at present.</i> |

DEPTH FOR FREEBOARD (D).

Moulded depth

Stringer plate

Sheathing on exposed deck

$T \left(\frac{L-S}{L} \right) =$

Depth for Freeboard (D) =

DEPTH CORRECTION.

(a) Where D is greater than Table depth (D—Table depth) R = *11.61*

(b) Where D is less than Table depth (if allowed) (Table depth—D) R =

If restricted by superstructures

ROUND OF BEAM CORRECTION.

Moulded Breadth (B)

Standard Round of Beam = $\frac{B \times 12}{50} =$

Ship's Round of Beam =

Difference

Restricted to

Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) =$ *-10.*

DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S ₁) | Height | Height Correction | Effective Length (E) |
|----------------------------|-------------------------|----------------------------------------------|--------|-------------------|----------------------|
| Poop enclosed | | | | | |
| " overhang | | | | | |
| R.Q.D. enclosed | | | | | |
| " overhang | | | | | |
| Bridge enclosed | | | | | |
| " overhang aft | | | | | |
| " overhang forward | | | | | |
| F'cle enclosed | | | | | |
| " overhang | | | | | |
| Trunk aft | | | | | |
| " forward | | | | | |
| Tonnage opening aft | | | | | |
| " " forward | | | | | |
| Total | | | | | |

Standard Height of Superstructure *7-1'*

" " R.Q.D. *42-0"*

Deduction for complete superstructure

Percentage covered $\frac{S}{L} =$ *40.13*

" " $\frac{S_1}{L} =$ *40.13*

" " $\frac{E}{L} =$ *39.05*

Percentage from Table, Line A. *22.69*

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. *26.69*

(corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required) *22.69 + 4 x .074 = 26.69*

Deduction = *2417 x 42 = 1015"*

SHEER CORRECTION.

| Station | Standard Ordinate | S M | Product | Actual Ordinate | Effective Ordinate | S M | Product |
|---------------------------------|-------------------|-----|---------|-----------------|--------------------|-----|---------|
| A.P. | | 1 | | | | 1 | |
| $\frac{1}{8}L$ from A.P. | | 4 | | | | 4 | |
| $\frac{2}{8}L$ " | | 2 | | | | 2 | |
| Amidships | | 4 | | | | 4 | |
| $\frac{2}{8}L$ from F.P. | | 2 | | | | 2 | |
| $\frac{1}{8}L$ " | | 4 | | | | 4 | |
| F.P. | | 1 | | | | 1 | |
| Total | | | | | | | |

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

If limited on account of midship superstructure.

Mean actual sheer aft = *> 1*

Mean standard sheer aft = *> 1*

Mean actual sheer forward = *> 1*

Mean standard sheer forward = *> 1*

Length of enclosed superstructure forward of amidships = $\frac{16.00}{455} = .035$

" " aft of " =

1.78 x .035 = .31"

2. If limited to maximum allowance of 1½ ins. per 100 ft.

Deduction for Tropical Freeboard.**Addition for Winter and Winter North Atlantic Freeboard.**

Depth to Freeboard Deck = *34.22*

Summer freeboard = *8.96*

Moulded draught (d) = *25.26*

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 *11.61*

Deduction for superstructures *10.15*

Sheer correction *.31*

Round of Beam correction *.10*

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc.

88.65

96.60

1412-24

-1.15

Summer Freeboard = *95.55*

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