Timber.

Rpt. C.11 (Comp.).

# Lloyd's Register of Shipping.
## SURVEYS FOR FREEBOARD.
### (COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index No._____
(For London Office only.)

| Ship's Name | Official Number | Nationality and Port of Registry | Gross Tonnage | Date of Build |
|---|---|---|---|---|
| YUKIKAWA MARU. | | JAPAN. KOBE. | 4502 | 1941 |

Port of Survey _____

Date of Survey  29.9.50

Surveyor's Signature _____

Particulars of Classification _____

Moulded Dimensions : Length 112.250 ~ Breadth 15.800 ~ Depth 9.016 ~

Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons

Coefficient of fineness for use with Tables  .732

### DEPTH FOR FREEBOARD (D).

Moulded depth  ...  ...  ...

Stringer plate  ...  ...  ...

Sheathing on exposed deck

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

Depth for Freeboard (D) = 9.026

### DEPTH CORRECTION.

(a) Where D is greater than Table depth (D—Table depth) R =  + 364 ~/~

(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 = $\dfrac{B \times 12}{50}$ =

Ship's Round of Beam  =

Difference

Restricted to

Correction = $\dfrac{\text{Diff}^e}{4} \times \left(1 - \dfrac{S_1}{L}\right)$ = + 2 ~/~

### DEDUCTION FOR SUPERSTRUCTURES.

| | Mean Covered Length (S) | Equivalent Enclosed Length (S₁) | 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 ... ... | 53.070 | 53.070 | | | 53.070 |

Standard Height of Superstructure  2192 ~/~

„  „  R.Q.D.

Deduction for complete superstructure  1013 ~/~

Percentage covered $\dfrac{S}{L}$ =

„ „ $\dfrac{S_1}{L}$ = } 47.28

„ „ $\dfrac{E}{L}$ =

Percentage from Table, Line A. TIMBER. 67.55
(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 = 1013 × .6755 = — 684 ~/~

### SHEER CORRECTION.

| Station | Standard Ordinate | S M | Product | Actual Ordinate | Effective Ordinate | S M | Product |
|---|---|---|---|---|---|---|---|
| A.P. ... ... | | 1 | | | | 1 | |
| ¼L from A.P. ... | | 4 | | | | 4 | |
| ⅖L „ | | 2 | | | | 2 | |
| Amidships ... | | 4 | | | | 4 | |
| ⅖L from F.P. ... | | 2 | | | | 2 | |
| ¼L „ | | 4 | | | | 4 | |
| F.P. ... ... | | 1 | | | | 1 | |
| Total ... | | | | | | | |

Mean actual sheer aft / Mean standard sheer aft =

Mean actual sheer forward / Mean standard sheer forward =

Length of enclosed superstructure / L  forward of amidships =

„ „ „ aft of „ =

Correction = $\dfrac{\text{Difference between sums of products}}{18}\left(.75 - \dfrac{S}{2L}\right)$ = + 1 ~/~

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

If limited on account of midship superstructure.

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

| | Ft. |
|---|---|
| Depth to Freeboard Deck = | 9.026 |
| Summer freeboard = | 1.306 |
| Moulded draught (d) = | 7.720 |

Deduction for Tropical freeboard and addition for Winter freeboard = $\dfrac{d}{48}$ inches = 161 ~/~

Addition for Winter North Atlantic Freeboard (if required) = $\dfrac{S}{36}$ . 214 ~/~

### Deduction for Fresh Water.

Displacement in salt water at summer load water line

△ =

Tons per inch immersion at summer load water line

T =

Deduction = $\dfrac{\triangle}{40 T}$ inches = 168 ~/~

### TABULAR FREEBOARD corrected for Flush Deck (if required)  1571

Correction for coefficient  1.412/1.36  1631

| | + | — | |
|---|---|---|---|
| Depth Correction ... ... | 364 | ✓ | An 29.9.50 |
| Deduction for superstructures ... | ✓ | 684 | |
| Sheer correction ... ... | 1 | ✓ | |
| Round of Beam correction ... | .2 | ✓ | |
| Correction for Thickness of Deck amidships ... | ✓ | ✓ | |
| Other corrections, scantlings, etc. | ✓ | ✓ | |
| | 367 | 684 | — 317 |
| Summer Freeboard = | | | 1314 |

### SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :—

Timber  3.10.1950 Timber

| | | | |
|---|---|---|---|
| Tropical Fresh Water Line above Centre of Disc | 672 ~/~ Timber | Tropical Fresh Water Freeboard | 1306 ~/~ ✓ |
| Fresh Water Line „ | 516 ~/~ ✓ | Fresh Water | 970 ~/~ ✓ |
| Tropical Line „ | 504 ~/~ ✓ | Tropical | 1140 |
| Winter Line above below „ | 129 ~/~ ✓ | Winter | 1430 |
| Winter North Atlantic Line below „ | 154 ~/~ ✓ | Winter North Atlantic | 1800 ~/~ |

Timber  Summer Line above „ 343 ~/~

2m.9.49. T.