

Amended amendment

# LLOYD'S REGISTER OF SHIPPING

## SURVEYS FOR FREEBOARD

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

For LONDON OFFICE ONLY

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|   |                                  |  |                               |                              |  |
|---|----------------------------------|--|-------------------------------|------------------------------|--|
| Ship's Name<br><b>WINNEBA</b><br>(formerly UMGENI)  | Official Number<br><b>166451</b> | Nationality and Port of Registry<br><b>British Liverpool</b> | Gross Tonnage<br><b>16774</b> | Date of Build<br><b>1938</b> | Port of Survey<br><b>Antwerp</b>             |
| Moulded Dimensions: Length <b>445'</b> Breadth <b>61'</b> Depth <b>35'-6"</b>                                 |                                  |  |                               |                              | Date of Survey<br><b>June 1957</b>           |
| Freeboard Length <b>445'</b>  |                                  |  |                               |                              | Surveyor's Signature                         |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) <b>16774</b> tons |                                  |  |                               |                              | Particulars of Classification <b>± 100A1</b> |
| Coefficient of fineness for use with Tables <b>.717</b>   |                                  |  |                               |                              |  |

| DEPTH FOR FREEBOARD (D).                                      |        | DEPTH CORRECTION.  |  | ROUND OF BEAM CORRECTION.  |                 |
|---|--------|--|--|--|-----------------|
| Moulded depth   | 35.50  | (a) Where D is greater than Table depth<br>(D-Table depth) R = 3<br>(35.62-29.67) 3 = 5.95 x 3 = +17.85" |  | Moulded Breadth (B)  | 61.00'          |
| Stringer plate  | .42"   | (b) Where D is less than Table depth (if allowed)<br>(Table depth-D) R =                                 |  | Standard Round of Beam = $\frac{B \times 12}{50}$                              | 14.64"          |
| Wood Sheathing on exposed deck                                | 2 1/2" |  |  | Ship's Round of Beam   | 6.00"           |
| T $\left(\frac{L-S}{L}\right) = .21 \times \frac{160.9}{445}$ | .08    | If restricted by superstructures   |  | Difference   | 8.64" deficient |
| Depth for Freeboard (D) =                                     | 35.62  |  |  | Restricted to $\frac{2.16 \times 3616}{4} \times \left(1 - \frac{S}{L}\right)$ |                 |
|   |        |  |  | Correction =   | + .78"          |

| DEDUCTION FOR SUPERSTRUCTURES. |                         |  |        |                      |
|--------------------------------|-------------------------|--|--------|----------------------|
|                                | Mean Covered Length (S) | Equivalent Enclosed Length (S <sub>1</sub> ) | Height | Effective Length (E) |
| Poop enclosed                  | 44.67                   | 44.67  | 7.50   | 44.67                |
| " overhang                     |                         |  |        |                      |
| R.Q.D. enclosed                |                         |  |        |                      |
| " overhang                     |                         |  |        |                      |
| Bridge enclosed                | 207.35                  | 207.35                                       | 8.50   | 207.35               |
| " overhang aft                 |                         |  |        |                      |
| " overhang forward             |                         |  |        |                      |
| F'cle enclosed                 | 32.08                   | 32.08  | 7.50   | 32.08                |
| " overhang                     |                         |  |        |                      |
| Trunk aft                      |                         |  |        |                      |
| " forward                      |                         |  |        |                      |
| Tonnage opening aft            |                         |  |        |                      |
| " forward                      |                         |  |        |                      |
| Total                          | 284.10                  | 284.10                                       |        | 284.10               |

Standard Height of Superstructure **7.5'**

" " R.Q.D. **42"**

Deduction for complete superstructure **42"**

Percentage covered  $\frac{S}{L} =$  **63.84**

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

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

Percentage from Table, Line A. **52.53**

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. **4.1L**

(corrected for absence of forecastle (if required)) **5(44.50-32.08) = 1.40**

Interpolation for bridge less than .2L (if required) **44.50**

Deduction = **42" x .5113 = 21.48"**

| SHEER CORRECTION. |                   |     |         |                 |                    |     |         |
|-------------------|-------------------|-----|---------|-----------------|--------------------|-----|---------|
| Station           | Standard Ordinate | S M | Product | Actual Ordinate | Effective Ordinate | S M | Product |
| A.P.              | 54.50             | 1   | 54.50   | 43.75           | 43.75              | 1   | 43.75   |
| 1/4 L from A.P.   | 24.25             | 4   | 97.00   | 13.75           | 13.75              | 4   | 55.00   |
| 1/2 L             | 5.995             | 2   | 11.99   | -.62            | -.62               | 2   | -1.24   |
| Amidships         | 0                 | 4   | 0       | 0               | 0                  | 4   | 0       |
| 3/4 L from F.P.   | 11.99             | 2   | 23.98   | 16.25           | 12.06              | 2   | 24.12   |
| 1/4 L             | 48.50             | 4   | 194.00  | 49.12           | 48.80              | 4   | 195.20  |
| F.P.              | 109.00            | 1   | 109.00  | 100.50          | 109.65             | 1   | 109.65  |
| Total             |                   |     | 490.47  |                 |                    |     | 426.48  |

Mean actual sheer aft = **Deficient 57.24% standard**

Mean standard sheer aft =

Mean actual sheer forward = **Excess**

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = **Deficient**

" " aft of " = **sheer**

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - \frac{S}{2L}}{.75 - \frac{S}{2L}} \right) = \frac{63.99}{18} \left( \frac{.75 - .3192}{.75 - .3192} \right) = +1.53"$

If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100ft.

| Deduction for Tropical Freeboard.                              |  | Deduction for Fresh Water.                           |  | TABULAR FREEBOARD corrected for Flush Deck (if required) |              |
|--|--|--|--|--|--------------|
| Addition for Winter and Winter North Atlantic Freeboard.       |  | Displacement in salt water at summer load water line |  | Correction for coefficient                               |              |
| Depth to Freeboard Deck = <b>35.54</b>                         |  | $\Delta = 13790$                                     |  | $\frac{.717 + .68}{1.36} = \frac{1.397}{1.36}$           | <b>85.55</b> |
| Summer freeboard = <b>10.19</b>                                |  | Tons per inch immersion at summer load water line    |  |  | <b>87.87</b> |
| Moulded draught (d) = <b>25.35</b>                             |  | T = <b>52.91</b>                                     |  |  |              |
| Keel allowance =   |  | Deduction = $\frac{\Delta}{40 T}$ inches             |  |  |              |
| Extreme draught =  |  | = <b>6.52</b>  |  |  |              |
| Deduction for Tropical freeboard and addition for =            |  | = <b>6 1/2"</b>                                      |  |  |              |
| Winter freeboard = $\frac{d}{4}$ inches = <b>6.34 = 6 1/4"</b> |  |  |  |  |              |
| Addition for Winter North Atlantic Freeboard (if required) =   |  |  |  |  |              |

Depth Correction **17.85**

Deduction for superstructures **21.48**

Sheer correction **1.53**

Round of Beam correction **.78**

Correction for Thickness of Deck amidships **.96**

Other corrections, scantlings, AND TO CORRESPOND TO APPROVED SUMMER MOULDED DRAFT OF **56.82**

Summer Freeboard = **22.25**

| SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, <del>Water</del> , Steel, Deck :- |                |                                |                     |
|---|----------------|--------------------------------|---------------------|
| Tropical Fresh Water Line above Centre of Disc  | <b>12 3/4"</b> | Tropical Fresh Water Freeboard | <b>9' - 1 1/2"</b>  |
| Fresh Water Line  | <b>6 1/2"</b>  | Fresh Water                    | <b>3' - 7 3/4"</b>  |
| Tropical Line   | <b>6 1/4"</b>  | Tropical                       | <b>3' - 8 1/2"</b>  |
| Winter Line below   | <b>6 1/4"</b>  | Winter                         | <b>10' - 2 1/2"</b> |
| Winter North Atlantic Line  |                | Winter North Atlantic          |                     |

1.10.57

5m.6.56. T.

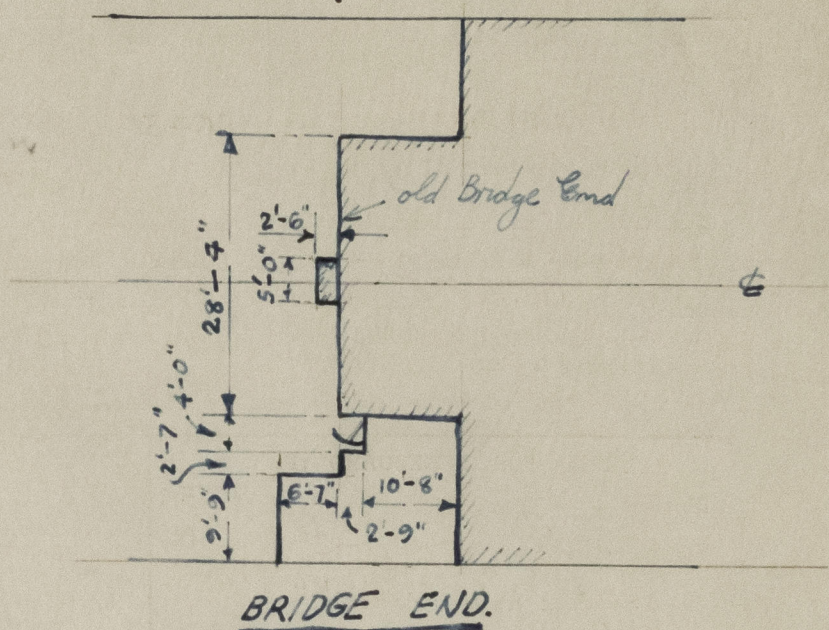
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A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

# BRIDGE

|   |               |   |
|---|---------------|---|
| Length as before                        | 198.67'       | ✓ |
| Less $6.67 \times \frac{1}{3}$          | <u>2.22</u>   | ✓ |
|   | 196.45        | ✓ |
| + $13.42 \times \frac{44.67}{61}$       | = 9.83        | ✓ |
| + $6.58 \times \frac{9.75}{61}$         | = <u>1.05</u> | ✓ |
|   | 207.33        | ✓ |
| Less doorway $2.75 \times \frac{4}{61}$ | = .18         | ✓ |
|   | 207.15        |   |
| + on $\oplus 2.5 \times \frac{5}{61}$   | .20           | ✓ |
| Equivalent length                       | <u>207.35</u> | ✓ |



Trade of ship

Names of sister ships T.S "UMTATA" & "UMTALI"

Builder's name and yard number Swan Hunter & Wigham Richardson Ltd No 155

Owners Elder Dempster Lines Ltd.

Fee £ : :

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



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