Rpt. C.11 (Comp.).

*Amended Freeboard*

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

Index. No. 2303
(For London Office only).

| Ship's Name | Official Number | Nationality and Port of Registry | Gross Tonnage | Date of Build |
|---|---|---|---|---|
| "LADY CONNAUGHT" | 132019. | British Liverpool. | | 1912 3ms. |

Port of Survey

~~Date of~~ Survey 13 – 1 – 44

Surveyor's Signature

Moulded Dimensions: Length 324.7′ Breadth 41.5 Depth 25.44

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

Coefficient of fineness for use with Tables .68 (estimated .655 actual)

Particulars of Classification +100A1 with freeboard.

### Depth for Freeboard (D).

| | | | |
|---|---|---|---|
| Moulded depth ... ... ... | 25.44 | | |
| Stringer plate ... .40 ... | .03 | | |
| | 3.88 | | |
| Sheathing on exposed deck | | | |
| $T\left(\frac{L-S}{L}\right)$ = .25 × .2224 = | .06 | | |
| Depth for Freeboard (D) = | 25.53 | | |

### Depth correction.

(a) Where D is greater than Table depth
(D−Table depth) R =
(25.53 − 21.65) 2.498 = +9.69

(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) | | 41.5′ |
| Standard Round of Beam = $\frac{B \times 12}{50}$ = | | 9.96 |
| Ship's Round of Beam = | | 4.00 |
| Difference | | 5.96 |
| Restricted to | | |
| Correction = $\frac{\text{Diff}^o}{4} \times \left(1-\frac{S_1}{L}\right)$ = | | $\frac{5.96}{4} \times \frac{.2224}{.3671}$ = +.55 |

### 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... ... | 156.67 | 156.67 | 7.5 | – | 156.67 |
| „ overhang aft ... | | | | | |
| „ overhang forward | | | .44 | .44 | |
| F'cle enclosed *Raised deck forward* | 95.83 | 95.83 | 3.25 actual | × $\frac{3.25}{6.75}$ | 48.84 |
| „ overhang ... | | | | | |
| Trunk aft ... ... | | | | | |
| „ forward ... | | | | | |
| Tonnage opening aft | | | | | |
| „ „ forward | | | | | |
| Total ... ... | 252.50 | 252.50 | | | 205.51 |

Standard Height of Superstructure 6.75
„ „ R.Q.D.
Deduction for complete superstructure 36.98
Percentage covered $\frac{S}{L}$ = 77.76
„ „ $\frac{S_1}{L}$ = 77.76
„ „ $\frac{E}{L}$ = 63.29
Percentage from Table, Line A. 51.60 − 5 = 46.60
(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 = 36.98 × .466 = − 17.23

### SHEER CORRECTION.

| Station | Standard Ordinate | S M | Product | Actual Ordinate | Effective Ordinate | S M | Product |
|---|---|---|---|---|---|---|---|
| A.P. ... ... | 42.47 | 1 | 42.47 | 38.00 | 38.00 | 1 | 38.00 |
| from A.P. ... | 18.90 | 4 | 75.60 | 13.43 | 13.43 | 4 | 53.72 |
| „ ... | 4.67 | 2 | 9.34 | 3.36 | 3.36 | 2 | 6.72 |
| amidships ... | – | 4 | – | – | – | 4 | – |
| from F.P. ... | 9.34 | 2 | 18.68 | 8.09 | 8.09 | 2 | 16.18 |
| „ ... | 37.80 | 4 | 151.20 | 32.38 | 32.38 | 4 | 129.52 |
| F.P. ... | 84.94 | 1 | 84.94 | 70.00 | 70.00 | 1 | 70.00 |
| Total ... | | | 382.23 | | | | 314.14 |

$\frac{\text{Mean actual sheer aft}}{\text{Mean standard sheer aft}}$ = } Deficient

$\frac{\text{Mean actual sheer forward}}{\text{Mean standard sheer forward}}$ =

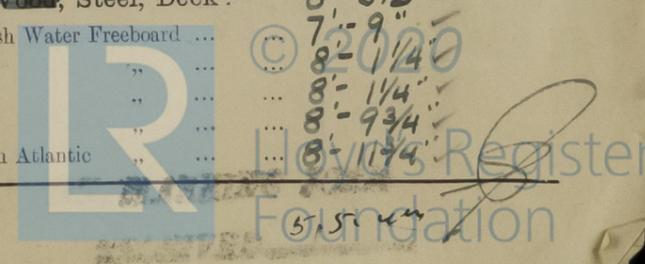$\frac{\text{Length of enclosed superstructure}}{L}$ forward of amidships =
aft of „ „ =

Correction = $\frac{\text{Difference between sums of products}}{18}\left(.75-\frac{S}{2L}\right)$ = $\frac{68.09}{18}\left(.75 - \frac{.3888}{.3612}\right)$ = + 1.37

If limited on account of midship superstructure.

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

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

| | Ft. |
|---|---|
| Depth to Freeboard Deck = | 25.47 |
| Summer freeboard = | 8.46 |
| Moulded draught (d) = | 17.01 |

Deduction for Tropical freeboard and addition for
Winter freeboard = $\frac{d}{4}$ inches = 4.25 = 4¼
Addition for Winter North Atlantic Freeboard (if required) =

### Deduction for Fresh Water.

Displacement in salt water at summer load water line
Δ =
Tons per inch immersion at summer load water line
T =
Deduction = $\frac{\Delta}{40\,T}$ inches
4¼

### TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~ 49.62

Correction for coefficient Nil. 49.62

| | + | − |
|---|---|---|
| Depth Correction ... ... | 9.69 | – |
| Deduction for superstructures | | 17.23 |
| Sheer correction ... ... | 1.37 | – |
| Round of Beam correction... | .55 | – |
| Correction for Thickness of Deck amidships | | .72 |
| Other corrections, scantlings, etc. *to corrected* | 58.33 | – |
| | 69.83 | 17.95 |

−17.23

S.B. 14.1.44

To summer moulded draught of 17·0

Summer Freeboard + 51.88
Summer Freeboard = 101.50

### SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood,~~ Steel, Deck :—  8′-5½″

| | | | | |
|---|---|---|---|---|
| Tropical Fresh Water Line above Centre of Disc ... ... | 8½″ | Tropical Fresh Water Freeboard ... | 7′-9″ | |
| Fresh Water Line „ „ „ | 4¼″ | Fresh Water | 8′-1¼″ | |
| Tropical Line „ „ „ | 4¼″ | Tropical | 8′-1¼″ | |
| Winter Line below „ „ | 4¼″ | Winter | 8′-9¾″ | |
| Winter North Atlantic Line „ „ „ | 6¼″ | Winter North Atlantic | 8′-11¾″ | |

10m.3.37. T.

00251-002156-0174

Tumble-home at Bridge deck 5"

$\frac{1}{2}$ B Mld $= 20'-9''$

$\phantom{\frac{1}{2} B Mld =} -5''$

$\phantom{\frac{1}{2} B Mld =} \overline{20-4''}$

Camber 4 . $4 \times \left(\frac{20.33}{20.75}\right)^2 = 3.84$

Increase of Mld. depth due to tumble home $= 4 - 3.84$

$\phantom{Increase of Mld. depth due to tumble home} = .16''$

$\phantom{Increase of Mld. depth due to tumble home} = \frac{1}{4}'' \text{ say.}$

$\therefore$ new Mld depth $= 17'-11'' + 7'-6'' + \frac{1}{4}''$

$\phantom{\therefore new Mld depth} = \underline{25' - 5\frac{1}{4}''}$
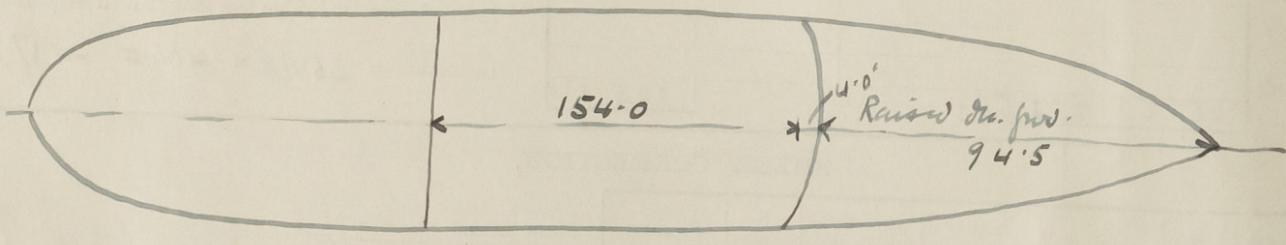


Bridge $154 + (\frac{2}{3} \times 4)$

$= 154 + 2.67 = \underline{156.67}$

Raised deck forward $= 94.5 + 1.33 = \underline{95.83}$

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £