

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index. No. 36757  
(For London Office only).

20624.

|   |                                  |  |  |                               |  |
|---|----------------------------------|--|--|-------------------------------|--|
| Ship's Name<br><b>"WILLIAM PEARMAN"</b>   | Official Number<br><b>168275</b> | Nationality and Port of Registry<br><b>BRITISH LONDON.</b> | Gross Tonnage<br><b>APPROX 1560 1552</b> | Date of Build<br><b>1942.</b> | Port of Survey<br><b>Burntisland (LEITH.)</b>                                      |
| Moulded Dimensions: Length <b>242'-9"</b> Breadth <b>39'-4"</b> Depth <b>18'-6" UPPER DECK.</b>   |                                  |  |  |                               | Date of Survey<br><b>While building</b>  |
| Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>3211 @ 15.725</b> tons |                                  |  |  |                               | Surveyor's Signature<br><b>Robert Wood</b>   |
| Coefficient of fineness for use with Tables <b>.7486</b> ✓  |                                  |  |  |                               | Particulars of Classification<br><b>+ 100 A.I. with freeboard. (complemented.)</b> |

|   |   |   |
|---|---|---|
| <b>Depth for Freeboard (D).</b>                                 | <b>Depth correction.</b>  | <b>Round of Beam correction.</b>  |
| Moulded depth ... <b>18.50</b>                                  | (a) Where D is greater than Table depth<br>$(D - \text{Table depth}) R = (18.54 - 16.18) \times 1.867 = +4.41"$ | Moulded Breadth (B) <b>39'-4"</b>   |
| Stringer plate ... <b>.04</b>                                   | (b) Where D is less than Table depth (if allowed)<br>(Table depth - D) R = <b>2.36</b>                          | Standard Round of Beam = $\frac{B \times 12}{50} = 9\frac{3}{8}"$   |
| Sheathing on exposed deck<br>$T \left( \frac{L-S}{L} \right) =$ | If restricted by superstructures ✓  | Ship's Round of Beam = <b>9 1/2"</b>  |
| Depth for Freeboard (D) = <b>18.54</b>                          |   | Difference Excess <b>.13"</b>   |
|   |   | Restricted to ✓   |
|   |   | Correction = $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.13}{4} \times .2297 = -.01"$ |

### DEDUCTION FOR SUPERSTRUCTURES.

|                         | Mean Covered Length (S) | Equivalent Enclosed Length (S <sub>1</sub> ) | Height            | Height Correction | Effective Length (E) |
|-------------------------|-------------------------|--|-------------------|-------------------|----------------------|
| Poop enclosed ...       | ✓                       |  |                   |                   |                      |
| „ overhang ...          | ✓                       |  |                   |                   |                      |
| R.Q.D. enclosed ...     | ✓ <b>148.58</b>         | <b>148.58</b>                                | <b>3'-11 3/8"</b> | <b>3.948</b>      | <b>148.45</b>        |
| „ overhang ...          | ✓                       |  |                   |                   |                      |
| Bridge enclosed ...     | ✓ <b>15.75</b>          | <b>15.75</b>                                 | <b>7'-0"</b>      | ✓                 | <b>15.75</b>         |
| „ overhang aft ...      | ✓                       |  |                   |                   |                      |
| „ overhang forward ...  | ✓                       |  |                   |                   |                      |
| F'cle enclosed ...      | ✓ <b>22.66</b>          | <b>22.66</b>                                 | <b>6'-0"</b>      | ✓                 | <b>22.66</b>         |
| „ overhang ...          | ✓                       |  |                   |                   |                      |
| Trunk aft ...           | ✓                       |  |                   |                   |                      |
| „ forward ...           | ✓                       |  |                   |                   |                      |
| Tonnage opening aft ... | ✓                       |  |                   |                   |                      |
| „ „ forward ...         | ✓                       |  |                   |                   |                      |
| Total ...               | <b>186.99</b>           | <b>186.99</b>                                |                   |                   | <b>186.86</b>        |

Standard Height of Superstructure **6'0" Bridge 7'0"**

„ „ R.Q.D. **3.952 5'-11 3/8"**

Deduction for complete superstructure **30.27**

Percentage covered  $\frac{S}{L} = 77.03$

„ „  $\frac{S_1}{L} = 77.03$

„ „  $\frac{E}{L} = 76.98$

Percentage from Table, Line A. ✓

(corrected for absence of forecastle (if required)) ✓

Percentage from Table, Line B. **71.59**

(corrected for absence of forecastle (if required)) ✓

Interpolation for bridge less than 2L (if required) ✓

Deduction = **30.27 x .7159 = -21.67"**

### SHEER CORRECTION.

| Station             | Standard Ordinate | S | M | Product       | Actual Ordinate  | Effective Ordinate | S | M | Product       |
|---------------------|-------------------|---|---|---------------|------------------|--------------------|---|---|---------------|
| A.P. ...            | <b>34.27</b>      | 1 |   | <b>34.27</b>  | ✓ <b>12'</b>     | <b>12.00</b>       | 1 |   | <b>12.00</b>  |
| 1/4 L from A.P. ... | <b>15.25</b>      | 4 |   | <b>61.00</b>  | ✓ <b>5 1/2'</b>  | <b>5.50</b>        | 4 |   | <b>22.00</b>  |
| 1/2 L „ ...         | <b>3.77</b>       | 2 |   | <b>7.54</b>   | ✓ <b>1 3/8'</b>  | <b>1.375</b>       | 2 |   | <b>2.75</b>   |
| Amidships ...       | -                 | 4 |   | -             | -                | -                  | 4 |   | -             |
| 3/4 L from F.P. ... | <b>7.54</b>       | 2 |   | <b>15.08</b>  | ✓ <b>4 1/2'</b>  | <b>4.50</b>        | 2 |   | <b>9.00</b>   |
| 1/4 L „ ...         | <b>30.50</b>      | 4 |   | <b>122.00</b> | ✓ <b>17 1/2'</b> | <b>17.50</b>       | 4 |   | <b>70.00</b>  |
| F.P. ...            | <b>68.55</b>      | 1 |   | <b>68.55</b>  | ✓ <b>39'</b>     | <b>39.00</b>       | 1 |   | <b>39.00</b>  |
| Total ...           |                   |   |   | <b>308.44</b> |                  |                    |   |   | <b>154.75</b> |

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{153.69}{18} \times (.75 - .3851) = +3.12"$

If limited on account of midship superstructure. **3649** If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Mean actual sheer aft = **Deficient**

Mean standard sheer aft = **Deficient**

Mean actual sheer forward = **Deficient**

Mean standard sheer forward = **Deficient**

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

„ „ aft of „ = **Deficient**

|  |  |  |              |
|--|--|--|--------------|
| <b>Deduction for Tropical Freeboard.</b>   | <b>Deduction for Fresh Water.</b>                    | <b>TABULAR FREEBOARD</b> corrected for Fresh Deck (if required)                            | <b>30.85</b> |
| <b>Addition for Winter and Winter North Atlantic Freeboard.</b>  | Displacement in salt water at summer load water line | Correction for coefficient $\frac{749 + .68}{1.36} = 1.429/1.36$                           | <b>32.41</b> |
| <b>Raised Quarter</b>  | $\Delta = 3444 @ 16'-9"$                             | Depth Correction ... <b>4.41</b>   |              |
| Depth to Freeboard Deck = <b>22.54</b>   | Tons per inch immersion at summer load water line    | Deduction for superstructures ... <b>21.67</b>   |              |
| Summer freeboard = <b>5.92</b>   | $T = 19.35$  | Sheer correction ... <b>3.12</b>   |              |
| Moulded draught (d) = <b>16.62</b>   | Deduction = $\frac{\Delta}{40T}$ inches              | Round of Beam correction ... <b>.01</b>  |              |
| Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <b>4.15 = 4 1/4"</b> | <b>= 4.45</b>  | Correction for Thickness of Deck amidships <b>47.37</b>                                    |              |
| Addition for Winter North Atlantic Freeboard (if required) = <b>6 1/4"</b>                                       | <b>= 4 1/2"</b>                                      | Camber at R.Q.D.K. Fumble home <b>4.63</b>   |              |
|  |  | Other corrections, scantlings, etc. to a summer moulded draught of 16'-7 1/2". <b>4.74</b> |              |
|  |  | <b>60.27 21.68 +38.59</b>  |              |
|  |  | Summer Freeboard = <b>71.00</b>  |              |

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

|  |  |
|--|--|
| Tropical Fresh Water Line above Centre of Disc ... <b>8 3/4"</b> | Tropical Fresh Water Freeboard ... <b>5'-11"</b> |
| Fresh Water Line „ „ ... <b>4 1/2"</b>                           | Fresh Water „ „ ... <b>5'-2 1/4"</b>             |
| Tropical Line „ „ ... <b>4 1/4"</b>                              | Tropical „ „ ... <b>5'-6 1/2"</b>                |
| Winter Line below „ „ ... <b>4 1/4"</b>                          | Winter „ „ ... <b>5'-6 3/4"</b>                  |
| Winter North Atlantic Line „ „ ... <b>6 1/4"</b>                 | Winter North Atlantic „ „ ... <b>6'-3 1/4"</b>   |



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.

Trade of ship..... *Collier - River Thames & North East Coast Ports*

Names of sister ships..... *"FULHAM VII"*

Builder's name and yard number..... *The Burntisland S.B. Co. Ltd. Yard N° 257.*

Owners..... *London Power Co. Ltd.*

Fee £ *(To be charged with 1<sup>st</sup> Entry.)*



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