

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

2nd 6336

Ship's Name <b>FRESH SRRAY.</b>	Official Number <b>180895</b>	Nationality and Port of Registry <b>British LONDON</b>	Gross Tonnage <b>283</b>	Date of Build <b>1946.</b>	Port of Survey <b>Lytham</b>
Moulded Dimensions: Length <b>120.00</b> Breadth <b>24.50</b> Depth <b>12.50</b>					Date of Survey <b>While building</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>639.50</b> tons					Surveyor's Signature <b>Harry S. Nestor</b> <b>+ 100 AI</b>
Coefficient of fineness for use with Tables <b>.717</b>					Particulars of Classification <b>FOR ADMIRALTY TENDER SERVICE</b>

<b>DEPTH FOR FREEBOARD (D).</b> Moulded depth ... .. <b>12.50</b> Stringer plate <b>.38</b> ... .. <b>.03</b> Sheathing on exposed deck <b>✓</b> $T \left( \frac{L-S}{L} \right) = 1'' \text{ durastec composite}$ Depth for Freeboard (D) = <b>12.53</b>	<b>DEPTH CORRECTION.</b> (a) Where D is greater than Table depth (D-Table depth) R = <b>(12.53-8.0) .923 = +4.18</b> <b>4.53</b> (b) Where D is less than Table depth (if allowed) (Table depth-D) R = <b>✓</b> If restricted by superstructures <b>✓</b>	<b>ROUND OF BEAM CORRECTION.</b> Moulded Breadth (B) <b>24.5</b> Standard Round of Beam = $\frac{B \times 12}{50} = 5.88$ Ship's Round of Beam = <b>6.0</b> Difference <b>.12</b> Restricted to Correction = $\frac{\text{Diff}^\circ}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.12}{4} \times .849 = .03$
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<b>DEDUCTION FOR SUPERSTRUCTURES.</b>					Standard Height of Superstructure <b>6.0</b>
	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	R.Q.D. <b>✓</b>
Poop enclosed ... ..					Deduction for complete superstructure <b>18.0</b>
„ overhang ... ..					Percentage covered $\frac{S}{L} = 15.21$
R.Q.D. enclosed ... ..					„ $\frac{S_1}{L} =$
„ overhang ... ..					„ $\frac{E}{L} =$ } <b>15.1</b>
Bridge enclosed ... ..					Percentage from Table, Line A. <b>7.55</b>
„ overhang aft ... ..					(corrected for absence of fore-castle (if required))
„ overhang forward ... ..					Percentage from Table, Line B.
F'cle enclosed ... ..	<b>18.00</b>	<b>18.00</b>	<b>6.50</b>	<b>✓</b>	(corrected for absence of fore-castle (if required))
„ overhang ... ..	<b>.25</b>	<b>.125</b>			Interpolation for bridge less than .2L (if required)
Trunk aft ... ..					Deduction = <b>18 x .0755 = -1.36</b>
„ forward ... ..					
Tonnage opening aft ... ..					
„ „ forward ... ..					
Total ... ..	<b>18.25</b>	<b>18.12</b>			

<b>SHEER CORRECTION.</b>							
Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..	<b>22.00</b>	<b>1</b>	<b>22.00</b>	<b>18.00</b>	<b>18.00</b>	<b>1</b>	<b>18.00</b>
$\frac{1}{8}L$ from A.P. ... ..	<b>9.79</b>	<b>4</b>	<b>39.16</b>	<b>9.00</b>	<b>9.00</b>	<b>4</b>	<b>36.00</b>
$\frac{2}{8}L$ „ ... ..	<b>2.42</b>	<b>2</b>	<b>4.84</b>	<b>3.50</b>	<b>3.50</b>	<b>2</b>	<b>7.00</b>
Amidships ... ..		<b>4</b>		<b>✓</b>		<b>4</b>	
$\frac{3}{8}L$ from F.P. ... ..	<b>4.84</b>	<b>2</b>	<b>9.68</b>	<b>5.00</b>	<b>5.00</b>	<b>2</b>	<b>10.00</b>
$\frac{4}{8}L$ „ ... ..	<b>19.58</b>	<b>4</b>	<b>78.32</b>	<b>15.00</b>	<b>15.00</b>	<b>4</b>	<b>60.00</b>
F.P. ... ..	<b>44.00</b>	<b>1</b>	<b>44.00</b>	<b>36.00</b>	<b>36.00</b>	<b>1</b>	<b>36.00</b>
Total ... ..			<b>198.00</b>				<b>167.00</b>
Correction = $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{31.0}{18.0} (.75 - .0761) = +1.16$ If limited on account of midship superstructure. <b>18.0 .6739</b> If limited to maximum allowance of 1 1/2 ins. per 100 ft. <b>✓</b>							

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = <b>12.53</b> Summer freeboard = <b>1.35</b> Moulded draught (d) = <b>11.18</b> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <b>2.8 = 2 3/4</b> Addition for Winter North Atlantic Freeboard (if required) =	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta = 575.626$ Tons per inch immersion at summer load water line <b>T = 5.87.95</b> Deduction = $\frac{\Delta}{40 T}$ inches = <b>2.63</b> <b>. 2 3/4</b>	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required) Correction for coefficient $.717 + .68 = 1.397$ <b>1.36</b> Depth Correction ... .. <b>4.18</b> Deduction for superstructures ... .. <b>- 1.36</b> Sheer correction ... .. <b>1.16</b> Round of Beam correction ... .. <b>.03</b> Correction for Thickness of Deck amidships ... .. Other corrections, scantlings, etc. ... .. <b>5.34 1.39 + 3.95</b> Summer Freeboard = <b>16.27</b>	<b>12.00</b> <b>12.32</b> <b>5.17.6.46</b>
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<b>SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-</b>			
Tropical Fresh Water Line above Centre of Disc	Not assigned	Tropical Fresh Water Freeboard	<b>1' - 4 1/4"</b>
Fresh Water Line	<b>2 3/4</b>	Fresh Water	<b>1' - 1 1/2"</b>
Tropical Line	Not assigned	Tropical	<b>1' - 7"</b>
Winter Line below	<b>2 3/4</b>	Winter	
Winter North Atlantic Line	Not assigned	Winter North Atlantic	



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 Water carrier for Admiralty Tender Services

Names of sister ships Freshpond, Freshwell, Freshmore, Freshmere

Builder's name and yard number Latham S. B. & Co. Ltd No. 875

Owners The Admiralty.

Fee £ 6 . 0 . 0



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