

Amended

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

Ship's Name <b>BORE</b>	Official Number <b>5167</b>	Nationality and Port of Registry <b>Swedish Stockholm</b>	Gross Tonnage	Date of Build <b>1910</b>	Port of Survey
Moulded Dimensions: Length <b>229.4</b> Breadth <b>35.62</b> Depth <b>17.62</b>					Date of Survey <b>6-6-47</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>2605</b> tons					Surveyor's Signature
Coefficient of fineness for use with Tables <b>.745</b>					Particulars of Classification <b>+100A1</b>

<b>DEPTH FOR FREEBOARD (D).</b> Moulded depth ... .. <b>17.62</b> Stringer plate ... .. <b>.04</b> Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <b>17.66</b>	<b>DEPTH CORRECTION.</b> (a) Where D is greater than Table depth (D-Table depth) R = <b>(17.66-15.29) 1.764 = + 4.18</b> (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures <input checked="" type="checkbox"/>	<b>ROUND OF BEAM CORRECTION.</b> Moulded Breadth (B) <b>35.62'</b> Standard Round of Beam = $\frac{B \times 12}{50} =$ <b>8.55'</b> Ship's Round of Beam = <b>8.75'</b> Difference <b>+ .20</b> Restricted to Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.20}{4} \times .3226 =$ <b>.02</b>
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<b>DEDUCTION FOR SUPERSTRUCTURES.</b>					Standard Height of Superstructure <b>6.00'</b>	
	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	" " R.Q.D. <b>3.863'</b>
Poop enclosed ... ..						Deduction for complete superstructure <b>28.94"</b>
" overhang ... ..						Percentage covered $\frac{S}{L} =$ <b>69.92</b>
R.Q.D. enclosed ... ..	<b>83.00</b>	<b>83.00</b>	<b>3.87</b>	<input checked="" type="checkbox"/>	<b>83.00</b>	" " $\frac{S_1}{L} =$ <b>67.74</b>
" overhang ... ..						" " $\frac{E}{L} =$
Bridge enclosed ... ..	<b>49.84</b>	<b>44.86</b>	<b>7.00</b>	<input checked="" type="checkbox"/>	<b>44.86</b>	Percentage from Table, Line A. <b>59.16</b>
" overhang aft ... ..						(corrected for absence of forecastle (if required))
" overhang forward ... ..						Percentage from Table, Line B. <input checked="" type="checkbox"/>
Fore enclosed <i>equiv.</i> ... ..	<b>27.54</b>	<b>27.54</b>	<b>7.25</b>	<input checked="" type="checkbox"/>	<b>27.54</b>	(corrected for absence of forecastle (if required))
" overhang ... ..			<b>wood etc.</b>			Interpolation for bridge less than .2L (if required) <input checked="" type="checkbox"/>
Trunk aft ... ..						Deduction = <b>28.94 x .5916 = -17.12"</b>
" forward ... ..						
Tonnage opening aft ... ..						
" " forward ... ..						
Total ... ..	<b>160.38</b>	<b>155.40</b>			<b>155.40</b>	

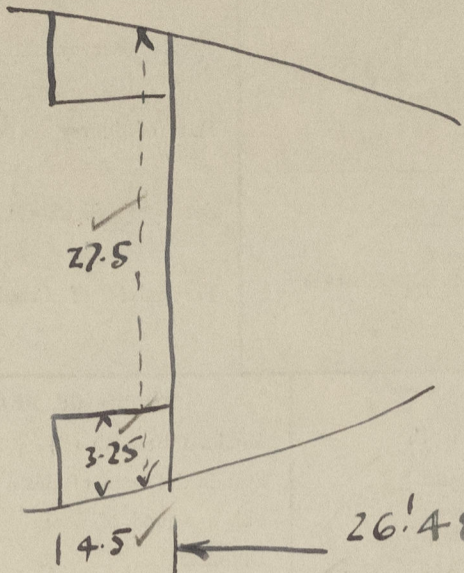
<b>SHEER CORRECTION.</b>									
Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..	<b>32.94</b>	1		<b>32.94</b>	<b>39.00</b>	<b>39.00</b>	1		<b>39.00</b>
$\frac{1}{8}$ L from A.P. ... ..	<b>14.66</b>	4		<b>58.64</b>	<b>16.98</b>	<b>16.98</b>	4		<b>67.92</b>
$\frac{2}{8}$ L " ... ..	<b>3.62</b>	2		<b>7.24</b>	<b>4.23</b>	<b>4.23</b>	2		<b>8.46</b>
Amidships ... ..	-	4		-	-	-	4		-
$\frac{2}{8}$ L from F.P. ... ..	<b>7.25</b>	2		<b>14.50</b>	<b>8.57</b>	<b>8.57</b>	2		<b>17.14</b>
$\frac{1}{8}$ L " ... ..	<b>29.32</b>	4		<b>117.28</b>	<b>34.36</b>	<b>34.36</b>	4		<b>137.44</b>
F.P. ... ..	<b>65.88</b>	1		<b>65.88</b>	<b>79.00</b>	<b>79.00</b>	1		<b>79.00</b>
Total ... ..				<b>296.48</b>					<b>348.96</b>
Correction = $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75-S}{.2L} \right) = \frac{52.48}{18} \left( \frac{.75-.3496}{.4064} \right) = -1.17"$									
If limited on account of midship superstructure. $\frac{.179}{.206} \times 1.17 = -.105"$ If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. <input checked="" type="checkbox"/>									

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = <b>17.66</b> Ft. Summer freeboard = <b>1.31</b> Moulded draught (d) = <b>16.35</b> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <b>4.09</b> Addition for Winter North Atlantic Freeboard (if required) = <b>6.09</b>	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line T = Deduction = $\frac{\Delta}{40 T}$ inches = <b>4.09</b>	<b>TABULAR FREEBOARD</b> <i>corrected for Flush Deck (if required)</i> Correction for coefficient $\frac{.745+.68}{1.36} = \frac{1.425}{1.36}$ Depth Correction ... .. <b>4.18</b> Deduction for superstructures ... .. <b>17.12</b> Sheer correction ... .. <b>1.05</b> Round of Beam correction ... .. <b>.02</b> Correction for Thickness of Deck amidships ... .. Other corrections, scantlings, etc. ... .. <b>4.18 18.19 - 14.01</b> Summer Freeboard = <b>15.74</b>
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<b>SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-</b>			
1906 freeboards reassigned 11.6.1947	Tropical Fresh Water Line above Centre of Disc <b>6.58</b> = <b>167 mm</b>	Tropical Fresh Water Freeboard <b>8.67</b> = <b>220 "</b>	
	Fresh Water Line " " <b>4.08</b> = <b>104 "</b>	Fresh Water " " <b>11.17</b> = <b>283 "</b>	
	Tropical Line " " <b>2.50</b> = <b>64 "</b>	Tropical " " <b>12.75</b> = <b>323 "</b>	
	Winter Line below " " <b>2.50</b> = <b>64 "</b>	Winter " " <b>12.75</b> = <b>451 "</b>	
	Winter North Atlantic Line " " <b>5.50</b> = <b>140 "</b>	Winter North Atlantic " " <b>20.75</b> = <b>527 "</b>	

Bore.

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.



Equiv freeboard  $\frac{4.5 \times 3.25 \times 2}{27.5} = 1.06$

$$\begin{array}{r} 26.48 \\ \hline 27.54 \end{array}$$

Trade of ship .....

Names of sister ships .....

Builder's name and yard number .....

Owners .....

Fee £ .....



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Foundation