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*Mr Fank added  
tanks*

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>William Barnes</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey _____
Moulded Dimensions: Length <i>519.98</i> Breadth <i>64.00</i> Depth <i>38.4</i> <i>met</i>					Date of Survey <i>14.6.19</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature _____
Coefficient of fineness for use with Tables <i>.83</i>					Particulars of Classification _____

<p><b>DEPTH FOR FREEBOARD (D).</b></p> <p>Moulded depth ... .. <i>38.4</i></p> <p>Stringer plate ... .. <i>.06</i></p> <p>Sheathing on exposed deck</p> <p><math>T \left( \frac{L-S}{L} \right) =</math></p> <p>Depth for Freeboard (D) = <i>38.46</i></p>	<p><b>DEPTH CORRECTION.</b></p> <p>(a) Where D is greater than Table depth (D - Table depth) R = <i>38.46 - 34.77 x 9 = 11.37</i></p> <p>(b) Where D is less than Table depth (if allowed) (Table depth - D) R =</p> <p>If restricted by superstructures</p>	<p><b>ROUND OF BEAM CORRECTION.</b></p> <p>Moulded Breadth (B)</p> <p>Standard Round of Beam = <math>\frac{B \times 12}{50} =</math></p> <p>Ship's Round of Beam =</p> <p>Difference</p> <p>Restricted to</p> <p>Correction = <math>\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) =</math></p>
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**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 ... ..					
"  overhang ... ..					
Bridge enclosed ... ..					
"  overhang aft ... ..					
"  overhang forward ... ..					
F'cle enclosed ... ..					
"  overhang ... ..					
Trunk aft ... ..					
"  forward ... ..					
Tonnage opening aft ... ..					
"  "  forward ... ..					
Total ... ..					

Standard Height of Superstructure \_\_\_\_\_

  "  "  R.Q.D. \_\_\_\_\_

Deduction for complete superstructure \_\_\_\_\_

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

  "  "   $\frac{S_1}{L} =$

  "  "   $\frac{E}{L} =$

Percentage from Table, Line A.  
(corrected for absence of forecastle (if required))

Percentage from Table, Line B. *Fank*  
(corrected for absence of forecastle (if required))

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

Deduction = *13.02*

**SHEER CORRECTION.**

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..		1					1		
$\frac{1}{8}L$ from A.P. ... ..		4					4		
$\frac{2}{8}L$ " ... ..		2					2		
Amidships ... ..		4					4		
$\frac{3}{8}L$ from F.P. ... ..		2					2		
$\frac{4}{8}L$ " ... ..		4					4		
F.P. ... ..		1					1		
Total ... ..									

Mean actual sheer aft =

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =

  "  "  aft of " =

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

If limited on account of midship superstructure.

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

<p><b>Deduction for Tropical Freeboard.</b></p> <p><b>Addition for Winter and Winter North Atlantic Freeboard.</b></p> <p>Depth to Freeboard Deck = <i>38.46</i> Ft.</p> <p>Summer freeboard = <i>8.39</i></p> <p>Moulded draught (d) = <i>30.07</i></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = <math>\frac{d}{4}</math> inches =</p> <p>Addition for Winter North Atlantic Freeboard (if required) =</p>	<p><b>Deduction for Fresh Water.</b></p> <p>Displacement in salt water at summer load water line</p> <p><math>\Delta =</math></p> <p>Tons per inch immersion at summer load water line</p> <p>T =</p> <p>Deduction = <math>\frac{\Delta}{40 T}</math> inches =</p>	<p><b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required)</p> <p>Correction for coefficient <i>1.5/1.26</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 50%;"></td><td style="width: 50%;"></td></tr> <tr><td style="text-align: center;">+</td><td style="text-align: center;">-</td></tr> <tr><td style="text-align: center;">11.37</td><td style="text-align: center;">13.02</td></tr> <tr><td colspan="2" style="text-align: right;">-1.65</td></tr> </table> <p>Summer Freeboard = <i>100.61</i></p>			+	-	11.37	13.02	-1.65	
+	-									
11.37	13.02									
-1.65										

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

Tropical Fresh Water Line above Centre of Disc ... ..	Tropical Fresh Water Freeboard ... ..
Fresh Water Line " " ... ..	Fresh Water " " ... ..
Tropical Line " " ... ..	Tropical " " ... ..
Winter Line below " " ... ..	Winter " " ... ..
Winter North Atlantic Line " " ... ..	Winter North Atlantic " " ... ..