

# Lloyd's Register of Shipping.

## SURVEY FOR FREEBOARD.

*Standard cargo*

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having 40 2 crections Port of Survey \_\_\_\_\_

(Type of Superstructures.)

Date of Survey \_\_\_\_\_

Ship's Name <i>St James Clark Ross</i>	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
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Name of Surveyor \_\_\_\_\_

Particulars of Classification \_\_\_\_\_

Moulded Dimensions: Length 535.25 Breadth \_\_\_\_\_ Depth 40.35

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

Coefficient of fineness for use with Tables \_\_\_\_\_

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... ..	(a) Where D is greater than Table depth (D - Table depth) R = <u>41.39 ✓</u>	Moulded Breadth (B)
Stringer plate ... ..	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = _____	Standard Round of Beam = $\frac{B \times 12}{50} =$ _____
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ _____	If restricted by superstructures _____	Ship's Round of Beam = _____
Depth for Freeboard (D) = <u>48.81</u>		Difference _____
		Restricted to _____
		Correction = $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ _____

### 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 42 -

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

„ „  $\frac{S_1}{L} =$  \_\_\_\_\_

„ „  $\frac{E}{L} =$  40

Percentage from Table, Line A. 23.50  
(corrected for absence of forecastle (if required))

Percentage from Table, Line B. 27.50  
(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required) 25.50

Deduction =  $.255 \times 42 =$  10.71

### 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 = \_\_\_\_\_  
L

„ „ aft of „ = \_\_\_\_\_

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

If limited on account of midship superstructure.

If limited to maximum allowance of  $1\frac{1}{2}$  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 style="text-align: center;">Ft.</p> <p>Depth to Freeboard Deck = <u>48 - 9 <math>\frac{3}{4}</math></u></p> <p>Summer freeboard = <u>12 - 10 <math>\frac{3}{4}</math></u></p> <p>Moulded draught (d) = <u>35 - 11</u></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}{40T}</math> inches = _____</p>	<p><b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required)</p> <p>Correction for coefficient</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">+</td> <td style="width: 50%; text-align: center;">-</td> </tr> <tr> <td>Depth Correction ... ..</td> <td style="text-align: center;">39.39 ✓</td> <td></td> </tr> <tr> <td>Deduction for superstructures ... ..</td> <td></td> <td style="text-align: center;">10.71 ✓</td> </tr> <tr> <td>Sheer correction ... ..</td> <td></td> <td></td> </tr> <tr> <td>Round of Beam correction ... ..</td> <td></td> <td></td> </tr> <tr> <td>Correction for Thickness of Deck amidships ... ..</td> <td></td> <td></td> </tr> <tr> <td>Other corrections, scantlings, etc. ... ..</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">39.39</td> <td style="text-align: center;">10.71</td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;">(28.68)</td> </tr> <tr> <td></td> <td colspan="2" style="text-align: center;">Summer Freeboard = <u>44.75</u></td> </tr> </table>		+	-	Depth Correction ... ..	39.39 ✓		Deduction for superstructures ... ..		10.71 ✓	Sheer correction ... ..			Round of Beam correction ... ..			Correction for Thickness of Deck amidships ... ..			Other corrections, scantlings, etc. ... ..				39.39	10.71		(28.68)			Summer Freeboard = <u>44.75</u>	
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### SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: © 2020

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 „ „ ... ..

Lloyd's Register Foundation