

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

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

Computation of Freeboard for Steamer, Sailing Ship, Tanker having <u>Ab C. 55</u>					Port of Survey _____
(Type of Superstructures.) _____					Date of Survey _____
Ship's Name <u>Sir James Black Ross</u>	Nationality and Port of Registry _____	Official Number _____	Gross Tonnage _____	Date of Build _____	Name of Surveyor _____
Moulded Dimensions: Length <u>535.25</u> Breadth _____ Depth <u>(48.75-8.0) = 40.75</u>					Particulars of Classification _____
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					
Coefficient of fineness for use with Tables <u>.826</u>					

Depth for Freeboard (D) Moulded depth <u>40.75</u> Stringer plate <u>.04</u> Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ _____ Depth for Freeboard (D) = <u>40.79</u>	Depth correction (a) Where D is greater than Table depth (D-Table depth) R = <u>(40.79-35.68)3 = 15.33</u> (b) Where D is less than Table depth (if allowed) (Table depth-D) R = _____ If restricted by superstructures _____	Round of Beam correction Moulded Breadth (B) _____ Standard Round of Beam = $\frac{B \times 12}{50} =$ _____ Ship's Round of Beam = _____ Difference _____ Restricted to _____ Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <u>NIL</u>
--	--	---

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
„ overhang			8'		
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 7.5'
 „ „ R.Q.D. _____
 Deduction for complete superstructure 42.0
 Percentage covered $\frac{S}{L} =$ _____
 „ „ $\frac{S_1}{L} =$ _____
 „ „ $\frac{E}{L} =$ 100.00
 Percentage from Table, Line A. _____
 (corrected for absence of forecastle (if required)) _____
 Percentage from Table, Line B. _____
 (corrected for absence of forecastle (if required)) _____
 Interpolation for bridge less than .2L (if required) _____
 Deduction = -42.0

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.		1				+6.0	1		6.00
1/4 L from A.P.		4				2.67	4		10.68
1/2 L „		2				.66	2		1.32
Amidships		4					4		
3/4 L from F.P.		2				.66	2		1.32
1/4 L „		4				2.67	4		10.68
F.P.		1				+6.0	1		6.00
Total									36.00

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ $\frac{36}{18} (.75 - .50) = -.50$
 If limited on account of midship superstructure. _____
 If limited to maximum allowance of 1 1/2 ins. per 100 ft. _____

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 „ = _____

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = <u>40-9 1/2</u> Summer freeboard = <u>8-1 1/4</u> Moulded draught (d) = <u>32-8 1/4</u> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = _____ Addition for Winter North Atlantic Freeboard (if required) = _____	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ _____ Tons per inch immersion at summer load water line $T =$ _____ Deduction = $\frac{\Delta}{40T}$ inches = _____	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient <u>.826 + .168 = 1.506</u> <table border="1"> <tr> <td></td> <td>+</td> <td>1.36</td> <td>-</td> </tr> <tr> <td>Depth Correction</td> <td></td> <td>15.33</td> <td>-</td> </tr> <tr> <td>Deduction for superstructures</td> <td></td> <td>-</td> <td>42.00</td> </tr> <tr> <td>Sheer correction</td> <td></td> <td>-</td> <td>.50</td> </tr> <tr> <td>Round of Beam correction</td> <td></td> <td>-</td> <td>-</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td></td> <td>-</td> <td>-</td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td></td> <td>-</td> <td>-</td> </tr> <tr> <td></td> <td></td> <td>15.33</td> <td>42.50</td> </tr> <tr> <td></td> <td></td> <td></td> <td>- 27.17</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Summer Freeboard = <u>97.25</u></td> </tr> </table>		+	1.36	-	Depth Correction		15.33	-	Deduction for superstructures		-	42.00	Sheer correction		-	.50	Round of Beam correction		-	-	Correction for Thickness of Deck amidships		-	-	Other corrections, scantlings, etc.		-	-			15.33	42.50				- 27.17				Summer Freeboard = <u>97.25</u>
	+	1.36	-																																							
Depth Correction		15.33	-																																							
Deduction for superstructures		-	42.00																																							
Sheer correction		-	.50																																							
Round of Beam correction		-	-																																							
Correction for Thickness of Deck amidships		-	-																																							
Other corrections, scantlings, etc.		-	-																																							
		15.33	42.50																																							
			- 27.17																																							
			Summer Freeboard = <u>97.25</u>																																							

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 „ „

© 2020
Lloyd's Register Foundation