

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

31 OCT 1935

33405

Computation of Freeboard for ~~Steamer~~ ~~Shipping~~ Ship, Tanker

having   *Poop and Forecastle*   Port of Survey \_\_\_\_\_

(Type of Superstructures.)

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

Ship's Name <b>"SIR JAMES CLARK ROSS"</b> <i>T.S. OIL ENG. VESSEL</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                      Breadth                      Depth

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

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

<p style="text-align: center;"><b>Depth for Freeboard (D)</b></p> <p>Moulded depth ... ..</p> <p>Stringer plate ... ..</p> <p>Sheathing on exposed deck <math>T \left( \frac{L-S}{L} \right) =</math> _____</p> <p>Depth for Freeboard (D) = _____</p>	<p style="text-align: center;"><b>Depth correction</b></p> <p>(a) Where D is greater than Table depth (D-Table depth) R = _____</p> <p>(b) Where D is less than Table depth (if allowed) (Table depth-D) R = _____</p> <p>If restricted by superstructures _____</p>	<p style="text-align: center;"><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}^e}{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>i</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ... ..						Standard Height of Superstructure _____
"  overhang ... ..						"  "  R.Q.D. _____
R.Q.D. enclosed ... ..						Deduction for complete superstructure _____
"  overhang ... ..						Percentage covered $\frac{S}{L} =$ _____
Bridge enclosed... ..						"  " $\frac{S_1}{L} =$ _____
"  overhang aft ... ..						"  " $\frac{E}{L} =$ _____
"  overhang forward ... ..						Percentage from Table, Line A. (corrected for absence of forecastle (if required))
F'cle enclosed ... ..						Percentage from Table, Line B. (corrected for absence of forecastle (if required))
"  overhang ... ..						Interpolation for bridge less than 2L (if required)
Trunk aft ... ..						Deduction = _____
"  forward ... ..						
Tonnage opening aft ... ..						
"  "  forward ... ..						
Total ... ..						

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ... ..		1					1			Mean actual sheer aft = _____
$\frac{1}{6}L$ from A.P. ... ..		4					4			Mean standard sheer aft = _____
$\frac{2}{6}L$ " ... ..		2					2			Mean actual sheer forward = _____
Amidships ... ..		4					4			Mean standard sheer forward = _____
$\frac{2}{6}L$ from F.P. ... ..		2					2			Length of enclosed superstructure forward of amidships = _____
$\frac{1}{6}L$ " ... ..		4					4			"  "  aft of " = _____
F.P. ... ..		1					1			
Total ... ..										

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

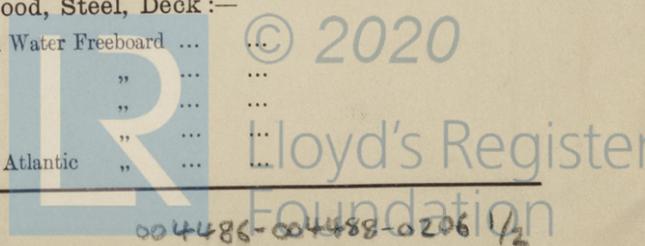
If limited on account of midship superstructure.

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: right;">Ft.</p> <p>Depth to Freeboard Deck = _____</p> <p>Summer freeboard = _____</p> <p>Moulded draught (d) = _____</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 style="text-align: center;"><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;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 10%;">+</th> <th style="width: 10%;">-</th> </tr> </thead> <tbody> <tr> <td>Depth Correction ... ..</td> <td></td> <td></td> </tr> <tr> <td>Deduction for superstructures ... ..</td> <td></td> <td></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> </tbody> </table> <p style="text-align: right;">Summer Freeboard = _____</p>		+	-	Depth Correction ... ..			Deduction for superstructures ... ..			Sheer correction ... ..			Round of Beam correction ... ..			Correction for Thickness of Deck amidships ... ..			Other corrections, scantlings, etc. ... ..		
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### 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 " " ... ..



PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	...	...	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...	...	...	...	...
COAMINGS	Height above Deck ... Thickness ... Stiffeners ... Brackets, Stays ...	Sides	...	...	...	...	...	...	...
		Ends	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...
HATCH BEAMS	Number ... Spacing ... Scantling and Sketch ...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...
FORE AND AFTERS	Number ... Spacing ... Unsupported Lengths ... Scantling* and Sketch ...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...
HATCH COVERS	Material ... Thickness ... How fitted ... Bearing Surface ...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...
Spacing of Cleats	...	...	...	...	...	...	...	...	
Number of Tarpaulins	...	...	...	...	...	...	...	...	

Particulars of fiddle, funnel and ventilator coamings :-

Particulars of Flush Bunker Scuttles :-

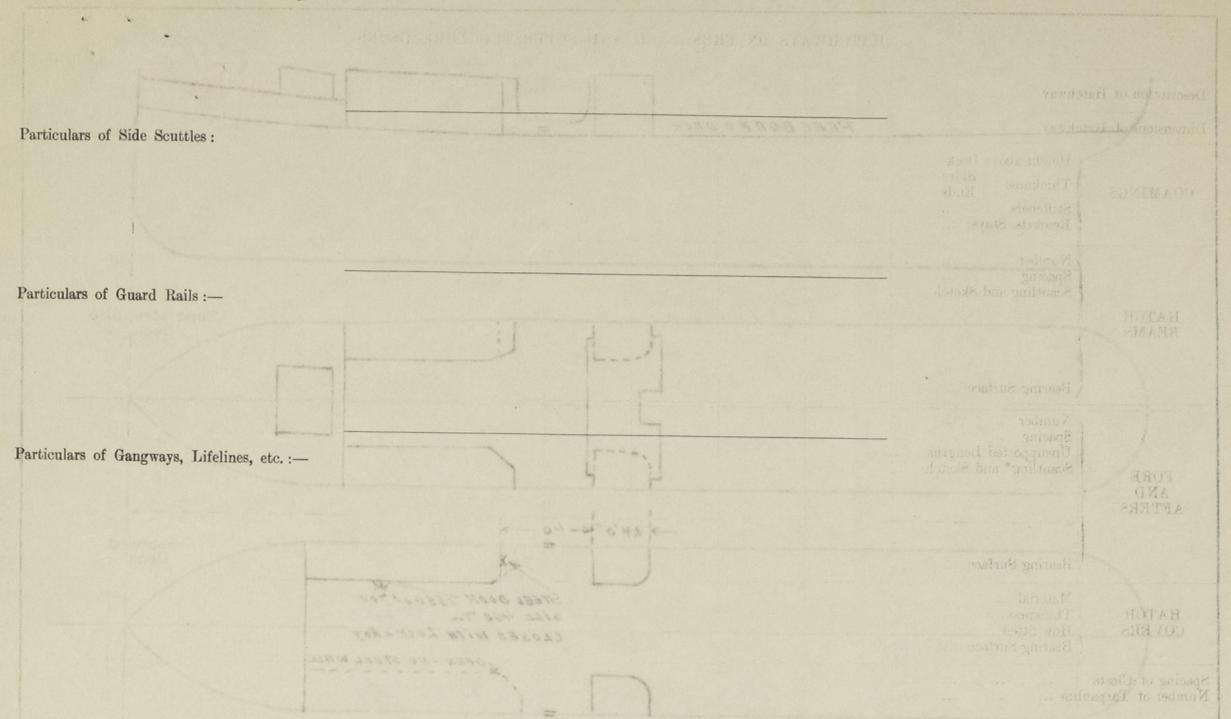
Particulars of Companionways :-

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :-

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :-

Particulars of Gangway Cargo and Coaling Ports :-

Particulars of Scuppers and Sanitary Discharge Pipes



Particulars of Side Scuttles :-

Particulars of Guard Rails :-

Particulars of Gangways, Lifelines, etc. :-

Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	...	...	...	...	...	...
Forward Well	...	...	...	...	...	...

State position of each freeing port ... } After Well :-  
 (F. and A. position and height above deck edge) } Forward Well :-  
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :-  
 Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead	...	...	...	...	...	...	...	...
Raised Quarter Deck Bulkhead	...	...	...	...	...	...	...	...
Bridge, After Bulkhead	...	...	...	...	...	...	...	...
Bridge, Forward Bulkhead	...	...	...	...	...	...	...	...
Forecastle Bulkhead	...	...	...	...	...	...	...	...
Trunk, Aft	...	...	...	...	...	...	...	...
Trunk, Forward	...	...	...	...	...	...	...	...
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	...	...	...	...	...	...	...	...
Exposed Machinery Casings on Superstructure Decks	...	...	...	...	...	...	...	...
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...	...	...	...	...	...	...	...
Deckhouses on Flush Deck Ships	...	...	...	...	...	...	...	...

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	...
Raised Quarter Deck Bulkhead	...
Bridge, After Bulkhead	...
Bridge, Forward Bulkhead	...
Forecastle Bulkhead	...
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	...
Exposed Machinery Casings on Superstructure Decks	...
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...
Deckhouses on Flush Deck Ships	...

