

3RD FLOOR ONLY (2)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name CROWNS. 230-231	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 316.9 Breadth 46.0 Depth 17.5 <i>To & under Deck</i>					Date of Survey 9/3/48
Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons					Surveyor's Signature
Coefficient of fineness for use with Tables 77 <i>assumed as before</i>					Particulars of Classification Continued

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 17.50	(a) Where D is greater than Table depth (D-Table depth) R = ✓	Moulded Breadth (B) _____
Stringer plate 0.04	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = 21.07-17.54) 2.431 = -8.58	Standard Round of Beam = $\frac{B \times 12}{100} =$ _____
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ _____	If restricted by superstructures 3.53 <i>No scantling case</i>	Ship's Round of Beam Calculated = _____
Depth for Freeboard (D) = 17.54		Difference STANDARD. ✓
		Restricted to _____
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L}\right) =$ _____

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	93.00	93.00	7.0	✓	93.00
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed					
„ overhang aft					
„ overhang forward					
Fore-castle enclosed	✓ 38.00	38.00	7.0	✓	38.00
„ overhang					
Trunk aft	✓	117.09	7.0	✓	117.09
„ forward					
Tonnage opening aft					
„ „ forward	✓				
Total	131.00	248.09			248.09

Standard Height of Superstructure **6.66** ✓

„ „ R.Q.D. **✓**

Deduction for complete superstructure **36.40** ✓

Percentage covered $\frac{S}{L} = \frac{41.46}{100} =$ **41.46** ✓

„ „ $\frac{S_1}{L} =$ **78.50** ✓

„ „ $\frac{E}{L} =$ **73.45** ✓

Percentage from Table, Line A. **73.45** ✓
(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 = **36.40 x 73.45 = 26.73** ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	41.60	1			33	33.00	1		33.00
$\frac{1}{2}$ L from A.P.	18.51	4			17	17.00	4		68.00
$\frac{1}{4}$ L „	4.575	2			7	7.00	2		14.00
Amidships		4			✓	✓	4		✓
$\frac{3}{4}$ L from F.P.	9.15	2			9	9.00	2		18.00
$\frac{1}{2}$ L „	37.02	4			40	40.00	4		160.00
F.P.	83.20	1			87	87.00	1		87.00
Total		✓		374.40					380.00

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - \frac{S}{2L}}{1} \right) =$ **NIL** ✓

If limited on account of midship superstructure.

Mean actual sheer aft = **0.75** *but greater than 7.5*

Mean standard sheer aft = _____

Mean actual sheer forward = **Excess**

Mean standard sheer forward = _____

Length of enclosed superstructure forward of amidships = _____

„ „ aft of „ = _____

greater than 100 ft take standard (scantling case)

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 17.54 Summer freeboard = 1.27 Moulded draught (d) = 16.27 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 = $\frac{\Delta}{40 T}$ inches = _____	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient $\frac{.77 + .68}{1.36} = \frac{1.45}{1.36}$ <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction</td> <td>✓</td> <td>8.58</td> </tr> <tr> <td>Deduction for superstructures</td> <td>✓</td> <td>26.73</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>✓</td> <td>35.31</td> </tr> </table> <p>Summer Freeboard = 15.23 ✓</p>		+	-	Depth Correction	✓	8.58	Deduction for superstructures	✓	26.73	Sheer correction	✓	✓	Round of Beam correction	✓	✓	Correction for Thickness of Deck amidships	✓	✓	Other corrections, scantlings, etc.	✓	✓		✓	35.31
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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	...

29
174
11
185

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.

TRUNK $13.0 \times \frac{38}{46} = 10.74$
 $\checkmark 140.0 \times \frac{29}{46} = 88.26$
 $\checkmark 32.0 \times \frac{26}{46} = 18.09$
185.0
117.09

9-37 *Prop* 28×1.3
 $\frac{36}{2}$
 1-0'
 18-0
 63
 8
 3
93

Shear.

A.P. 20'-0" \checkmark 33" \checkmark
 1 18-8 \checkmark 17" \checkmark
 2 17-10 \checkmark 7" \checkmark
 3 17-3 \checkmark 0" \checkmark
 3 18-0 \checkmark 9" \checkmark
 4 20-7 40" \checkmark
 F.P. 24-6 \checkmark 87" \checkmark

185
38
93
316 \checkmark

Stel. Actual.

41.60 \checkmark	33	1	41.60 \checkmark	33.00 \checkmark
18.51 \checkmark	17	3	55.53 \checkmark	51.00 \checkmark
4.575 \checkmark	7	3	13.725 \checkmark	21.00 \checkmark
0 \checkmark	0	1	0	0
			\checkmark 110.855	105.00

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____



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