

*Approx for Ship (No particulars available)*

# LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

For LONDON OFFICE ONLY

Received .....

Index No. ....

Govt. Copy .....

Owners C11 .....

Ship's Name <b>Hanna</b> <b>479</b>	Official Number ✓	Nationality and Port of Registry ✓	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length <b>547.9'</b> Breadth <b>73.16</b> Depth <b>40.35</b> ✓					Date of Survey <b>10.12.52</b>
Freeboard Length <b>547.9</b> ✓					Surveyor's Signature <b>Shell</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) .....					Particulars of Classification <b>100A1 CP</b> ✓
Coefficient of fineness for use with Tables <b>.75 Assumed</b>					

**DEPTH FOR FREEBOARD (D).**

Moulded depth ... **40.35**

Stringer plate **1.02** ... **.08** ✓

Wood Sheathing on exposed deck

$T \left( \frac{L-S}{L} \right) =$  **43**

Depth for Freeboard (D) = **40.35**

**DEPTH CORRECTION.**

(a) Where D is greater than Table depth

$(40.35 - 36.53) R =$  **3.82** ✓

(b) Where D is less than Table depth (if allowed)

$(Table\ depth - D) R =$  **3.82** ✓

If restricted by superstructures

**ROUND OF BEAM CORRECTION.**

Moulded Breadth (B) **73.16** ✓

Standard Round of Beam =  $\frac{B \times 12}{50} =$  **17.56** ✓

Ship's Round of Beam = **17.72**

Difference

Restricted to

Correction =  $\frac{Diff}{4} \times \left( 1 - \frac{S_1}{L} \right) =$  **1.16** ✓

**4.02**

**DEDUCTION FOR SUPERSTRUCTURES.**

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	126.0	126.0	8.0	✓	126.0
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	48.62	48.62	7.74	✓	47.8
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	74.5	74.5	7.57	✓	81.0
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	249.12	249.12			249.12

Standard Height of Superstructure **90"** **7.5**

" " R.Q.D. ✓

Deduction for complete superstructure **42.0** ✓

Percentage covered  $\frac{S}{L} =$  **46.5**

" "  $\frac{S_1}{L} =$  **46.5**

" "  $\frac{E}{L} =$  **46.5**

Percentage from Table, Line A. **36.47**

(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 = **36.47**

**SHEER CORRECTION.**

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	64.79	1			39.38	39.38	1		39.4
$\frac{1}{8}L$ from A.P. ...		4			14	14	4		56
$\frac{3}{8}L$ " ...		2					2		
Amidships ...	0	4		0	0	0	4		0
$\frac{3}{8}L$ from F.P. ...		2			3	3	2		6
$\frac{1}{8}L$ " ...		4			19	19	4		76
F.P. ...	129.6	1		129.6	78.8	78.8	1		78.8
Total ...				583					256.2

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - S}{2L} \right) =$  **9.49**

If limited on account of midship superstructure.

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 = **40.43**

Summer freeboard = **9.04**

Moulded draught (d) = **31.35**

Keel allowance =

Extreme draught =

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

Depth Correction ... **11.70**

Deduction for superstructures ... **15.32**

Sheer correction ... **9.49**

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

+	-
11.70	15.32
9.49	
21.19	15.32

Summer Freeboard = **109.09**

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

Tropical Fresh Water Line above Centre of Disc ...

Fresh Water Line " " ...

Tropical Line " " ...

Winter Line below " " ...

Winter North Atlantic Line " " ...

Tropical Fresh Water Freeboard ...

Fresh Water " " ...

Tropical " " ...

Winter " " ...

Winter North Atlantic " " ...

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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.

53  
 24  
 14 x 610 8540  
 10 x 680 6800  
 29 x 760 22040  
 31380  
 + 1013  
 38393 = 125.96  
 2/3 x 1520 8040  
 610  
 14  
 610  
 4140  
 8540  
 22800  
 760  
 40

147 ✓  
 124  
 18 x 760 ✓  
 2 x 5 x 760  
 8  
 15200  
 49.56 x 21.740 = 48.64  
 22.30  
 560

214  
 195  
 19 x 680  
 220  
 214  
 16 x 610  
 12920  
 9760  
 22680  
 18600  
 680

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950," paragraph 11.)



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