

Computation of Freeboard for Seamer, Sailing Ship.

having BRIDGE & FORECASTLE

(Type of Superstructures.)

Ship's Name "LIANA" Nationality and Port of Registry ... Official Number ... Gross Tonnage ... Date of Build ...

Moulded Dimensions: Length 265 Breadth 38.33 Depth 19.43

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

Coefficient of fineness for use with Tables ... tons

Port of Survey ...

Date of Survey 26-5-32

Name of Surveyor ...

Particulars of Classification +100A1

Depth for Freeboard (D)

Moulded depth ... ..

Stringer plate ... ..

Sheathing on exposed deck

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

Depth for Freeboard (D) = 19.48

Depth correction

(a) Where D is greater than Table depth (D-Table depth) R = + 4.30

(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 =  $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) =$  -.05

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 ... ..					
" cle enclosed ... ..					
" overhang ... ..					
Trunk aft ... ..					
" forward ... ..					
Tonnage opening aft ... ..					
" forward ... ..					
Total ... ..					

Standard Height of Superstructure

" " R.Q.D. ... ..

Deduction for complete superstructure 32.50

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

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

" "  $\frac{E}{L} =$  37.91

Percentage from Table, Line A. TIMBER

(corrected for absence of forecastle (if required)) 60.45

Percentage from Table, Line B.

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required)

Deduction = 60.45 x 32.50 = 19.44 ✓

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		
$\frac{2}{8}L$ from F.P. ... ..		2					2		
$\frac{1}{8}L$ " ... ..		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 =

" " aft of " =

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) =$  -.89 ✓

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 = 19.48 ✓

Summer freeboard = 1.92 ✓

Moulded draught (d) = 17.86 ✓

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = 4.46 ✓

Addition for Winter North Atlantic Freeboard (if required) =  $\frac{d}{3} =$  5.95 ✓

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$  4142

Tons per inch immersion at summer load water line

T = 21.35

Deduction =  $\frac{\Delta}{40 T}$  inches = 4.85

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction ... ..	<u>4.30</u>	
Deduction for superstructures ... ..		<u>19.44</u>
Sheer correction ... ..		<u>.89</u>
Round of Beam correction ... ..		<u>.05</u>
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc. ... ..	<u>1.14</u>	
UPPER DECK AFT	<u>5.44</u>	<u>20.68</u>
Summer Freeboard =	<u>23.00</u>	

23.00" = 584 7/8" ✓

TIMBER SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Steel, Deck:—

	...	...	...	...	...
TIMBER Tropical Fresh Water Line above Centre of Disc	<u>496.74</u>	✓	TIMBER Tropical Fresh Water Freeboard	<u>13.69</u>	✓
" Fresh Water Line	<u>383</u>	✓	" Fresh Water	<u>18.15</u>	✓
" Tropical Line	<u>373</u>	✓	" Tropical	<u>18.54</u>	✓
" Winter Line	<u>109</u>	✓	" Winter	<u>28.95</u>	✓
" Winter North Atlantic Line	<u>159</u>	✓	" Winter North Atlantic	<u>39.49</u>	✓

10m, 2, 31

SUMMER ABOVE .. 260 ✓

W 444-0113

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