

AMENDED COMPUTATION ON ACCOUNT OF  
TONNAGE MATCH ALTERATION.

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For LONDON OFFICE ONLY

# LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

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Ship's Name <b>"BLYTH EXPLORER"</b>	Official Number <b>148867</b>	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length <b>419.5'</b> Breadth <b>53.75'</b> Depth <b>29.17'</b>					Date of Survey <b>16th December, 1953</b>
Freeboard Length					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>12347</b> tons					Particulars of Classification
Coefficient of fineness for use with Tables <b>.773</b>					

<b>DEPTH FOR FREEBOARD (D).</b> Moulded depth ... <b>29.17</b> Stringer plate ... <b>.03</b> Wood Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <b>29.20</b>	<b>DEPTH CORRECTION.</b> (a) Where D is greater than Table depth (D-Table depth) R = <b>(29.20 - 27.97) 3</b> <b>= +3.69</b> (b) Where D is less than Table depth (if allowed) (Table depth-D) R = <b>✓</b> If restricted by superstructures <b>✓</b>	<b>ROUND OF BEAM CORRECTION.</b> Moulded Breadth (B) <b>53.75'</b> Standard Round of Beam = $\frac{B \times 12}{50} =$ <b>12.9"</b> Ship's Round of Beam = <b>13.0"</b> Difference <b>.1</b> Restricted to Correction = $\frac{\text{Diff}^n}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ <b>1/4 (.0086) = N.L.</b>
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## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	68.17	68.17	8.25	✓	68.17
" overhang ...	1.00	.50	"	✓	.50
R.Q.D. enclosed ...	✓				
" overhang ...	✓				
Bridge enclosed ...	346.08	346.08	"	✓	346.08
" overhang aft ...	.21	.16	"	✓	.16
" overhang forward ...	✓				
F'cle enclosed ...	✓				
" overhang ...	✓				
Trunk aft ...	✓				
" forward ...	✓	1/2 Diff.			
Tonnage opening aft ...	4.04	2.29	"	✓	2.29
" " forward ...	✓				
Total ...	419.50	417.20			417.20

Standard Height of Superstructure **7.5'**

" " R.Q.D. **✓**

Deduction for complete superstructure **42.00**

Percentage covered  $\frac{S}{L} =$  **100.00**

" "  $\frac{S_1}{L} =$  **99.44**

" "  $\frac{E}{L} =$  **99.31**

Percentage from Table, Line A. & B **99.31**  
(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 = **42.00 × .9931 = -41.71"**

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	51.95'	1					1		
1/4 L from A.P. ...		4					4		
3/4 L " ...		2					2		
Amidships ...	0	4	0	0	0	0	4	0	0
3/4 L from F.P. ...		2					2		
1/4 L " ...		4					4		
F.P. ...		1					1		
Total ...				467.87					557.96

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{90.39}{18} (.75 - .50) = -1.26$

If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **29.20** Ft.

Summer freeboard = **3.64**

Moulded draught (d) = **25.56**

Keel allowance =

Extreme draught =

Deduction for Tropical freeboard and addition for =

Winter freeboard =  $\frac{d}{4}$  inches = **6 1/2"**

Addition for Winter North Atlantic Freeboard (if required) = **✓**

## Deduction for Fresh Water.

Displacement in salt water at summer load water line  $\Delta =$  **12676**

Tons per inch immersion at summer load water line  $T =$  **48.86**

Deduction =  $\frac{\Delta}{40 T}$  inches = **7"**

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ... **3.69**

Deduction for superstructures ... **41.71**

Sheer correction ... **1.26**

Round of Beam correction ...

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

	+	-
Depth Correction	3.69	
Deduction for superstructures		41.71
Sheer correction		1.26
Round of Beam correction		
Correction for Thickness of Deck amidships		
Other corrections, scantlings, etc.		
	3.69	42.97

Summer Freeboard = **43.68**

## SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc ...	13 1/2"	Tropical Fresh Water Freeboard ...	21 3/4"
Fresh Water Line " " ...	7"	Fresh Water " " ...	3' 0 3/4"
Tropical Line " " ...	6 1/2"	Tropical " " ...	3' 1 1/4"
Winter Line below " " ...	6 1/2"	Winter " " ...	4' 3 1/4"
Winter North Atlantic Line " " ...	✓	Winter North Atlantic " " ...	✓