

AMENDED.

(POSITION OF TONNAGE WELL ALTERED).

## 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 .....

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Ship's Name <b>BLYTH NAVIGATOR.</b>	Official Number <b>148889</b>	Nationality and Port of Registry <b>BRITISH GLASGOW.</b>	Gross Tonnage <b>5154</b>	Date of Build <b>1926-2</b>	Port of Survey .....
Moulded Dimensions: Length <b>419.5</b> ✓ Breadth <b>53.75</b> ✓ Depth <b>29.17</b> ✓					Date of Survey <b>28.4.54</b> ✓
Freeboard Length .....					Surveyor's Signature .....
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) <b>12350</b> ✓ tons					Particulars of Classification .....
Coefficient of fineness for use with Tables <b>.773</b> ✓					

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... .. <b>29.17</b>	(a) Where D is greater than Table depth (D-Table depth) R = <b>(29.20 - 27.96) 3' = +3.72</b> ✓	Moulded Breadth (B) <b>53.75</b>
Stringer plate ... .. <b>.03</b>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <b>12.90</b>
Wood Sheathing on exposed deck	If restricted by superstructures	Ship's Round of Beam = <b>13.00</b>
$T \left( \frac{L-S}{L} \right) =$		Difference <b>.10</b>
Depth for Freeboard (D) = <b>29.20</b> ✓		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.10}{4} \times .0054 = \text{Nil.}$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..	<b>63.44</b>	<b>63.44</b>	<b>8.0</b>	-	<b>63.44</b> ✓
" overhang ... ..	<b>1.00</b>	<b>.50</b>		-	<b>.50</b> ✓
R.Q.D. enclosed ... ..					
" overhang ... ..					
Bridge enclosed ... ..					
" overhang aft ... ..					
" overhang forward ... ..					
F'cle enclosed ... ..	<b>350.81</b>	<b>350.81</b>	<b>8.0</b>	-	<b>350.81</b> ✓
" overhang ... ..	<b>0.21</b>	<b>.16</b>		-	<b>.16</b> ✓
Trunk aft ... ..					
" forward ... ..		<b>1/2 D .46</b>			
Tonnage opening aft ... ..	<b>4.04</b>	<b>2.30</b>	<b>8.0</b>	-	<b>2.30</b> ✓
" " forward ... ..					
Total ... ..	<b>419.50</b>	<b>417.21</b> ✓			<b>417.21</b> ✓

Standard Height of Superstructure **7.5** ✓

" " R.Q.D. **-**

Deduction for complete superstructure **42** ✓

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

" "  $\frac{S_1}{L} =$  **99.46** ✓

" "  $\frac{E}{L} =$  **99.33** ✓

Percentage from Table, Line A & B. **99.33** ✓

(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 x 99.33 = 41.72** ✓

## SHEER CORRECTION.

Actual T.D.H. = **8.00** ✓

Standard - = **7.50** ✓

**.50** ✓

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..	<b>51.95</b>	1	<b>51.95</b>	<b>48.00</b>	<b>54.00</b>	1	<b>54.00</b>
1/4 L from A.P. ... ..	<b>23.12</b>	4	<b>92.48</b>	<b>19.75</b>	<b>24.03</b>	4	<b>96.12</b>
1/2 L " ... ..	<b>5.71</b>	2	<b>11.42</b>	<b>5.00</b>	<b>5.94</b>	2	<b>11.88</b>
Amidships ... ..	<b>0</b>	4	<b>0</b>	<b>0</b>	<b>0</b>	4	<b>0</b>
3/4 L from F.P. ... ..	<b>11.43</b>	2	<b>22.86</b>	<b>14.00</b>	<b>13.86</b>	2	<b>27.72</b>
1/4 L " ... ..	<b>46.24</b>	4	<b>184.96</b>	<b>56.00</b>	<b>56.07</b>	4	<b>224.28</b>
F.P. ... ..	<b>103.90</b>	1	<b>103.90</b>	<b>120.00</b>	<b>126.00</b>	1	<b>126.00</b>
Total ... ..			<b>467.57</b>	<b>+6</b>			<b>540.00</b>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{72.43}{18} (.25) = -1.01$  ✓

If limited on account of midship superstructure.

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 " =

## Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck =	<b>29.20</b>
Summer freeboard =	<b>3.67</b> ✓
Moulded draught (d) =	<b>25.53</b> ✓
Keel allowance =	
Extreme draught =	
Deduction for Tropical freeboard and addition for =	
Winter freeboard = $\frac{d}{4}$ inches =	<b>6.38 = 6 1/2</b> ✓

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	<b>7</b> ✓

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

Correction for coefficient

Depth Correction ... ..	<b>3.72</b>	-
Deduction for superstructures ... ..	-	<b>41.72</b> ✓
Sheer correction ... ..	-	<b>1.01</b> ✓
Round of Beam correction ... ..	-	-
Correction for Thickness of Deck amidships ... ..	-	-
Other corrections, scantlings, etc. ... ..	-	-
	<b>3.72</b>	<b>42.73</b>
		<b>-39.01</b> ✓

Summer Freeboard = **43.95** ✓SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	<b>13 1/2</b> ✓
Fresh Water Line " "	<b>7</b> ✓
Tropical Line " "	<b>6 1/2</b> ✓
Winter Line below " "	<b>6 1/2</b> ✓
Winter North Atlantic Line " "	<b>-</b>

Tropical Fresh Water Freeboard	<b>20.6 1/2</b> ✓
Fresh Water " "	<b>3</b> ✓
Tropical " "	<b>3</b> ✓
Winter " "	<b>4</b> ✓
Winter North Atlantic " "	<b>-</b>