

34789  
14 DEC 1935

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

GLASGOW REPORT No 56433

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having *a complete superstructure without tonnage opening*Port of Survey *Glasgow*

(Type of Superstructures.)

Date of Survey *12<sup>th</sup> Dec 1935*

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

FORT AMHERST

*Antark  
London*

164573

3489

1936-1

Name of Surveyor *J. H. Thomas*Moulded Dimensions: Length *310'-0"* Breadth *45'-0"* Depth *27'-1" to 27'-0"*Moulded displacement at moulded draught = 85 per cent. of moulded depth *23.02 = 6030* tonsCoefficient of fineness for use with Tables *.657* ~~*23.02*~~ ~~*(.68 lowest)*~~ ~~*1000*~~ ~~*FI*~~Particulars of Classification *+100A1 with freeboard*  
(class uncompleted).

Depth for Freeboard (D)

Moulded depth ... *27-08*Stringer plate ... *103*

Sheathing on exposed deck

 $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = *27-11*

Depth correction

(a) Where D is greater than Table depth

(D - Table depth) R = *15-35* $(27-11 - 20-67) \times 2-384 = +6-29$ 

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

(Table depth - D) R = *6-44*If restricted by superstructures ☒

Round of Beam correction

Moulded Breadth (B) *45'*Standard Round of Beam =  $\frac{B \times 12}{50} = \frac{10-8}{50}$ Ship's Round of Beam = *6" OFFER D2*Difference *4-8*

Restricted to

Correction =  $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{4-8}{4} \times 20 = +2-4$ 

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<i>201-5</i>	<i>201-5</i>	<i>8-0</i>	<i>-</i>	<i>201-5</i>
" overhang ...			<i>+2-1</i>		
R.Q.D. enclosed					
" overhang					
Bridge enclosed...	<i>210-0</i>		<i>8-0</i>		
" overhang aft					
" overhang forward					
F'cle enclosed ...	<i>46-5</i>	<i>46-5</i>	<i>8-0</i>	<i>-</i>	<i>46-5</i>
" overhang ...			<i>+2-1</i>		
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward					
Total ...	<i>248-0</i>	<i>248-0</i>			<i>248-0</i>

Standard Height of Superstructure *6-60*" " R.Q.D. *✓*Deduction for complete superstructure *36-1*Percentage covered  $\frac{S}{L} = \frac{80-0}{100}$ "  $\frac{S_1}{L} = \frac{80-0}{100}$ "  $\frac{E}{L} = \frac{80-0}{100}$ Percentage from Table, Line A. *75-3*

(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 =  $36 \times 753 = -27-11$ 

UPPER DECK

SHEER CORRECTION.

Actual height of superstructure = *8-21* feet  
Standard *6-60* feet  
*1-61' = 19-32'*

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<i>41-00</i>	<i>1</i>		<i>41-00</i>	<i>41-32</i>	<i>60-32</i>	<i>1</i>		<i>60-32</i>
$\frac{1}{2}$ L from A.P. ...	<i>18-24</i>	<i>4</i>		<i>72-96</i>	<i>18-2</i>	<i>26-84</i>	<i>4</i>		<i>107-36</i>
$\frac{3}{4}$ L " ...	<i>4-51</i>	<i>2</i>		<i>9-02</i>	<i>4-2</i>	<i>6-64</i>	<i>2</i>		<i>13-28</i>
Amidships ...	<i>-</i>	<i>4</i>		<i>-</i>	<i>-</i>	<i>-</i>	<i>4</i>		<i>-</i>
$\frac{3}{4}$ L from F.P. ...	<i>9-02</i>	<i>2</i>		<i>18-04</i>	<i>10</i>	<i>10-00</i>	<i>2</i>		<i>20-00</i>
$\frac{1}{2}$ L " ...	<i>36-49</i>	<i>4</i>		<i>145-96</i>	<i>39-74</i>	<i>39-75</i>	<i>4</i>		<i>159-00</i>
F.P. ...	<i>82-00</i>	<i>1</i>		<i>82-00</i>	<i>92-2</i>	<i>92-50</i>	<i>1</i>		<i>92-50</i>
Total ...	<i>36-9</i>	<i>✓</i>		<i>369-00</i>					<i>452-46</i>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( 75 - \frac{S}{2L} \right) = \frac{83-46}{18} \left( 75 - \frac{40}{35} \right) = -1-62$ 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 = *27-4-19*Summer freeboard = *8-48-56*Moulded draught (d) = *18-63*

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = *4-66 = 4-3/4*

Addition for Winter North Atlantic Freeboard (if

required) = *6-3/4*

Deduction for Fresh Water.

Displacement in salt water at summer load water line *182-76* $\Delta = 4-71$ 

Tons per inch immersion at summer load water line

T = *25-33*Deduction =  $\frac{\Delta}{40T}$  inches= *4-61* $d/4 = 4-3/4$ 

TABULAR FREEBOARD corrected for Fresh Deck (if required)

Correction for coefficient

Nil.

Depth Correction ... *15-35*Deduction for superstructures ... *27-11*Sheer correction ... *1-62*Round of Beam correction ... *0-24*

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. *1-00*Total *18-7 1/2*Summer Freeboard = *101-75*SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, *Steel Deck*Tropical Fresh Water Line above Centre of Disc ... *9 1/2*Fresh Water Line " " ... *4 3/4*Tropical Line " " ... *4 3/4*Winter Line below " " ... *4 3/4*Winter North Atlantic Line " " ... *6 3/4*Tropical Fresh Water Freeboard ... *8-5 3/4*Fresh Water " " ... *7-8 3/4*Tropical " " ... *8-1 1/2*Winter " " ... *8-10 1/2*Winter North Atlantic " " ... *9-0 1/2*

20 DEC 1935