

4-NOV-1952

Index No.

(For London Office only)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name EVGENIA	Official Number	Nationality and Port of Registry LIBERIAN MONROVIA	Gross Tonnage	Date of Build 1952	Port of Survey to Harthoupe
Moulded Dimensions: Length 431-078 Breadth 57-6 Depth 38-3 <small>TO UPPER D^m 38-3 BUILDER'S</small>					Date of Survey White Building
Moulded displacement at moulded draught = 85 per cent. of moulded depth 17.714 tons					Surveyor's Signature N. D. Johnston
Coefficient of fineness for use with Tables .767					Particulars of Classification 100A1

DEPTH FOR FREEBOARD (D).

Moulded depth **38-3** ... **38-30**

Stringer plate **1-00** ... **.08**

Sheathing on exposed deck

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

Depth for Freeboard (D) **38-38**

DEPTH CORRECTION.

(a) Where D is greater than Table depth
(D-Table depth) R = **(38-38-28-81) 3 = +28-71"**

(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) **57-50** = **57-50**

Standard Round of Beam = $\frac{B \times 12}{50} =$ **13-80**

Ship's Round of Beam = **13-75**

Difference **.05**

Restricted to

Correction = $\frac{\text{Diff.}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.05}{4} \times .9190 = +.01$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
Fore enclosed ...	34-38	34-99	7-0	7-0	32-66
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	34-99	34-99			32-66

Standard Height of Superstructure **7-50'**

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

Deduction for complete superstructure **42-00"**

Percentage covered $\frac{S}{L} =$ **8-10**

" " $\frac{S_1}{L} =$ **7-56**

Percentage from Table, Line A. **3-78**

(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 x .0378 = -1-59"**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	53-22	1		53-22	72-00	72-00	1		72-00
$\frac{1}{2}$ L from A.P. ...	23-68	4		94-72	32-00	32-00	4		128-00
$\frac{3}{4}$ L " ...	5-85	2		11-71	8-00	8-00	2		16-00
Amidships ...		4					4		
$\frac{3}{4}$ L from F.P. ...	11-71	2		23-42	13-25	13-25	2		26-50
$\frac{1}{2}$ L " ...	47-365	4		189-46	53-50	53-50	4		214-00
F.P. ...	106-43	1		106-43	120-00	120-00	1		120-00
Total ...				478-96					576-50

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 = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75-S}{2L} \right) = \frac{97-54-75-0405}{18} = -3-84"$

If limited on account of midship superstructure. **YES-NIL**

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 = **38-38**

Summer freeboard = **9-88**

Moulded draught (d) = **28-50**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **7-12-7"**

Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

M.D. **15-192** **28-6 3/4**

FULL **15-387** **28-6 3/4**

Tons per inch immersion at summer load water line

M.D. **50-60** **28-6 3/4**

FULL **50-72** **28-6 3/4**

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

= **7-53**

= **7 1/2"**

TABULAR FREEBOARD

Correction for coefficient **1-36** **1-36**

	+	-
Depth Correction ...	28-71	
Deduction for superstructures ...		1-59
Sheer correction ...		
Round of Beam correction01	
Correction for Thickness of Deck amidships ...		
Other corrections, scantlings, etc. 2-91		
to a summer moulded draught of 28-6"	31-63	1-59
Summer Freeboard = 118-50		

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

Tropical Fresh Water Line above Centre of Disc ...	14 1/2"
Fresh Water Line " " ...	7 1/2"
Tropical Line " " ...	7"
Winter Line below " " ...	7"
Winter North Atlantic Line " " ...	7"

Tropical Fresh Water Freeboard	8-10 1/2"
Fresh Water " "	9-3"
Tropical " "	9-3 3/4"
Winter " "	10-5 1/2"
Winter North Atlantic " "	10-5 1/2"

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.

Designed draught as open shelter deck = 26'-5 $\frac{3}{4}$ "
 Draught " Closed " " = 28'-6"
 Difference = 2'-0 $\frac{1}{4}$ "

\therefore Increase in length due to deeper draught = $2.02 \times \frac{8}{26.50} = .61' = 7\frac{3}{8}"$

Full addition for flush deck = $4.322 \times 1.5 = 6.483$ ✓
 Partial " " " " = $\frac{32.66}{43.22} \times 6.483 = \frac{4.899}{1.584}$ ✓

MOULDED DEPTH FROM TOP OF KEEL TO 2ND DECK = 30'-3.64"

MOULDED DISPL. AT 85% 30'-3.64" (25.76) = 13561 TONS.

EXTREME DISPL. AT 26'-0" EXTREME DRAUGHT. = 13730 TONS TPI = 49.90
 " " " 27'-0" " " = 14328 TONS " = 50.20

42786

Trade of ship Ocean going
 Names of sister ships Similar to SS GEORGIOS No 1238 Ship, except 1254 is now closed shelter deck.
 Builder's name and yard number M^{rs} Gray & Co Ltd 1254
 Owners N G LIVANAS
 Fee £ 32 . 0 . 0



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