

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name **GEORGIOS MANOLAKIS** Official Number **1428** Nationality and Port of Registry **Greek Piraeus** Gross Tonnage **10060.86** Date of Build **1939**

Port of Survey **Piraeus**

Date of Survey

Surveyor's Signature *E. F. Reed*

Moulded Dimensions: Length **483.465'** Breadth **65.75'** Depth **35.917'**

Moulded displacement at moulded draught = 85 per cent. of moulded depth **21.730** tons SW

Coefficient of fineness for use with Tables **0.785**

Particulars of Classification **100A1**
Oil Tanker carrying oil in bulk (contemplated)

DEPTH FOR FREEBOARD (D).

Moulded depth ... **35.917'**

Stringer plate **23mm** ... **0.075'**

Sheathing on exposed deck -

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

Depth for Freeboard (D) = **35.992**

DEPTH CORRECTION.

(a) Where D is greater than Table depth
(D-Table depth) R = $\frac{35.992 - 35.465}{15} \times 3 = +11.31$

(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) **65.75'**

Standard Round of Beam = $\frac{B \times 12}{50} = 15.78$

Ship's Round of Beam **400mm** = **15.78**

Difference **0**

Restricted to

Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = 0$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	103.0	103.0	7'-6"	-	103.0
" overhang ...	11.10				
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	48.34	39.89	7'-6"	-	39.89
" overhang ...	21.86	10.93	7'-6"	-	10.93
Trunk aft ...	70.10				
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	173.2	153.82			153.82

Standard Height of Superstructure **7'-6"**

" " R.Q.D. -

Deduction for complete superstructure **42**

Percentage covered $\frac{S}{L} = 35.9\%$

" " $\frac{S_1}{L} = 31.9\%$

" " $\frac{E}{L} = 31.9\%$

Percentage from Table, Line A. **22.9%**
(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 = **9.64 inch**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	58.3	1	58.30	45.3	45.3	1	45.3	45.3	
$\frac{1}{6}$ L from A.P. ...	26.00	4	104.00	21.7	21.7	4	86.8	86.8	
$\frac{2}{6}$ L „ ...	6.42	2	12.84	5.9	5.9	2	11.8	11.8	
Amidships ...	0	4	0	0	0	4	0	0	
$\frac{3}{6}$ L from F.P. ...	12.84	2	25.68	11.8	11.8	2	23.6	23.6	
$\frac{1}{6}$ L „ ...	52.00	4	208.00	43.4	43.4	4	173.6	173.6	
F.P. ...	116.60	1	116.60	90.60	90.60	1	90.60	90.60	
Total ...			525.42				431.7	431.7	

Mean actual sheer aft = **.823**

Mean standard sheer aft = **.823**

Mean actual sheer forward = **.823**

Mean standard sheer forward = **.823**

Length of enclosed superstructure forward of amidships = **L**

" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{93.72}{18} \left(0.75 - \frac{173.2}{2 \times 483.465} \right) = 2.97"$

If limited on account of midship superstructure.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **35.992**

Summer freeboard = **7.886**

Moulded draught (d) = **28.106**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **7.02**

Addition for Winter North Atlantic Freeboard (if required) = **7.02 + 4.83 = 11.85"**

Deduction for Fresh Water.

Displacement in salt water at summer load water line $\Delta = 19880$

Tons per inch immersion at summer load water line $T = 65.6$

Deduction = $\frac{\Delta}{40 T}$ inches = **7.57 inches**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient **0.785 = 0.68** $\times 83.53 =$

	+	-
Depth Correction ...	11.31	
Deduction for superstructures ...		9.64
Sheer correction ...	2.97	
Round of Beam correction ...	0	
Correction for Thickness of Deck amidships ...		
Other corrections, scantlings, etc. ...		
	14.28	9.64

Summer Freeboard **24.64 = 7'-10 58"**

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

Tropical Fresh Water Line above Centre of Disc	14.59"	Tropical Fresh Water Freeboard	80.05"
Fresh Water Line " "	7.57"	Fresh Water " "	87.02"
Tropical Line " "	7.02"	Tropical " "	87.62"
Winter Line below " "	7.02"	Winter " "	101.66"
Winter North Atlantic Line " "	11.85"	Winter North Atlantic " "	106.49"

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.

length of prop:-

47-43 - 4 @ 734 = 2936
43-10 - 33 @ 760 = 25080
10 - 0 - 10 @ 610 = 6100
34116

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____



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