

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

48424

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
Moulded Dimensions: Length 483.465' Breadth 65.75' Depth 35.917'					Date of Survey
Moulded displacement at moulded draught = 85 per cent. of moulded depth 21.730 tons SW					Surveyor's Signature <i>E. F. Reed</i>
Coefficient of fineness for use with Tables 0.785					Particulars of Classification 100A1 Oil Tanker carrying oil in bulk (contemplated)

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... 35.917'	(a) Where D is greater than Table depth (D - Table depth) R = $(35.992 - \frac{483.465}{15}) \times 3 = +11.31$	Moulded Breadth (B) 65.75'
Stringer plate 23mm ... 0.075'	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = -	Standard Round of Beam = $\frac{B \times 12}{50} = 15.78$
Sheathing on exposed deck -	If restricted by superstructures	Ship's Round of Beam 400mm = 15.78
$T \left(\frac{L-S}{L} \right) =$		Difference = 0
Depth for Freeboard (D) = 35.992		Restricted to
		Correction = $\frac{\text{Diff}^c}{4} \times \left(1 - \frac{S_1}{L} \right) = 0$

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
$\frac{1}{4}L$ from A.P. ...	26.00	4		104.00	21.7	21.7	4		86.8
$\frac{2}{4}L$ " ...	6.42	2		12.84	5.9	5.9	2		11.8
Amidships ...	0	4		0	0	0	4		0
$\frac{3}{4}L$ from F.P. ...	12.84	2		25.68	11.8	11.8	2		23.6
$\frac{1}{4}L$ " ...	52.00	4		208.00	43.4	43.4	4		173.6
F.P. ...	116.60	1		116.60	90.60	90.60	1		90.60
Total ...				525.42					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 " = **L**

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{93.72}{18} \left(\frac{0.75 - \frac{173.2}{2 \times 483.465}}{1} \right) = 2.97''$
 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** Ft.

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) **83.53**

Correction for coefficient $0.785 = 0.68 \times 83.53 =$ **90.00**

	+	-
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	94.64	4.64

Summer Freeboard **94.64 = 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'' = 6'-8.05''
Fresh Water Line	7.57''	Fresh Water	87.02'' = 7'-3.02''
Tropical Line	7.02''	Tropical	87.62'' = 7'-3.62''
Winter Line below	7.02''	Winter	101.66'' = 8'-5.66''
Winter North Atlantic Line	11.85''	Winter North Atlantic	106.49'' = 8'-10.49''

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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Foundation