

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index. No. _____
(For London Office only.)

Computation of Freeboard for ~~Steamer, Sailing Ship, Tanker~~
having _____

(Type of Superstructures.) _____

Ship's Name *Proposed Tanker (10400 tons)*
for *Anglo American Oil Co.*

Nationality and Port of Registry _____ Official Number _____ Gross Tonnage _____ Date of Build _____

Moulded Dimensions: Length *445* Breadth *61* Depth *32.17*

Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons

Coefficient of fineness for use with Tables *assumed .75*

Port of Survey _____

Date of Survey *15-2-35*

Name of Surveyor _____

Particulars of Classification *100 A1*
Carrying petroleum in bulk.

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	32.17	(a) Where D is greater than Table depth (D-Table depth) R =		Moulded Breadth (B)	61
Stringer plate	.07	(32.24-29.67) x 3 = +7.71		Standard Round of Beam = $\frac{B \times 12}{50}$	14.684
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Ship's Round of Beam	15.25
$T \left(\frac{L-S}{L} \right) =$				Difference	.64
Depth for Freeboard (D) =	32.24	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{.64^2}{4} \times .6086 = -.10$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	105.50	105.50	8.0		105.50	
" overhang						
R.Q.D. enclosed						
" overhang						
Bridge enclosed	32.67	32.67	8.0		32.67	
" overhang aft						
" overhang forward						
F'cle enclosed	32.00	32.00	8.0		32.00	
" overhang						
Trunk aft						
" forward						
Tonnage opening aft						
" " forward						
Total	170.17	170.17			170.17	

Standard Height of Superstructure *7.5*

" " R.Q.D. *-*

Deduction for complete superstructure *42*

Percentage covered $\frac{S}{L} = \frac{38.24}{170.17} = .2247$

" " $\frac{S_1}{L} = \frac{39.14}{170.17} = .2299$

" " $\frac{E}{L} = \frac{29.24}{170.17} = .1718$

Percentage from Table, Line A. *Tanker 30.14*

(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) *.28*

Deduction = $42 \times .2247 = 9.44$

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.		1					1		
$\frac{1}{6}$ L from A.P.		4					4		
$\frac{2}{6}$ L " "		2					2		
Amidships		4					4		
$\frac{2}{6}$ L from F.P.		2					2		
$\frac{1}{6}$ L " "		4					4		
F.P.		1					1		
Total									

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

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.	Deduction for Fresh Water.	TABULAR FREEBOARD
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Corrected for Flush Deck (if required)
Depth to Freeboard Deck = <i>32.24</i>	$\Delta =$	Correction for coefficient $\frac{.75 + .68}{1.36} = \frac{1.43}{1.36}$
Summer freeboard = <i>6.25</i>	Tons per inch immersion at summer load water line	
Moulded draught (d) = <i>26.20</i>	T =	
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =	Deduction = $\frac{\Delta}{40T}$ inches =	
Addition for Winter North Atlantic Freeboard (if required) =		

Summer Freeboard = *72.93*

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

Tropical Fresh Water Line above Centre of Disc		Tropical Fresh Water Freeboard
Fresh Water Line		Fresh Water
Tropical Line		Tropical
Winter Line below		Winter
Winter North Atlantic Line		Winter North Atlantic

