

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index. No. 101
(For London Office only).

Ship's Name ANGLO SAXON PROPOSED TANKER	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey London
Moulded Dimensions: Length 434.0 Breadth 62.50 Depth 23.0					Date of Survey 8/8/88.
Moulded displacement at moulded draught = 85 per cent. of moulded depth tons					Surveyor's Signature
Coefficient of fineness for use with Tables .78 (stated by Owners' supt).					Particulars of Classification 100 A1 carrying petroleum in bulk (contemplated)

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 23.00	(a) Where D is greater than Table depth (D-Table depth) R =	Moulded Breadth (B) = 62.50
Stringer plate .60 ... 05	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 15.00$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	(28.93-23.05) 3 = -17.64	Ship's Round of Beam = 15.00
Depth for Freeboard (D) = 23.05	If restricted by superstructures	Difference
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left(1 - \frac{S_1}{L} \right) =$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	107.00	107.00	7.5		107.00
„ overhang ...					
R.Q.D. enclosed ...					
„ overhang ...					
Bridge enclosed ...					
„ overhang aft ...					
„ overhang forward ...					
Fore enclosed ...	60.00	60.00			60.00
„ overhang ...					
Trunk aft ...		168.12			168.12
„ forward ...					
Tonnage opening aft ...					
„ „ forward ...					
Total ...	167.00	335.12			335.12

Standard Height of Superstructure 7.50'
„ „ R.Q.D. ✓
Deduction for complete superstructure 42.00 ✓
Percentage covered $\frac{S}{L} = 38.48$
„ „ $\frac{S_1}{L} = 77.21$ ✓
„ „ $\frac{E}{L} = 77.21$ ✓
Percentage from Table, Line A. 71.87 ✓
(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 .7187 = 30.18. ✓

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	53.40	1		26.50		1	26.50
$\frac{1}{2}$ L from A.P. ...		4		10.00		4	40.00
$\frac{3}{8}$ L „ ...		2		5.00		2	10.00
Amidships ...		4		-		4	-
$\frac{3}{8}$ L from F.P. ...		2		8.00		2	16.00
$\frac{1}{2}$ L „ ...		4		22.00		4	88.00
F.P. ...	106.80	1		53.00		1	53.00
Total ...			480.56				233.50

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{247.06}{18} (.75 - .1924) = + 7.65$ ✓
If limited on account of midship superstructure. If limited to maximum allowance of 1½ ins. per 100 ft.

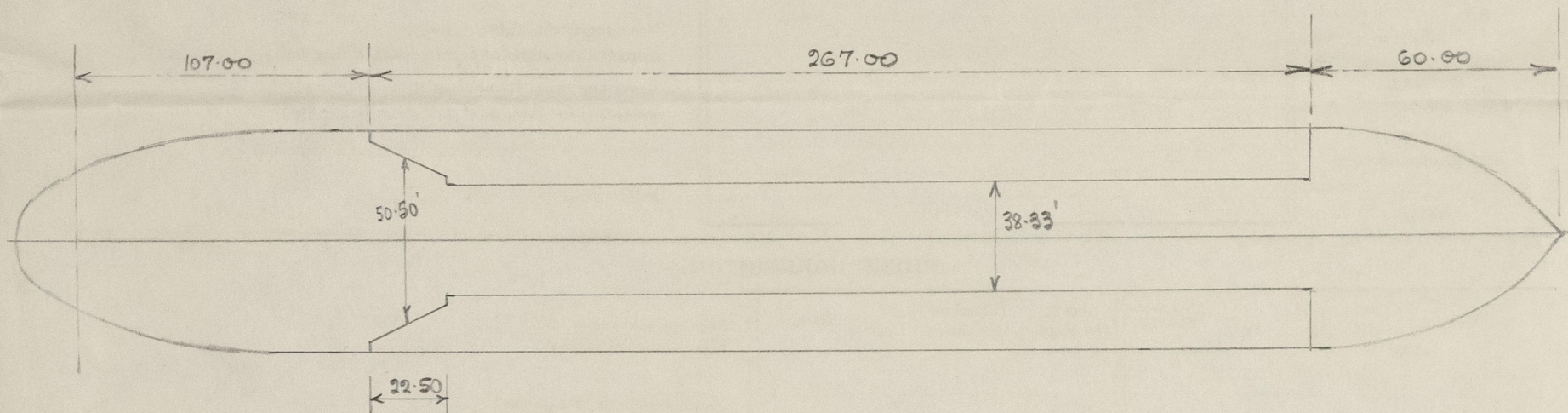
Mean actual sheer aft = Deficient
Mean standard sheer aft
Mean actual sheer forward = Deficient.
Mean standard sheer forward
Length of enclosed superstructure forward of amidships = Deficient
„ „ aft of „ = Sheer.

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Depth to Freeboard Deck = 23.05 Ft. ✓ Summer freeboard = 4.00 Moulded draught (d) = 19.05	Displacement in salt water at summer load water line Δ = Tons per inch immersion at summer load water line T = Deduction = $\frac{\Delta}{40T}$ inches	Correction for coefficient $\frac{.78 + .68}{1.36} = \frac{1.46}{1.36}$ Depth Correction ... 17.64 ✓ Deduction for superstructures ... 30.18 ✓ Sheer correction ... 7.65 Round of Beam correction ... Correction for Thickness of Deck amidships ... Other corrections, scantlings, etc. ... Summer Freeboard = 48.01 ✓
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = Addition for Winter North Atlantic Freeboard (if required) =		82.14 ✓ 88.18 ✓

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 „ „ ...

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.



Trunk & equivalent length

$$22.50 \times \frac{50.50}{62.50} = 18.18$$

$$244.50 \times \frac{38.33}{62.50} = 149.94$$

$$\underline{\underline{168.12}}$$

Trade of ship.....

Names of sister ships.....

Builder's name and yard number.....

Owners.....

Fee £.....

$$\begin{array}{r} 107 \\ 22.5 \\ 244.5 \\ 60 \\ \hline 434.0 \end{array}$$



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Foundation