

854
Rpt. C.11.

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Index No. _____
(For London Office only.)

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

Port of Survey _____

(Type of Superstructures.) _____

Date of Survey 15-2-35

Name of Surveyor _____

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

Particulars of Classification 100 A1
Carrying petroleum in bulk.

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>32.17</u>	(a) Where D is greater than Table depth (D-Table depth) R = <u>(32.24-29.67) x 3 = +7.71</u>	Moulded Breadth (B) <u>61</u>
Stringer plate <u>.07</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 14.684$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <u>15.25</u>
Depth for Freeboard (D) = <u>32.24</u>		Difference = <u>.64</u>
		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)	Standard Height of Superstructure
Poop enclosed <u>105.50</u>	<u>105.50</u>	<u>8.0</u>	<u>✓</u>	<u>105.50</u>	<u>7.5</u>
" overhang					R.Q.D.
R.Q.D. enclosed					Deduction for complete superstructure <u>42</u>
" overhang					Percentage covered $\frac{S}{L} = \frac{38.24}{100} = 38.24$
Bridge enclosed <u>32.67</u>	<u>32.67</u>	<u>8.0</u>	<u>✓</u>	<u>32.67</u>	" $\frac{S_1}{L} = \frac{39.14}{100} = 39.14$
" overhang aft					" $\frac{E}{L} = \frac{29.24}{100} = 29.24$
" overhang forward					Percentage from Table, Line A. <u>Tanker 30.74</u>
F'cle enclosed <u>32.00</u>	<u>32.00</u>	<u>8.0</u>	<u>✓</u>	<u>32.00</u>	(corrected for absence of forecastle (if required))
" overhang					Percentage from Table, Line B.
Trunk aft					(corrected for absence of forecastle (if required))
" forward					Interpolation for bridge less than 2L (if required) <u>.28</u>
Tonnage opening aft					Deduction = <u>42 x .3074 = 12.66</u>
" " forward					
Total <u>170.17</u>	<u>170.17</u>			<u>170.17</u>	

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		<u>Standard</u>			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.

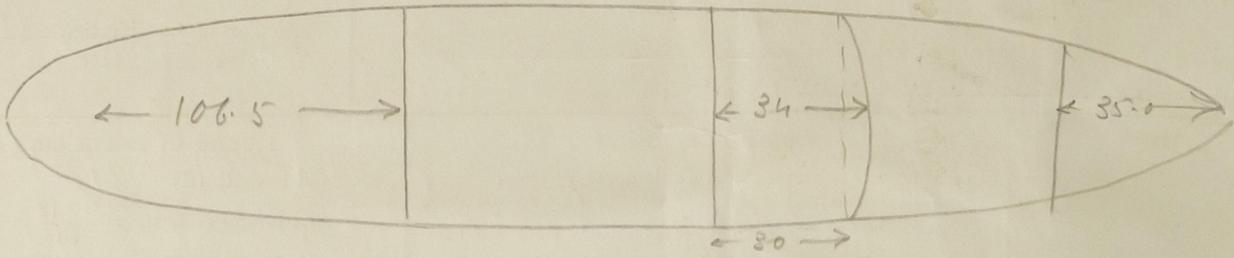
If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.75 + .68}{1.36} = \frac{1.43}{1.36}$
Depth to Freeboard Deck = <u>32.24</u>	$\Delta =$	Depth Correction <u>7.71</u>
Summer freeboard = <u>6.25</u>	Tons per inch immersion at summer load water line	Deduction for superstructures <u>12.66</u>
Moulded draught (d) = <u>26.29</u>	T =	Sheer correction <u>-.72</u>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =	Deduction = $\frac{\Delta}{40T}$ inches =	Round of Beam correction <u>-.72</u>
Addition for Winter North Atlantic Freeboard (if required) =		Correction for Thickness of Deck amidships <u>12.32</u>
		Other corrections, scantlings, etc. <u>4.66</u>
		Summer Freeboard = <u>72.93</u>

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 " "





© 2020

Lloyd's Register
Foundation