

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>LABIOSA</b>	Official Number <b>181908</b>	Nationality and Port of Registry <b>BRITISH LONDON</b>	Gross Tonnage <b>APPROX 6,400 6473</b>	Date of Build <b>1948</b>	Port of Survey <b>NEWCASTLE-ON-TYNE</b>
Moulded Dimensions: Length <b>425'-0"</b> Breadth <b>54'-3"</b> Depth <b>31'-0"</b> <b>426'-0" TO CR OF RUDDER STOCK</b>					Date of Survey <b>DURING CONSTRUCTION</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>13435</b> tons					Surveyor's Signature <b>A. Hunter</b>
Coefficient of fineness for use with Tables <b>.7742</b>					Particulars of Classification <b>100 A1 (CONTEMPLATED) CARRYING PETROLEUM IN BULK.</b>

<b>DEPTH FOR FREEBOARD (D).</b> Moulded depth ... <b>31'-0"</b> Stringer plate ... <b>3/4"</b> Sheathing on exposed deck ... <b>.05</b> $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <b>31'-05"</b>	<b>DEPTH CORRECTION.</b> (a) Where D is greater than Table depth (D-Table depth) R = <b>(31'-05"-28'-40") 3 = +7'-95"</b> (b) Where D is less than Table depth (if allowed) (Table depth-D) R = <b>2'-65"</b> If restricted by superstructures <b>✓</b>	<b>ROUND OF BEAM CORRECTION.</b> Moulded Breadth (B) <b>54'-25"</b> Standard Round of Beam = $\frac{B \times 12}{50} =$ <b>13'-02"</b> Ship's Round of Beam <b>13'-2"</b> = <b>13'-50"</b> Difference <b>Even = .48"</b> Restricted to Correction = $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right) =$ <b><math>\frac{.48^2}{4} \times .5522 = .07"</math></b>
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DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed <b>SIDE CENTRE</b>	<b>87'-3"</b>	<b>90'-80"</b>	<b>8'-0"</b>	<b>✓</b>	<b>90'-80"</b>
" overhang	<b>NIL</b>				
R.Q.D. enclosed					
" overhang					
Bridge enclosed <b>SIDE CENTRE</b>	<b>43'-8"</b>	<b>46'-13"</b>	<b>7'-6"</b>	<b>✓</b>	<b>46'-13"</b>
" overhang aft	<b>7'-11 1/2"</b>	<b>8'-96"</b>			<b>5'-96"</b>
" overhang forward	<b>NIL</b>				
F'cle enclosed	<b>47'-10 1/2"</b>	<b>47'-87"</b>	<b>7'-6"</b>	<b>✓</b>	<b>47'-87"</b>
" overhang	<b>NIL</b>				
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	<b>192'-74"</b>	<b>190'-76"</b>			<b>190'-76"</b>

Standard Height of Superstructure	<b>7'-50"</b>
" " R.Q.D.	<b>✓</b>
Deduction for complete superstructure	<b>42'-00"</b>
Percentage covered $\frac{S}{L} =$	<b>45.34</b>
" $\frac{S_1}{L} =$	<b>44.78</b>
" $\frac{E}{L} =$	<b>44.78</b>
Percentage from Table, Line A. TANKER	<b>33.78</b>
(corrected for absence of forecastle (if required))	<b>✓</b>
Percentage from Table, Line B.	<b>✓</b>
(corrected for absence of forecastle (if required))	<b>✓</b>
Interpolation for bridge less than .2L (if required)	<b>✓</b>
Deduction = <b>42'-00" × .3378 = 15'-03"</b>	<b>✓</b>

SHEER CORRECTION.							
Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
A.P.	<b>52'-60"</b>	<b>1</b>	<b>52'-60"</b>	<b>51'-2"</b>	<b>51'-50"</b>	<b>1</b>	<b>51'-50"</b>
1/2 L from A.P.	<b>23'-4"</b>	<b>4</b>	<b>93'-64"</b>	<b>21'-8"</b>	<b>21'-62"</b>	<b>4</b>	<b>86'-48"</b>
1/2 L	<b>5'-79"</b>	<b>2</b>	<b>11'-58"</b>	<b>5'-2"</b>	<b>5'-50"</b>	<b>2</b>	<b>11'-00"</b>
Amidships	<b>✓</b>	<b>4</b>	<b>✓</b>	<b>0</b>	<b>✓</b>	<b>4</b>	<b>✓</b>
1/2 L from F.P.	<b>11'-57"</b>	<b>2</b>	<b>23'-14"</b>	<b>12'-8"</b>	<b>12'-12"</b>	<b>2</b>	<b>24'-24"</b>
1/2 L	<b>46'-82"</b>	<b>4</b>	<b>187'-28"</b>	<b>47'-8"</b>	<b>47'-37"</b>	<b>4</b>	<b>189'-48"</b>
F.P.	<b>105'-20"</b>	<b>1</b>	<b>105'-20"</b>	<b>108"</b>	<b>108'-00"</b>	<b>1</b>	<b>108'-00"</b>
Total			<b>473'-44"</b>				<b>470'-70"</b>

Mean actual sheer aft = **Deficient 7'-75"**  
 Mean standard sheer aft = **Deficient 7'-75"**

Mean actual sheer forward = **Even**  
 Mean standard sheer forward = **Even**

Length of enclosed superstructure forward of amidships = **✓**  
 " " aft of " = **✓**

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{2'-74}{18} \left( .75 - \frac{2262}{2 \times 425} \right) = +.08"$   
 If limited on account of midship superstructure. **✓** **5238** If limited to maximum allowance of 1 1/2 ins. per 100 ft. **✓**

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = <b>31'-06"</b> Summer freeboard = <b>5'-56"</b> Moulded draught (d) = <b>25'-50"</b> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <b>6'-38" = 6'-2"</b> Addition for Winter North Atlantic Freeboard (if required) = <b>6'-38" + 4'-26" = 10'-64" = 10'-4"</b>	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line <b>✓</b> $\Delta =$ <b>12,990 13,080</b> Tons per inch immersion at summer load water line <b>✓</b> $T =$ <b>46.4</b> Deduction = $\frac{\Delta}{40 T}$ inches = <b>7'-03" = 7'-0"</b>	<b>TABULAR FREEBOARD corrected for Flush Deck (if required)</b> Correction for coefficient <b>772 + 63 = 1.452 / 1.36 = 1.068</b> Depth Correction ... <b>7'-95"</b> Deduction for superstructures ... <b>15'-03"</b> Sheer correction ... <b>.08"</b> Round of Beam correction <b>STRONGER</b> ... <b>.07"</b> Correction for Thickness of Deck amidships ... <b>15"</b> Other corrections, scantlings, etc. ... <b>✓</b> Summer Freeboard = <b>66'-65"</b>
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### SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Water~~ Steel, Deck :-

Tropical Fresh Water Line above Centre of Disc	... 13 1/2"	Tropical Fresh Water Freeboard	4'-5 1/4"
Fresh Water Line	... 7"	Fresh Water	4'-11 3/4"
Tropical Line	... 6 1/2"	Tropical	5'-0 1/4"
Winter Line below	... 6 1/2"	Winter	6'-1 1/4"
Winter North Atlantic Line	... 0 3/4"	Winter North Atlantic	6'-5 1/2"

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.

Trade of ship OIL CARRIER. FOREIGN GOING.

Names of sister ships "LAMPANIA" (HAWTHORN LESKIE & CO 690) "LATIA" (H.L. & CO. 684)

Builder's name and yard number R. & W. HAWTHORN LESKIE & CO. LD. 692

Owners ANGLO SAXON PETROLEUM CO. LD. LONDON.

Fee £ 17 : - : -

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