

26 FEB 1947

Index. No. 38954  
(For London Office only).

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR ~~STEAMER, SAILING SHIP,~~ TANKER.)

Ship's Name <b>S.S. "ESSO LONDON"</b>	Official Number <b>181582</b>	Nationality and Port of Registry <b>BRITISH LONDON.</b>	Gross Tonnage <b>10712</b>	Date of Build <b>1944</b>	Port of Survey <b>SOUTHAMPTON.</b>
Moulded Dimensions: Length <b>503'-0"</b> Breadth <b>68'-0"</b> Depth <b>39'-3"</b> To CENTRE OF RUDDER STOCK.					Date of Survey <b>19/24<sup>TH</sup> FEB. 1947</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>24300</b> tons					Surveyor's Signature <i>Colchester</i>
Coefficient of fineness for use with Tables <del>SEE DISP. SCALE AS PER ATTACHED PLAN.</del> <b>745</b>					Particulars of Classification <b>100 A1 CLASS CONTEMPLATED</b>

<b>Depth for Freeboard (D).</b> Moulded depth ... .. <b>39.25</b> Stringer plate ... .. <b>.08</b> Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <b>39.33</b>	<b>Depth correction.</b> (a) Where D is greater than Table depth (D - Table depth) R = $(39.33 - 33.53) 3 = +17.40"$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = If restricted by superstructures ✓	<b>Round of Beam correction.</b> Moulded Breadth (B) <b>68'-0"</b> Standard Round of Beam = $\frac{B \times 12}{50} = 16.32$ Ship's Round of Beam = <b>18"</b> Difference <b>✓ 1.68</b> Restricted to <b>✓</b> Correction = $\frac{\text{Diff.}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{1.68}{4} \times \frac{6017}{5000} = -.25"$
---	---	--

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed	106.00		8'-0" AT AFT END.			Standard Height of Superstructure <b>7.50'</b>
BOW FRONT Equiv.	107.9"	108.67	8'-0" AT FOR <sup>W</sup> END. ✓		108.67	" " R.Q.D. <b>✓</b>
" overhang	4'-0"		8'-0"			Deduction for complete superstructure <b>42.00"</b>
R.Q.D. enclosed	2.67					Percentage covered $\frac{S}{L} =$
" overhang						" " $\frac{S_1}{L} =$ <b>39.83</b>
Bridge enclosed...	35'-10"	38.67	8'-0" ✓		38.67	" " $\frac{E}{L} =$
" overhang aft	2.84					Percentage from Table, Line A <b>Tanker</b>
BOW Equiv.	4'-3"		8'-0"			(corrected for absence of forecastle (if required)) <b>30.83</b>
overhang forward			10'-0" AT AFT END. ✓			Percentage from Table, Line B. ✓
F'cle enclosed ...	53'-0"	53.00	13'-3" AT F.P.		53.00	(corrected for absence of forecastle (if required)) ✓
" overhang ...						Interpolation for bridge less than 2L (if required) ✓
Trunk aft ...						Deduction = <b>42.00 × .3083 = -12.95"</b>
" forward ...						
Tonnage opening aft ...						
" " forward						
Total ...	200.34	200.34			200.34	

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	60.3	1	60.30	22.00	22.00	1	22.00
1/4 L from A.P. ...	26.835	4	107.34	8.70	3.70	4	14.80
1/2 L " ...	6.63	2	13.26			2	
Amidships ...		4				4	
3/4 L from F.P. ...	13.27	2	26.54			2	
3/4 L " ...	53.67	4	214.68	6.00	6.00	4	24.00
F.P. ...	120.60	1	120.60	18.00	18.00	1	18.00
Total ...			542.72				78.80

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{75-S}{2L} \right) = \frac{463.92}{18} \left( \frac{75-1991}{2 \times 5000} \right) = +14.15$   
 If limited on account of midship superstructure. ✓

Mean actual sheer aft = **<1**  
 Mean standard sheer aft

Mean actual sheer forward = **<1**  
 Mean standard sheer forward

Length of enclosed superstructure forward of amidships = **20**  
 " " aft of " = **deficient sheer.**

Deduction for Tropical Freeboard.  
 Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **39.33**  
 Summer freeboard = **9.23**  
 Moulded draught (d) = **30.10**

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = **7.52 × 7 1/2"**

Addition for Winter North Atlantic Freeboard (if required) = **7.52 + 5.03 = 12.55" = 12 1/2"**

Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta = 21,890 \text{ Tons.}$   
 Tons per inch immersion at summer load water line  
 $T = 67.00$   
 Deduction =  $\frac{\Delta}{40T}$  inches = **8.17**  
**= 8 1/4"**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient  $\frac{745+68}{1.36} = 1.425$

	+	-
Depth Correction ...	17.40	
Deduction for superstructures ...	-20	12.95
Sheer correction ...	14.15	
Round of Beam correction ...		.25
Correction for Thickness of Deck amidships ...		
Other corrections, scantlings, etc. ...	-60	
<b>31.55</b>	<b>13.20</b>	<b>+18.35</b>

Summer Freeboard = **110.7580**

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

Tropical Fresh Water Line above Centre of Disc ... **15 3/4"**  
 Fresh Water Line " " ... **8 1/4"**  
 Tropical Line " " ... **7 1/2"**  
 Winter Line below " " ... **7 1/2"**  
 Winter North Atlantic Line " " ... **12 1/2"**

Tropical Fresh Water Freeboard **7'-11"**  
 Fresh Water " **8'-6 1/2"**  
 Tropical " **8'-7 1/4"**  
 Winter " **9'-10 1/4"**  
 Winter North Atlantic " **10'-3 1/4"**



Esso London.

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.

Poop! ~~101.75~~  
 ~~$\frac{2}{3}$  of 4'-0"~~ ~~2.67~~  
~~110.42~~

Bridge! 35.833  
 $\frac{2}{3}$  of 4'-3" 2.833  
38.666 say 38.67.

*Print*

Trade of ship OIL TANKER.

Names of sister ships ESSO GLASGOW & ESSO BIRMINGHAM

Builder's name and yard number SUN SHIPBUILDING & D.D. CO CHESTER P.A. USA HULL No 451

Owners THE ANGLO-AMERICAN OIL CO.

Fee £ 20-0-0

ML-D



© 2020

Lloyd's Register  
Foundation