

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD-STEAMERS.

Index No. _____
(For London Office only.)
Port of Survey _____
Date of Survey _____
Name of Surveyor _____

Ship's Name. <i>Albert E. Watts</i>	Port of Registry and Nationality.	Official Number.	Gross Tonnage.	Date of Build. <i>1921</i>	Particulars of Classification. <i>+ 100 A1 "Carrying Petroleum in Bulk"</i>
Number in Register Book					

Moulded dimensions *430 x 59.00 x 33.25*

Moulded displacement at a moulded draught of 85 per cent. of moulded depth

Coefficient of fineness for use with tables

DEPTH FOR FREEBOARD.

CORRECTION FOR LENGTH.

Moulded depth	...	...	...	...	...	<i>33.25</i>
Stringer plate	...	...	...	...	...	<i>.06</i>
Sheathing in wells	$T \left(\frac{L-S}{L} \right) =$	...	...	...	...
Depth <i>D</i> =	...	...	...	...	...	<i>33.31</i>

(a) When <i>D</i> is greater than $\frac{L}{15}$	$(D - \frac{L}{15}) \times R =$	<i>(33.31 - 28.67) \times 3</i>	<i>+ 13.92</i>
(b) When <i>D</i> is less than $\frac{L}{15}$ (if allowed).	$(\frac{L}{15} - D) \times R =$	...	...
If restricted by height of superstructures	...	...	...

SUPERSTRUCTURES.

	Mean Covered Length <i>S</i> .	Equivalent Enclosed Length <i>S</i> ₁ .	Height.	Correction for Height.	Effective Length.	Forward Sheer				
						<i>A</i>	<i>S</i>	<i>S</i> _m	<i>A</i>	<i>S</i>
Poop enclosed	<i>134.00</i>	<i>134.00</i>	<i>7.50</i>		<i>134.00</i>	<i>65</i>	<i>-</i>	<i>1</i>	<i>-</i>	<i>-</i>
" overhang						<i>-</i>	<i>1166</i>	<i>3</i>	<i>-</i>	<i>34.98</i>
R.Q.D. enclosed						<i>18.20</i>	<i>4717</i>	<i>3</i>	<i>54.60</i>	<i>141.51</i>
" overhang						<i>121.12</i>	<i>106.00</i>	<i>1</i>	<i>121.12</i>	<i>106.00</i>
Bridge enclosed	<i>36.46</i>	<i>36.46</i>	<i>7.75</i>		<i>36.46</i>	<i>175.72 282.49</i>				
" overhang aft										
" overhang forward										
F'cle enclosed	<i>40.38</i>	<i>25.12</i>	<i>7.75</i>		<i>25.12</i>	$\frac{A}{S} = \frac{175.72}{282.49} = 62.20\%$				
" overhang										
Trunks forward										
" aft										
Tonnage opening										
TOTAL =	<i>210.84</i>	<i>195.58</i>			<i>195.58</i>					
Length of ship (<i>L</i>) =	<i>430</i>	<i>430</i>			<i>430</i>					
% Covered ... =	<i>49.03</i>	<i>45.48</i>			<i>45.48</i>					
Corresponding %, corrected for absence of forecandle if required } <i>A</i> =	<i>Tanker</i>					Correction for Bridge less than $\frac{1}{2}L$ if required } <i>Tanker</i>				
Allowance ... =	<i>42.00</i>	<i>36.48</i>			<i>- 15.32</i>					

SHEER.

Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.
A.P. 1	<i>60.37</i>	<i>53.00</i>	<i>60.37</i>	<i>1</i>	<i>60.37</i>
2	<i>10.00</i>	<i>23.58</i>	<i>10.00</i>	<i>4</i>	<i>40.00</i>
3	<i>-</i>	<i>5.83</i>	<i>-</i>	<i>2</i>	<i>-</i>
4	<i>-</i>	<i>-</i>	<i>-</i>	<i>4</i>	<i>-</i>
5	<i>-</i>	<i>11.66</i>	<i>-</i>	<i>2</i>	<i>-</i>
6	<i>18.20</i>	<i>47.17</i>	<i>18.20</i>	<i>4</i>	<i>72.80</i>
F.P. 7	<i>121.12</i>	<i>106.00</i>	<i>121.12</i>	<i>1</i>	<i>121.12</i>

If excess sheer forward and deficient sheer aft :—

Actual sheer aft = *Deficient*
Standard sheer aft
Actual sheer forward = *Deficient*
Standard sheer forward

Length of enclosed superstructure *L*

Forward of amidships = } *Tanker*
Aft of amidships = }

Mean effective sheer ...	...	...	...	...	<i>18</i>	<i>294.29</i>
Standard sheer $\frac{1}{10}L + 5 =$	...	...	...	...		<i>16.35</i>
Difference (<i>Df</i>)	...	...	...	...		<i>26.50</i>
Allowance = $Df \times \left(\frac{75 - \frac{S}{L}}{2} \right) =$	<i>10.15</i>	<i>(.75 - .245)</i>				<i>+ 5.12</i>
If limited on account of amidship superstructure	...	...	...	...
If limited on account of excess sheer ($1\frac{1}{2}$ in. per 100 ft.)	...	...	...	...

ROUND OF BEAM.

TABULAR FREEBOARD (corrected for flush deck if required) =

Standard	...	<i>59.24</i>	...	<i>14.16</i>
Ship	...	...	...	<i>15.00</i>
Difference	...	...	...	<i>.84</i>
Restricted to	...	...	...	<i>.545</i>
Allowance = $\frac{\text{Difference}}{4} \times \left(1 - \frac{S}{L} \right) =$	<i>21</i>	<i>(1 - .455)</i>		<i>-.11</i>

Corrected for Coefficient $\frac{+ .68}{1.36} =$

Correction for Length	...	<i>13.92</i>
" Superstructures	...	<i>15.32</i>
" Sheer	...	<i>5.12</i>
" Round of beam	...	<i>.11</i>
" Thickness of deck	...	
" Scantlings, etc.	...	
" Statutory deck line	...	

+	-
<i>19.04</i>	<i>15.43</i>
<i>+ 3.61</i>	

Summer Freeboard =

FREEBOARD recommended amidships from centre of Disc to top of Statutory Deck Line, Wood (Steel) Deck :—

Fresh Water Line	above centre of Disc	...	...	...
Indian Summer Line	"	"	"	...
Winter Line	below	"	"	...
Winter North Atlantic Line	"	"	"	...