

*Preliminary Comp (E.S.V)*  
**LLOYD'S REGISTER OF SHIPPING**  
**SURVEYS FOR FREEBOARD**  
 (COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

For LONDON OFFICE ONLY

Received .....  
 Index No. ....  
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Ship's Name <i>Richard Dunston</i> Yard No S 780/1	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey  Date of Survey <i>6.1.61</i>  Surveyor's Signature  Particulars of Classification <i>+100A 1</i> <i>Hopper Barge</i>
Moulded Dimensions: Length <i>170</i> Breadth <i>36</i> Depth <i>17</i> Freeboard Length ..... Moulded displacement at moulded draught = 85 per cent. of moulded depth ..... tons (excluding bossing) Coefficient of fineness for use with Tables <i>Say 75</i>					

<b>DEPTH FOR FREEBOARD (D).</b> Moulded depth ... .. <i>17</i> Stringer plate ... .. <i>.04</i> Wood Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <i>17.04</i>	<b>DEPTH CORRECTION.</b> (a) Where D is greater than Table depth (D - Table depth) R = <i>(17.04 - 11.33) 1.307 = 7.42</i> (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) <i>36</i> Standard Round of Beam = $\frac{B \times 12}{50} = 8.64$ Ship's Round of Beam <i>about = ditto</i> Difference Restricted to Correction = $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right) = \text{Nil}$
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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 ... ..						Standard Height of Superstructure .....
" overhang ... ..						" " R.Q.D. ....
R.Q.D. enclosed ... ..						Deduction for complete superstructure .....
" overhang ... ..						Percentage covered $\frac{S}{L} =$
Bridge enclosed ... ..						" " $\frac{S_1}{L} =$
" overhang aft ... ..						" " $\frac{E}{L} =$
" overhang forward ... ..						Percentage from Table, Line A. (corrected for absence of forecastle (if required))
F'cle enclosed ... ..						Percentage from Table, Line B. (corrected for absence of forecastle (if required))
" overhang ... ..						Interpolation for bridge less than .2L (if required)
Trunk aft ... ..						Deduction = <i>Nil</i>
" forward ... ..						
Tonnage opening aft ... ..						
" " forward ... ..						
Total ... ..						

**SHEER CORRECTION.**

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..	<i>27</i>	1		<i>27</i>		1	
$\frac{1}{4}L$ from A.P. ... ..		4				4	
$\frac{2}{4}L$ " ... ..		2				2	
Amidships ... ..	0	4	0	0	0	4	0
$\frac{2}{4}L$ from F.P. ... ..		2				2	
$\frac{1}{4}L$ " ... ..		4				4	
F.P. ... ..	<i>54</i>	1		<i>54</i>		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 =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \text{Nil}$   
 If limited on account of midship superstructure.

If limited to maximum allowance of 1 1/4 ins. per 100ft.

<b>Deduction for Tropical Freeboard.</b> Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = <i>17.04</i> Summer freeboard = <i>2.1</i> Moulded draught (d) = <i>14.54</i> Keel allowance = Extreme draught = Deduction for Tropical freeboard and addition for = Winter freeboard = $\frac{d}{4}$ inches = Addition for Winter North Atlantic Freeboard (if required) =	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line $T =$ Deduction = $\frac{\Delta}{40 T}$ inches =	<b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required) Correction for coefficient <i>18.3 + 2.55</i> Depth Correction ... .. <i>7.42</i> Deduction for superstructures ... .. Sheer correction ... .. Round of Beam correction ... .. Correction for Thickness of Deck amidships ... .. Other corrections, scantlings, etc. ... .. Summer Freeboard = <i>29.35</i>
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**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.

Fwd Sheer 21.6"  
17  
4-6 54

19-3  
17  
2-3  
27

Trade of ship \_\_\_\_\_

Names of sister ships \_\_\_\_\_

Builder's name and yard number \_\_\_\_\_

Owners \_\_\_\_\_

Fee £ : : \_\_\_\_\_

List of plans forwarded for reference. (See "Instructions to Surveyors, Part 4, 1950", paragraph 11.)



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