

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

 Index No. _____
 (For London Office only).

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
					Date of Survey
Moulded Dimensions: Length <u>130'-8"</u> Breadth <u>25'-0"</u> Depth <u>10'-9"</u>					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth <u>609</u> tons					Particulars of Classification
Coefficient of fineness for use with Tables <u>.714</u>					

Depth for Freeboard (D). Moulded depth <u>10.75</u> Stringer plate $\frac{1}{2}$ " <u>.04</u> $2\frac{1}{4}$ " Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ <u>.07</u> Depth for Freeboard (D) = <u>10.86</u>	Depth correction. (a) Where D is greater than Table depth (D - Table depth) R = $(10.86 - 8.71) 1.005 = +2.16$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = _____ If restricted by superstructures	Round of Beam correction. Moulded Breadth (B) <u>25'-0"</u> Standard Round of Beam = $\frac{B \times 12}{50} = 6$ Ship's Round of Beam = <u>6 1/2"</u> Difference <u>.5"</u> Restricted to _____ Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.5}{4} \left(1 - \frac{.6141}{1} \right) = -.05$
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DEDUCTION FOR SUPERSTRUCTURES.						
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	Standard Height of Superstructure <u>6.0</u>
						" " R.Q.D.
Poop enclosed <i>apart</i> ...	<u>59.17</u>	<u>59.17</u>	<u>7.25</u>	✓	<u>59.17</u>	Deduction for complete superstructure <u>19.07</u>
" overhang ...						Percentage covered $\frac{S}{L} = 61.67$
R.Q.D. enclosed						" " $\frac{S_1}{L} = 61.41$
" overhang						" " $\frac{E}{L} = 61.41$
Bridge enclosed...						Percentage from Table, Line A. <u>48.40</u>
" overhang aft ...						(corrected for absence of forecastle (if required))
" overhang forward						Percentage from Table, Line B.
F'cle enclosed <i>apart</i> ...	<u>20.70</u>	<u>20.72</u>	<u>6.75</u>	✓	<u>20.72</u>	(corrected for absence of forecastle (if required))
" overhang ...	<u>.72</u>	<u>.36</u>			<u>.36</u>	Interpolation for bridge less than 2L (if required)
Trunk aft ...						Deduction = <u>19.07</u> \times <u>.484</u> = <u>-9.23</u>
" forward ...						
Tonnage opening aft ...						
" " forward						
Total ...	<u>80.59</u>	<u>80.25</u>			<u>80.25</u>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	<u>23.07</u>	1		<u>23.07</u>	<u>27.00</u>		1		<u>27.00</u>	Mean actual sheer aft =
$\frac{1}{8}$ L from A.P. ...	<u>10.27</u>	4		<u>41.08</u>	<u>11.90</u>		4		<u>47.60</u>	Mean actual sheer forward =
$\frac{3}{8}$ L " ...	<u>2.54</u>	2		<u>5.08</u>	<u>2.80</u>		2		<u>5.60</u>	Mean standard sheer forward =
Amidships ...	-	4		-	-		4		-	Length of enclosed superstructure forward of amidships =
$\frac{3}{8}$ L from F.P. ...	<u>5.07</u>	2		<u>10.14</u>	<u>6.00</u>		2		<u>12.00</u>	" " aft of " =
$\frac{1}{8}$ L " ...	<u>20.53</u>	4		<u>82.12</u>	<u>22.50</u>		4		<u>90.00</u>	
F.P. ...	<u>46.14</u>	1		<u>46.14</u>	<u>49.00</u>		1		<u>49.00</u>	
Total ...				<u>207.63</u>					<u>231.20</u>	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{23.57}{18} \left(\frac{.75 - .3083}{1} \right) = .58$

If limited on account of midship superstructure. 6.14 \times .14 = .86

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

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

 Depth to Freeboard Deck = 35.72 Ft.
 Summer freeboard = 7.64
 Moulded draught (d) = 28.08

 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = _____
 Addition for Winter North Atlantic Freeboard (if required) = _____

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$
 Tons per inch immersion at summer load water line

 $T =$
 Deduction = $\frac{\Delta}{40T}$ inches = _____

TABULAR FREEBOARD corrected for Flush Deck (if required)

 Correction for coefficient .714 \times .68 \times 1.394 = 1.36

	+	-
Depth Correction ...	<u>10.20</u>	
Deduction for superstructures ...		<u>25.43</u>
Sheer correction ...	<u>2.07</u>	
Round of Beam correction ...	<u>.37</u>	
Correction for Thickness of Deck amidships ...	<u>2.66</u>	
Other corrections, scantlings, etc. ...		
	<u>15.30</u>	<u>25.43</u>

 Summer Freeboard = 91.82

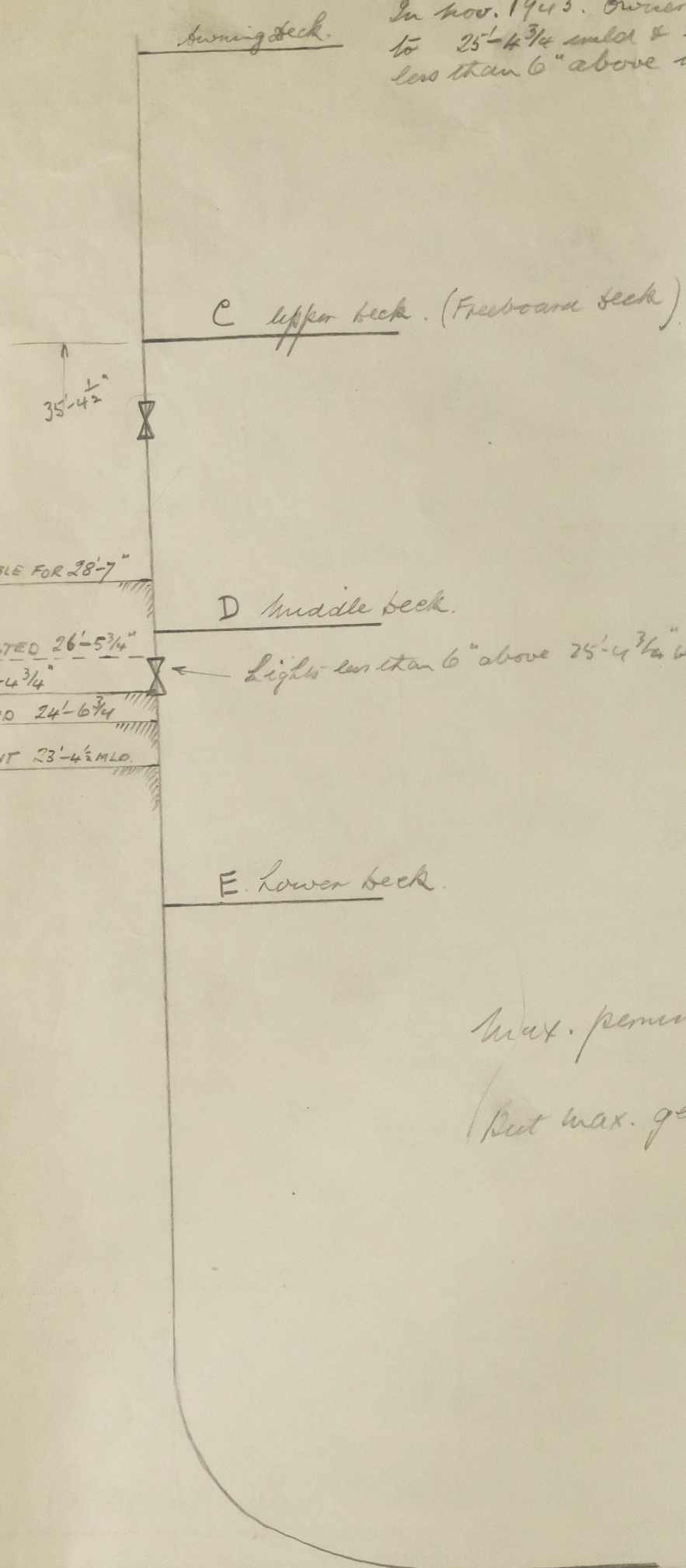
 SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck :-

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 " " ...

Converted to a freight ship in 1930 by ...
additional scantling cut them. Stated that the
draught was 25'-2 1/2" above top of keel.

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.

Convention draft assigned - 1932. Draft - 24'-6 3/4"
In 1941. owners applied for deeper loading but it
was excluded due to height of lowest side rail
In Nov. 1943. Owners requested an increase of draft
to 25'-4 3/4" and this was assigned but all rails
less than 6" above new W.L. were blanked off.



Max. permissible draught on Star
= 28'-7"
But max. geometric freeboard = 28'-1"

Trade of ship _____

Names of sister ships _____

Builder's name and yard number _____

Owners _____

Fee £ _____