

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.

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

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having *C.S.S. with Tonnage opening*

(Type of Superstructures.)

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
<i>SOMERSET COAST.</i>	<i>PROPOSED RE-ARRANGT</i>	<i>"B"</i>		

Moulded Dimensions: Length *239.80* Breadth *36.00* Depth *14.75*
Moulded displacement at moulded draught = 85 per cent. of moulded depth *2274* tons
Coefficient of fineness for use with Tables *.735*

Port of Survey _____
Date of Survey *27-10-32*
Name of Surveyor _____
Particulars of Classification *+100A.1*

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <i>14.75</i>	(a) Where D is greater than Table depth (D-Table depth) R =	Moulded Breadth (B) <i>36.00</i>
Stringer plate <i>.03</i>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>8.64</i>
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	<i>(15.99-14.75) 1.845 = -2.23</i>	Ship's Round of Beam = <i>9.00</i>
Depth for Freeboard (D) = <i>14.78</i>	If restricted by superstructures	Difference <i>.36</i>
		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <i>$\frac{.36}{4} (1 - \frac{.9888}{.0112}) = \text{NIL}$</i>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<i>77.71</i> ✓	<i>77.71</i>	<i>10.9</i>	✓	<i>77.71</i>
" overhang	<i>1.92</i> ✓	<i>.96</i>			<i>.96</i>
R.Q.D. enclosed					
" overhang					
Bridge enclosed	<i>154.42</i>	<i>154.42</i>	<i>7.9</i>	✓	<i>154.42</i>
" overhang aft	<i>1.75</i>	<i>1.31</i>			<i>1.31</i>
" overhang forward					
F'cle enclosed					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft	<i>4.00</i>	<i>2.70</i>	<i>1/2 DIFF</i>		<i>2.70</i>
" " forward					
Total	<i>239.80</i>	<i>237.10</i> ✓			<i>237.10</i> ✓

Standard Height of Superstructure *6.0* ✓
" " R.Q.D. _____
Deduction for complete superstructure *29.98* ✓
Percentage covered $\frac{S}{L} =$ *100* ✓
" " $\frac{S_1}{L} =$ *98.88* ✓
" " $\frac{E}{L} =$ *98.88* ✓
Percentage from Table, Line A.
(corrected for absence of forecastle (if required))
Percentage from Table, Line B. *98.62* ✓
(corrected for absence of forecastle (if required))
Interpolation for bridge less than 2L (if required)
Deduction = *29.98 × .9862 = -29.57* ✓

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<i>33.98</i>	1			<i>33.00</i>	<i>90.00</i>	1		<i>90.00</i>
$\frac{1}{4}$ L from A.P.		4			<i>12.84</i>	<i>40.05</i>	4		<i>160.20</i>
$\frac{2}{4}$ L "		2			<i>3.21</i>	<i>9.90</i>	2		<i>19.80</i>
Amidships		4			-	-	4		-
$\frac{3}{4}$ L from F.P.		2			<i>7.35</i>	<i>11.11</i>	2		<i>22.22</i>
$\frac{1}{4}$ L "		4			<i>29.42</i>	<i>44.95</i>	4		<i>179.80</i>
F.P.	<i>67.96</i>	1			<i>66.00</i>	<i>101.00</i>	1		<i>101.00</i>
Total				<i>305.80</i>	<i>735</i>				<i>573.02</i>

Mean actual sheer aft = *Excess* ✓
Mean standard sheer aft _____
Mean actual sheer forward = *Excess* ✓
Mean standard sheer forward _____
Length of enclosed superstructure forward of amidships =
" " aft of " = *C.S.S.*

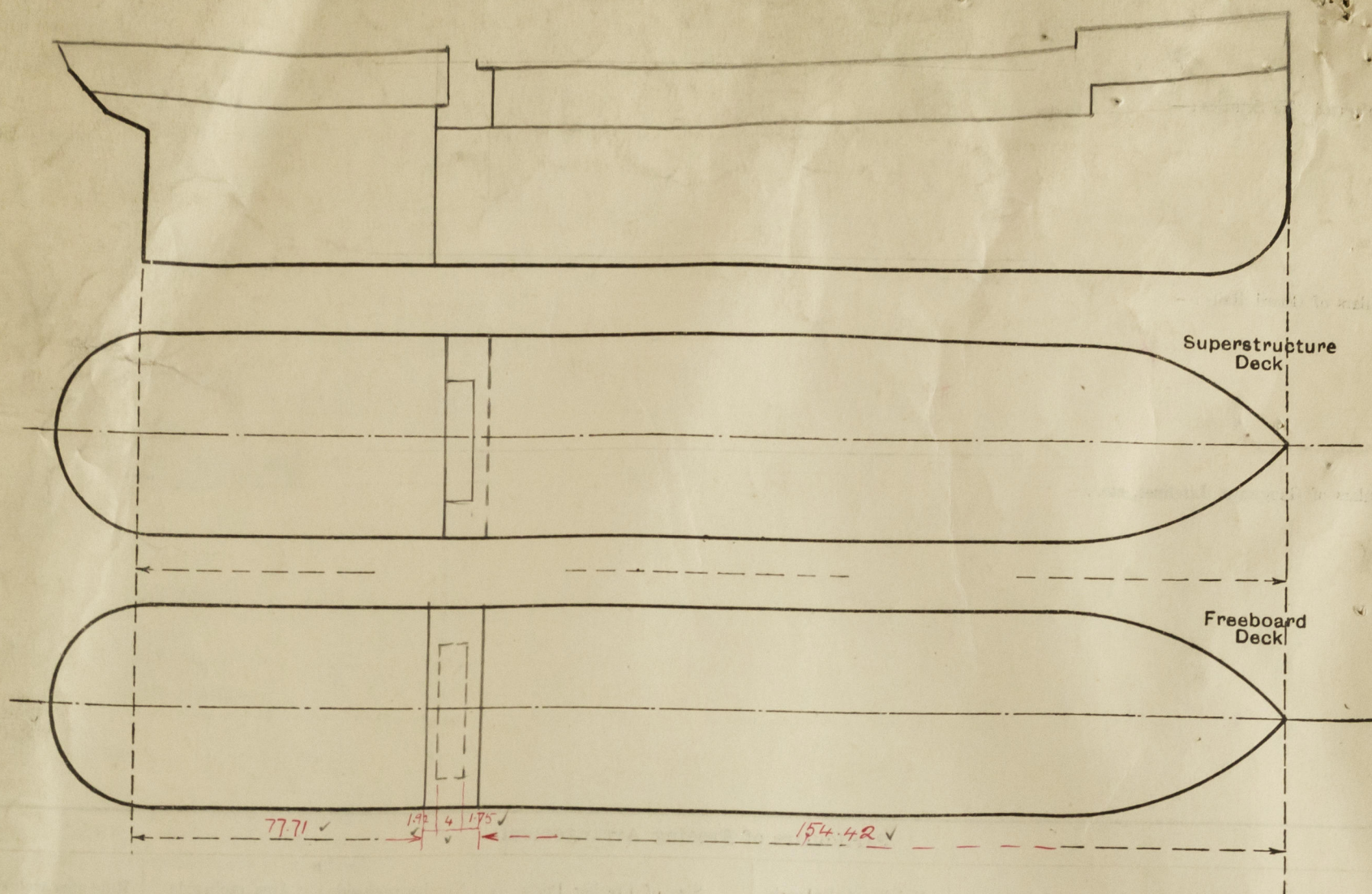
Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ *$\frac{267.22}{18} (.75 - \frac{.50}{.50}) = -3.71$* LIMITED.
If limited to maximum allowance of $\frac{1}{2}$ ins. per 100 ft. *-3.60*

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = <i>14.78</i> ✓ Summer freeboard = <i>.17</i> ✓ Moulded draught (d) = <i>14.61</i> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>3.65 = 3.34</i> ✓ Addition for Winter North Atlantic Freeboard (if required) = <i>2</i> ✓	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ <i>2700</i> ✓ Tons per inch immersion at summer load water line $T =$ <i>16.70</i> Deduction = $\frac{\Delta}{40T}$ inches = <i>4.04</i> ✓	TABULAR FREEBOARD corrected for Flush Deck (if required) Correction for coefficient <i>$\frac{.735 + .68}{1.36} = \frac{1.415}{1.36}$</i> <table><tr><th></th><th>+</th><th>-</th></tr><tr><td>Depth Correction</td><td>-</td><td><i>2.23</i> ✓</td></tr><tr><td>Deduction for superstructures</td><td>-</td><td><i>29.57</i> ✓</td></tr><tr><td>Sheer correction</td><td>-</td><td><i>3.60</i></td></tr><tr><td>Round of Beam correction</td><td>-</td><td>-</td></tr><tr><td>Correction for Thickness of Deck amidships</td><td>-</td><td>-</td></tr><tr><td>Other corrections, scantlings, etc.</td><td>-</td><td>-</td></tr><tr><td></td><td>-</td><td><i>35.40</i></td></tr></table> Summer Freeboard = MINUS <i>3.92</i>		+	-	Depth Correction	-	<i>2.23</i> ✓	Deduction for superstructures	-	<i>29.57</i> ✓	Sheer correction	-	<i>3.60</i>	Round of Beam correction	-	-	Correction for Thickness of Deck amidships	-	-	Other corrections, scantlings, etc.	-	-		-	<i>35.40</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	<i>4</i> ✓	Tropical Fresh Water Freeboard	MINUS <i>2</i> ✓
Fresh Water Line " "	<i>4</i> ✓	Fresh Water " "	MINUS <i>2</i> ✓
Tropical Line " "	<i>NIL</i>	Tropical " "	<i>2</i> LIMITED ✓
Winter Line below " "	<i>3 3/4</i> ✓	Winter " "	<i>5 3/4</i>
Winter North Atlantic Line " "	<i>5 3/4</i> ✓	Winter North Atlantic " "	<i>7 1/4</i>

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship, are to be shewn on the following sketches:—



State any special features in the construction of the ship:—

Builder's name and yard number.

Names of sister ships

Owners

Fee £

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