

Preliminary

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~
having a main quarter-deck and a fore-castle. Port of Survey _____

(Type of Superstructures) _____ Date of Survey 26-5-36

Ship's Name Miss Austins 341 Ship Nationality and Port of Registry _____ Official Number _____ Gross Tonnage _____ Date of Build _____

Moulded Dimensions: Length 214.00 Breadth 34.33 Depth 15.00
Moulded displacement at moulded draught = 85 per cent. of moulded depth 1980 tons
Coefficient of fineness for use with Tables .74

Name of Surveyor _____
Particulars of Classification _____

RETAIN

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>15.00</u>	(a) Where D is greater than Table depth (D - Table depth) R = $(15.04 - 14.27) \times 1.646 = +1.27$	Moulded Breadth (B) <u>34.33</u>
Stringer plate <u>.04</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = _____	Standard Round of Beam = $\frac{B \times 12}{50} = 8.24$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ _____	If restricted by superstructures <input checked="" type="checkbox"/>	Ship's Round of Beam = <u>8.62</u>
Depth for Freeboard (D) = <u>15.04</u>		Difference = <u>.38</u>
		Restricted to _____
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.38^2}{4} \times \frac{.2638}{.2628} = -.0203$

DEDUCTION FOR SUPERSTRUCTURES.

Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed					Standard Height of Superstructure <u>6.0</u>
" overhang					" " R.Q.D. <u>3.76</u>
R.Q.D. enclosed <u>135.90</u>	<u>135.90</u>	<u>3.75</u>	$\times \frac{3.75}{3.76} =$	<u>135.53</u>	Deduction for complete superstructure <u>27.4</u>
" overhang					Percentage covered $\frac{S}{L} = 73.72$
Bridge enclosed					" " $\frac{S_1}{L} = 73.7262$
" overhang aft					" " $\frac{E}{L} = 73.5444$
" overhang forward					Percentage from Table, Line A. <u>67.35.23</u>
F'cle enclosed <u>open</u> <u>21.84</u>	<u>21.84</u>	<u>7.0</u>		<u>21.84</u>	(corrected for absence of fore-castle (if required))
" overhang					Percentage from Table, Line B. _____
Trunk aft					(corrected for absence of fore-castle (if required))
" forward					Interpolation for bridge less than .2L (if required) _____
Tonnage opening aft					Deduction = $27.4 \times \frac{.6723}{.6735} = -18.45.42$
" " forward					
Total <u>157.74</u>	<u>157.74</u>			<u>157.37</u>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<u>31.40</u>	1			<u>31.00</u>	31.00	1		31.00
$\frac{1}{8}$ L from A.P.		4			<u>13.79</u>	13.79	4		55.16
$\frac{2}{8}$ L "		2			<u>3.41</u>	3.41	2		6.82
Amidships		4					4		
$\frac{2}{8}$ L from F.P.		2			<u>7.26</u>	7.26	2		14.52
$\frac{1}{8}$ L "		4			<u>29.37</u>	29.37	4		117.48
F.P.	<u>62.80</u>	1			<u>66.00</u>	66.00	1		66.00
Total				<u>282.60</u>					<u>290.98</u>

Mean actual sheer aft = Deficient but greater than .75% standard
Mean standard sheer aft _____

Mean actual sheer forward = Excess
Mean standard sheer forward _____

Length of enclosed superstructure forward of amidships = > .1L
" " aft of " = > .1L

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{8.38}{18} \left(.75 - \frac{3686}{3814} \right) = -.18$

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

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.74 \times .68}{1.36} = \frac{1.42}{1.36} = 1.04$
Depth to <u>Rain Quarter</u> Freeboard Deck = <u>18.78</u> Ft.	$\Delta =$ _____	Depth Correction <u>1.27</u>
Summer freeboard = <u>4.50.52</u>	Tons per inch immersion at summer load water line	Deduction for superstructures <u>18.45</u>
Moulded draught (d) = <u>14.29.26</u>	T = _____	Sheer correction <u>0.18</u>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>3.57 = 3\frac{1}{2}</u>	Deduction = $\frac{\Delta}{40T}$ inches = <u>3\frac{1}{2}</u>	Round of Beam correction <u>0.83</u>
Addition for Winter North Atlantic Freeboard (if required) = <u>5\frac{1}{2}</u>		Correction for Thickness of Deck amidships <u>45.00</u>
		Other corrections, scantlings, etc. <u>1.42</u>
		Summer Freeboard = <u>54.09.11</u>

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

Tropical Fresh Water Line above Centre of Disc <u>7"</u>	Tropical Fresh Water Freeboard <u>4'-6\frac{1}{4}"</u>
Fresh Water Line " " <u>3\frac{1}{2}"</u>	Fresh Water " " <u>3'-11\frac{1}{4}"</u>
Tropical Line " " <u>3\frac{1}{2}"</u>	Tropical " " <u>4'-2\frac{3}{4}"</u>
Winter Line below " " <u>3\frac{1}{2}"</u>	Winter " " <u>4'-2\frac{3}{4}"</u>
Winter North Atlantic Line " " <u>5\frac{1}{2}"</u>	Winter North Atlantic " " <u>4'-9\frac{3}{4}"</u>
	Winter North Atlantic " " <u>4'-11\frac{3}{4}"</u>

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	...	...	...	...	...	...	...	...	...
Dimensions of Hatchway	...	...	...	...	...	...	...	...	...
COAMINGS	Height above Deck	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...
	Stiffeners	...	...	...	...	...	...	...	...
	Brackets, Stays	...	...	...	...	...	...	...	...
HATCH BEAMS	Number	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...
	Scantling and Sketch	...	...	...	...	...	...	...	...
FORE AND AFTERS	Bearing Surface	...	...	...	...	...	...	...	...
	Number	...	...	...	...	...	...	...	...
HATCH COVERS	Material	...	...	...	...	...	...	...	...
	Thickness	...	...	...	...	...	...	...	...
	How fitted	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
Spacing of Cleats	...	...	...	...	...	...	...	...
Number of Tarpaulins	...	...	...	...	...	...	...	...

*Are wood fore and afters steel shod at all bearing surfaces?
 Are battens and wedges efficient and in good condition?
 Are tarpaulins in good condition and in accordance with rule requirements?
 Are lashings provided in accordance with rule requirements?

Particulars of fiddle, funnel and ventilator coamings :—

Particulars of Flush Bunker Scuttles :—

Particulars of Companionways :—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :—

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :—

Particulars of Gangway Cargo and Coaling Ports :—

Particulars of Scuppers and Sanitary Discharge Pipes :—

Particulars of Side Scuttles :—

Particulars of Guard Rails :—

Particulars of Gangways, Lifelines, etc. :—

RETAIN

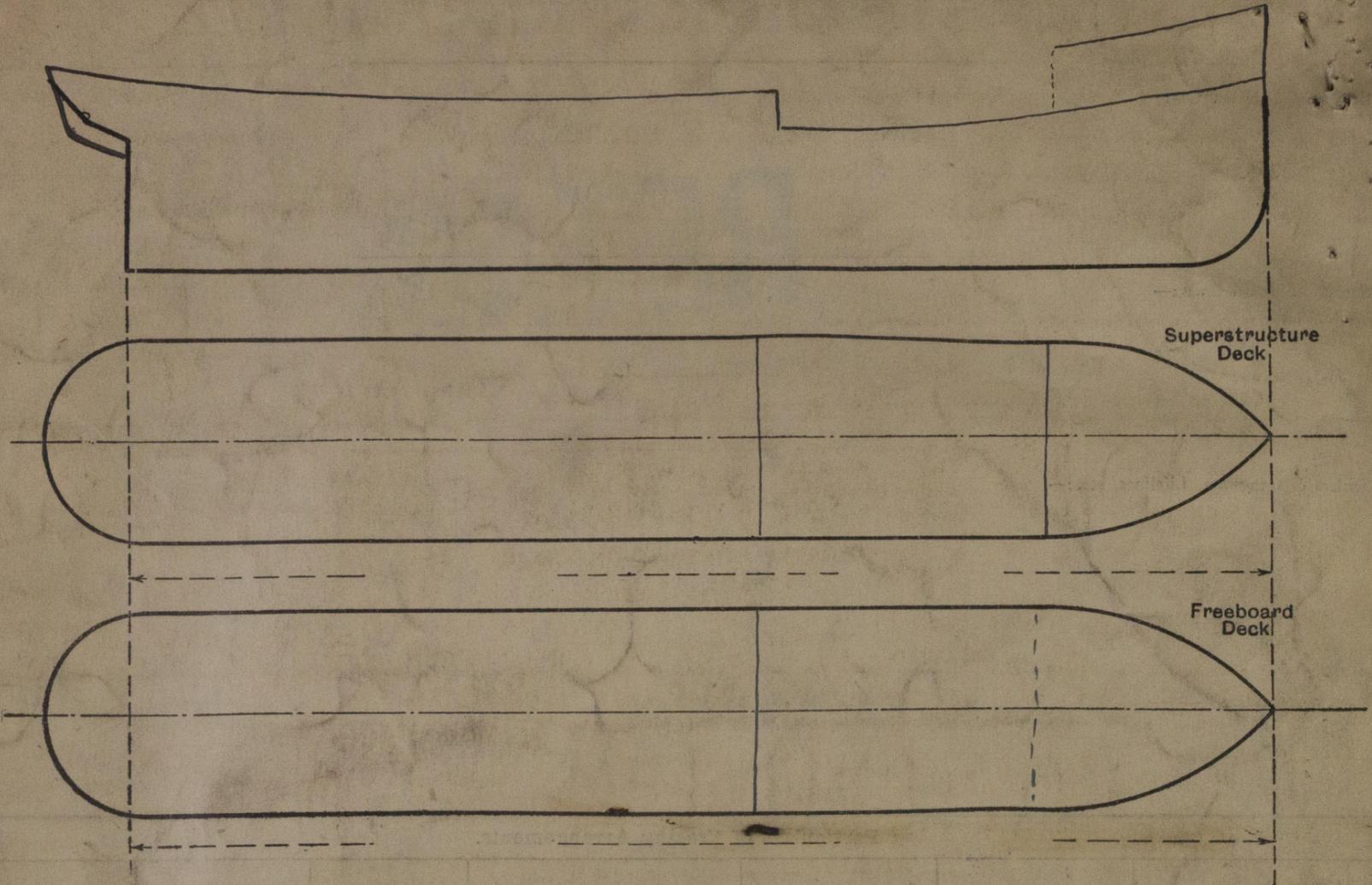
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well
Forward Well

State position of each freeing port ... } After Well :—
 (F. and A. position and height above deck edge) } Forward Well :—
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :—
 Additional area where sheer is less than standard.

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead
Raised Quarter Deck Bulkhead
Bridge, After Bulkhead
Bridge, Forward Bulkhead
Forecastle Bulkhead
Trunk, Aft
Trunk, Forward
Exposed Machinery Casings on Freeboard or Raised Quarter Decks
Exposed Machinery Casings on Superstructure Decks
Machinery Casings within Superstructures not fitted with Class I Closing Appliances
Deckhouses on Flush Deck Ships

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	...
Raised Quarter Deck Bulkhead	...
Bridge, After Bulkhead	...
Bridge, Forward Bulkhead	...
Forecastle Bulkhead	...
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	...
Exposed Machinery Casings on Superstructure Decks	...
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...
Deckhouses on Flush Deck Ships	...

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:—

$$\begin{array}{r}
 \text{Fee} \quad 21.84 \\
 \hline
 4/10 = \frac{21.40}{.44} \div 2 = .22 \\
 \hline
 21.40 \\
 \hline
 21.62
 \end{array}$$

Builder's name and yard number.....

Names of sister ships.....

Owners.....

Fee £.....

Received by me.....



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Foundation

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