

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker					Port of Survey
having					Date of Survey
(Type of Superstructures.)					Name of Surveyor
Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build	Particulars of Classification
<i>Urania</i>	<i>Swedish Stockholm</i>	<i>3579</i>	<i>628</i>	<i>1899</i>	
Moulded Dimensions: Length		Breadth	Depth		
Moulded displacement at moulded draught = 85 per cent. of moulded depth tons					
Coefficient of fineness for use with Tables					

<b>Depth for Freeboard (D)</b> Moulded depth ... Stringer plate ... Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <i>13.36</i>	<b>Depth correction</b> (a) Where D is greater than Table depth (D - Table depth) R = <i>+ 2.41"</i> (b) Where D is less than Table depth (if allowed) (Table depth - D) R = If restricted by superstructures <input checked="" type="checkbox"/>	<b>Round of Beam correction</b> Moulded Breadth (B) Standard Round of Beam = $\frac{B \times 12}{50} =$ Ship's Round of Beam = Difference Restricted to Correction = $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right) = - 0.25"$
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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 ...						
" overhang ...						
R.Q.D. enclosed ...						
" overhang ...						
Bridge enclosed ...						
" overhang aft ...						
" overhang forward ...						
Fore enclosed ...						
" overhang ...						
Trunk aft ...						
" forward ...						
Tonnage opening aft ...						
" " forward ...						
Total ...						

Standard Height of Superstructure	
" " R.Q.D.	
Deduction for complete superstructure	<i>23.33</i>
Percentage covered $\frac{S}{L} =$	
" " $\frac{S_1}{L} =$	
" " $\frac{E}{L} =$	<i>73.63%</i>
Percentage from Table, line A. <i>Timber</i>	<i>83.68%</i>
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B.	
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	
Deduction = $23.33 \times .8368 =$	<i>19.52"</i>

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...		1				1	
$\frac{1}{4}L$ from A.P. ...		4				4	
$\frac{2}{4}L$ " ...		2				2	
Amidships ...		4				4	
$\frac{3}{4}L$ from F.P. ...		2				2	
$\frac{1}{4}L$ " ...		4				4	
F.P. ...		1				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 " =	

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = + .15"$$

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.  
Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *13.36* Ft.  
Summer freeboard = *.18*  
Moulded draught (d) = *13.18*

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = *3.29" = 84 mm*

Addition for Winter North Atlantic Freeboard (if

required) =  $\frac{d}{3} = 4.39" = 112 \text{ mm}$ 

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 =  $\frac{\Delta}{40 T}$  inches*3.4**84 mm**3.4*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

*19.05*

Depth Correction ... *2.41*  
 Deduction for superstructures ... *19.52*  
 Sheer correction ... *.15*  
 Round of Beam correction ... *.25*  
 Correction for Thickness of Deck amidships ...  
 Other corrections, scantlings, etc. ... *.38*

+	-
<i>2.41</i>	<i>-</i>
<i>-</i>	<i>19.52</i>
<i>.15</i>	<i>-</i>
<i>-</i>	<i>.25</i>
<i>-</i>	<i>-</i>
<i>.38</i>	<i>-</i>
<i>2.94</i>	<i>19.77</i>

Summer Freeboard = *2.22" = 56 mm*

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

Timber Tropical Fresh Water Line above Centre of Disc	<i>3.4</i>	<i>87 mm</i>	Timber Tropical Fresh Water Freeboard	<i>3.4</i>	<i>87 mm</i>
" Fresh Water Line	<i>3.4</i>	<i>87 mm</i>	" Fresh Water	<i>3.4</i>	<i>87 mm</i>
" Tropical Line	<i>3.4</i>	<i>87 mm</i>	" Tropical	<i>3.4</i>	<i>87 mm</i>
" Winter Line below	<i>3.4</i>	<i>87 mm</i>	" Winter	<i>3.4</i>	<i>87 mm</i>
" Winter North Atlantic Line	<i>3.4</i>	<i>87 mm</i>	" Winter North Atlantic	<i>3.4</i>	<i>87 mm</i>

Summer line above centre of disc *3.4" 87 mm*

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Particulars of Scuppers and Sanitary Discharge Pipes —

The discharge pipes forward are led through the ships sides above the freeboard deck. The discharge pipes amidships are led through the ships sides 5' below the freeboard deck. Storm valves fitted to all.

Particulars of Side Scuttles:

Side lights in fore-castle and amidships have strong hinged dead lights.

Particulars of Guard Rails:—

On File 36" high with 2 rods, stanchions spaced 4'-0" apart.

Particulars of Gangways, Lifelines, etc.:—

Crows in fore-castle: Ships shore-connecting gang way will be laid between nos 1 & 2 hatchways and life lines as convenient.

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 ... ..	86.5"	39"	36" x 19"	2	9.5 sq ft.	
Forward Well ... ..	46.2	48"	36" x 22 1/2"	2	11.2 sq ft.	
State position of each freeing port ... .. { After Well:— 21'-3"; 58'-6" from AP: lower edge 7 1/2" above deck (F. and A. position and height above deck edge) { Forward Well:— 5'-8"; 30'-4" Bridge front " 9" " State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— hinged shutters and one rail fitted Additional area where sheer is less than standard. 2 mooring pipes (p.c.s) in each well.						

Particulars of Superstructures, Trunks, Casings, Deckhouses.

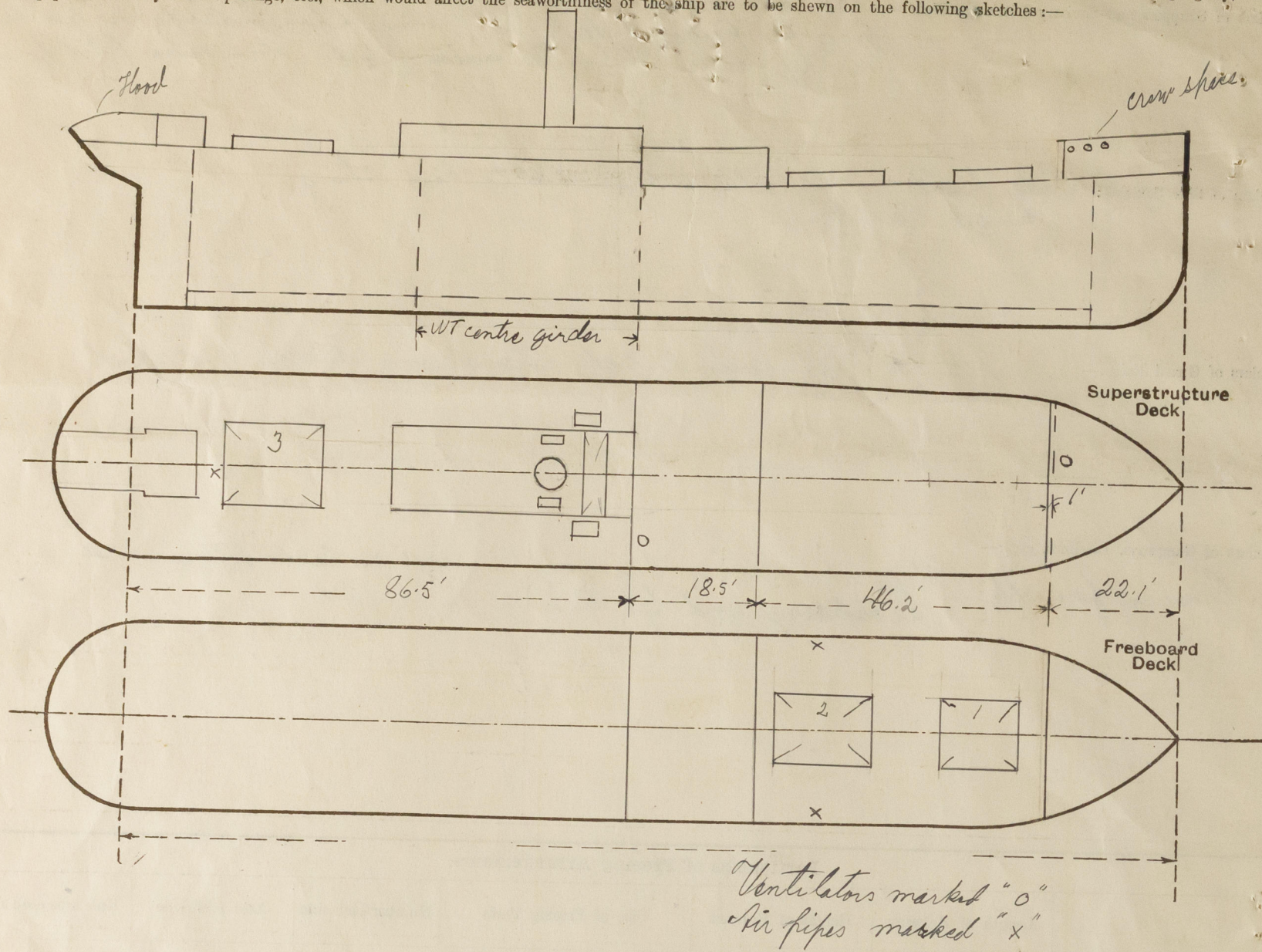
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ... ..	—							
Raised Quarter Deck Bulkhead ...	—							
Bridge, After Bulkhead ... ..	none	.28"	Wood lining inside			none	—	40" from R.Q.D.
Bridge, Forward Bulkhead ... ..	36" x 36"	.32"	Wood lining inside	30"	Wood lining inside	none	none	7.2
Fore-castle Bulkhead ... ..	none	.32"	Wood lining inside			5'-0" x 2'-0"	13 1/2"	7.2
Trunk, Aft ... ..								
Trunk, Forward ... ..								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	none	.32"	2 3/4" x 2 3/4" x 36"	33"	none	5'-2" x 2'-2"	18.5"	7'-3"
Exposed Machinery Casings on Super-structure 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 ... ..	No opening
Raised Quarter Deck Bulkhead ...	" "
Bridge, After Bulkhead ... ..	" "
Bridge, Forward Bulkhead ... ..	" "
Fore-castle Bulkhead ... ..	Steel hinged door capable of being opened from both sides. Ditto to side houses.
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	2 steel hinged doors on port side to Engine and boiler room. Ditto to both sides.
Exposed Machinery Casings on Super-structure 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:— Particulars for timber freeboard.

- Dock house and Hood fitted at after end of R.Q. deck.  
 Longitudinal subdivision of D.B. tanks as shown on sketch above.  
 Bulwarks: 48" high in forward well and 39" in after well, stiffened at upper edge by 6" x 3" x 1/2" angles and supported by 5" x 4" T angles spaced 5'-6" apart efficiently lugged to the uprights.  
 Uprights: Strong angle sockets to take 3 1/2" x 9" timbers are permanently and efficiently secured to the deck alongside the bulwark and spaced 7'-10.5" apart.  
 Lashings: Eye plates for lashings will be fitted and riveted to the sheer strake and spaced in accordance with regulations.  
 Steering gear: Steering rods and chains protected by wood casings when carrying deck cargo. A hand steering gear is fitted in the hood clear of all cargo.

Builder's name and yard number

Aktieb. Lindholmens Motala, Gothenburg. Yard no. 370

Names of sister ships

Owners

Stockholms Rederi S/B Svea, Stockholm.

Fee

kr. 150.00

Received by me



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