

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

 Index. No. \_\_\_\_\_  
 (For London Office only.)

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having Forecastle (or Raised Fore Deck)

Port of Survey Hull

(Type of Superstructures.)

Date of Survey ✓

Name of Surveyor W. Malcolm

Particulars of Classification 100 A1  
"For Inland Services"  
(Contemplated)

Ship's Name Skamting

Nationality and Port of Official Number \_\_\_\_\_

Gross Tonnage \_\_\_\_\_

Date of Build \_\_\_\_\_

Moulded Dimensions: Length 135'-0" Breadth 29'-0" Depth 16'-3"

Moulded displacement at moulded draught = 85 per cent. of moulded depth 891 tons

Coefficient of fineness for use with Tables .577 ~~.577~~ (.68 lower)

**Depth for Freeboard (D)**

Moulded depth ... ✓ 16'-3"

Stringer plate ... ✓ 1/2" ... ✓ .04

Sheathing on exposed deck .25 × 101 / 135 = .19

$T \left( \frac{L-S}{L} \right) = \frac{3 \times 101}{135} = .22$  raised deck  
(See profile plan)

Depth for Freeboard (D) = ✓ 16'-48"

**Depth correction**

(a) Where D is greater than Table depth  
 $(D - \text{Table depth}) R = (16'-48" - 9'-00") \times 1.038 = +7.76$  ✓  
7'-48"

(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) 29'-0"

Standard Round of Beam =  $\frac{B \times 12}{50} = 6.96$  ✓ 10"

Ship's Round of Beam = ✓

Difference 3'-04"

Restricted to ✓

Correction =  $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S}{L} \right) = \frac{3.04}{4} \times \frac{8148}{135} = -.62$  ✓

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	Standard Height of Superstructure	R.Q.D.
Poop enclosed ...						<u>6.0</u> <u>✓</u>	<u>✓</u>
" overhang ...							
R.Q.D. enclosed ...							
" overhang ...							
Bridge enclosed ...							
" overhang aft ...							
" overhang forward ...							
F'cle enclosed ...	<u>✓ 25.0</u>	<u>25.0</u>	<u>3.0</u>	<u>× 3/6</u>	<u>12.5</u>		
" overhang ...							
Trunk aft ...							
" forward ...							
Tonnage opening aft ...							
" forward ...							
Total ...	<u>25.0</u>	<u>25.0</u>			<u>12.5</u>		

Percentage covered  $\frac{S}{L} = 18.52$  ✓

"  $\frac{S_1}{L} = 18.52$  ✓

"  $\frac{E}{L} = 9.26$  ✓

Percentage from Table, Line A. 4.63 ✓  
 (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 =  $19.5 \times .0463 = -.90$  ✓

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<u>23.5</u>	1		<u>23.50</u>	<u>42</u>	<u>42</u>	1		<u>42</u>
1/4 L from A.P. ...	<u>10.455</u>	4		<u>41.82</u>	<u>22</u>	<u>22</u>	4		<u>88</u>
2/4 L " ...	<u>2.585</u>	2		<u>5.17</u>	<u>8</u>	<u>8</u>	2		<u>16</u>
Amidships ...	<u>-</u>	4		<u>-</u>	<u>-</u>	<u>-</u>	4		<u>-</u>
3/4 L from F.P. ...	<u>5.17</u>	2		<u>10.34</u>	<u>5</u>	<u>5</u>	2		<u>10</u>
1/4 L " ...	<u>20.91</u>	4		<u>83.64</u>	<u>25</u>	<u>25</u>	4		<u>100</u>
F.P. ...	<u>47.00</u>	1		<u>47.00</u>	<u>57</u>	<u>57</u>	1		<u>57</u>
Total ...				<u>211.47</u>					<u>313</u>

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 =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{101.53}{18} \left( .75 - \frac{.0926}{2} \right) = -3.71$  ✓

If limited on account of midship superstructure. Yes. Nil.If limited to maximum allowance of 1 1/2 ins. per 100 ft. 2.02 ✓

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = ✓ 16'-54"

Summer freeboard = ✓ 1'-71"

Moulded draught (d) = ✓ 14'-83"

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = ✓ 3'-71"  
33 3/4"

Addition for Winter North Atlantic Freeboard (if required) = 5 3/4"

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 975 - 990$  ✓

Tons per inch immersion at summer load water line

T = 7.92 ✓

Deduction =  $\frac{\Delta}{40T}$  inches = 3'-12"

14'-8" 975 7.88  
13'-9 1/2" 891 7.64

## TABULAR FREEBOARD corrected for Fresh Deck (if required)

## Correction for coefficient

	+	-
Depth Correction ...	<u>7.76</u>	<u>-</u>
Deduction for superstructures ...	<u>-</u>	<u>0.90</u>
Sheer correction ...	<u>-</u>	<u>0.62</u>
Round of Beam correction ...	<u>-</u>	<u>-</u>
Correction for Thickness of Deck amidships ...	<u>0.72</u>	<u>-</u>
Other corrections, scantlings, etc. ...	<u>-</u>	<u>-</u>
	<u>8.48</u>	<u>1.52</u>
Summer Freeboard =	<u>20.56</u>	<u>✓</u>

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

Tropical Fresh Water Line above Centre of Disc ...	<u>6 3/4"</u> <u>✓</u>	Tropical Fresh Water Freeboard ...	<u>1'-8 1/2"</u> <u>✓</u>
Fresh Water Line " " ...	<u>3"</u> <u>✓</u>	Fresh Water " " ...	<u>1'-1 3/4"</u> <u>✓</u>
Tropical Line " " ...	<u>3 3/4"</u> <u>✓</u>	Tropical " " ...	<u>1'-5 1/2"</u> <u>✓</u>
Winter Line below " " ...	<u>3 3/4"</u> <u>✓</u>	Winter " " ...	<u>1'-4 3/4"</u> <u>✓</u>
Winter North Atlantic Line " " ...	<u>5 3/4"</u> <u>✓</u>	Winter North Atlantic " " ...	<u>2'-0 1/4"</u> <u>✓</u>
			<u>2'-2 1/4"</u> <u>✓</u>



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway									
Dimensions of Hatchway									
COAMINGS	Height above Deck	...							
	Thickness	Sides	...						
	Stiffeners	Ends	...						
	Brackets, Stays	...							
HATCH BEAMS	Number	...							
	Spacing	...							
	Scantling and Sketch	...							
	Bearing Surface	...							
FORE AND AFTERS	Number	...							
	Spacing	...							
	Unsupported Lengths	...							
	Scantling* and Sketch	...							
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 fiddley, 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.:—

*to Rule Requirements*

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 Deck	...							
Exposed Machinery Casings on Superstructure Decks	...							
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...							
Deckhouses on Flush Deck Ships	...							

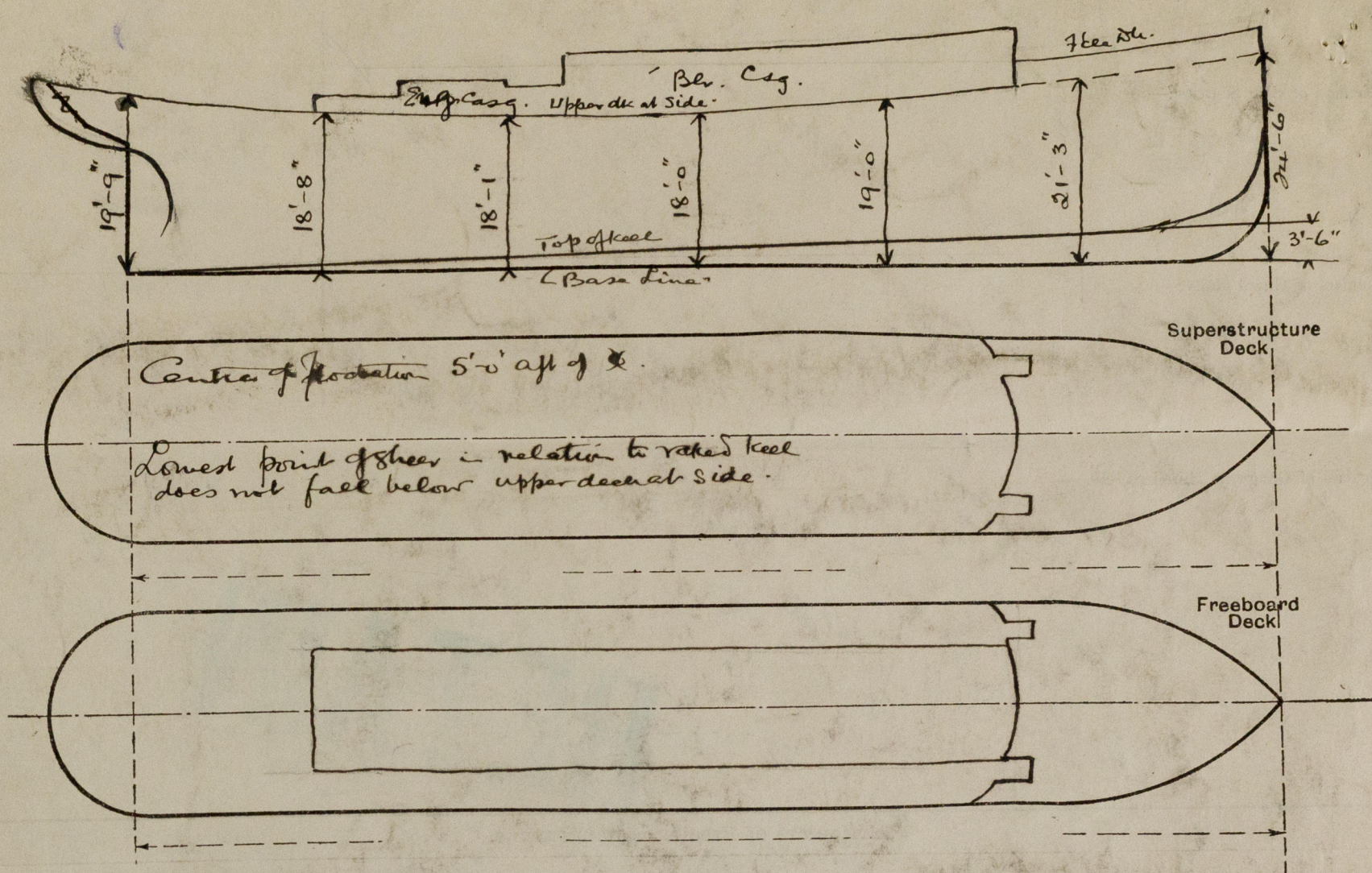
Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead	...	
Raised Quarter Deck Bulkhead	...	
Bridge, After Bulkhead	...	
Bridge, Forward Bulkhead	...	
Forecastle Bulkhead	...	
Exposed Machinery Casings on Freeboard or Raised Quarter Deck	...	
Exposed Machinery Casings on Superstructure Decks	...	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	...	
Deckhouses on Flush Deck Ships	...	

*Single door. Spring lock. Steel hinge & door. to Rule.*

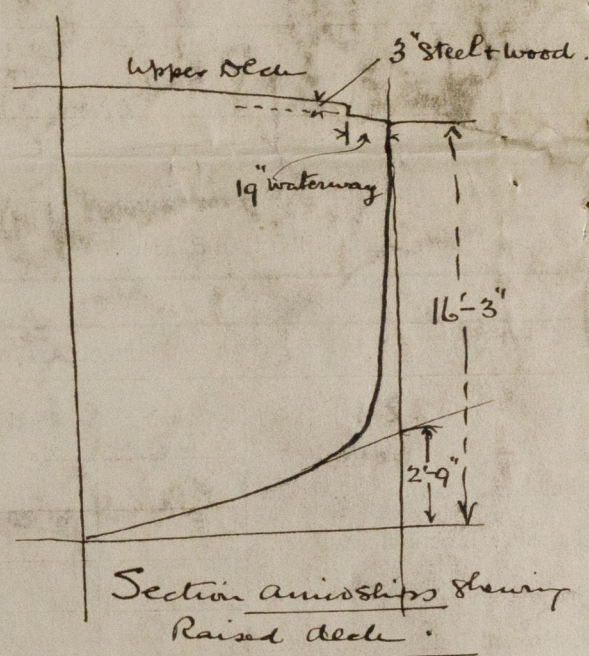


Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—



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

*On completion, find out whether  
freeboard should not be marked  
from deck at side.*



Builder's name and yard number Proposed Single screw tug.  
Names of sister ships Similar vessel "Superman". Hull No 785.  
Owners United Towing Co. Ltd.  
Fee £            Received by me