

# Amended Computation.

## Lloyd's Register of Shipping.

### SURVEYS FOR FREEBOARD.

 Index. No. 34793  
 (For London Office only.)

 Computation of Freeboard for ~~Steamer, Sailing Ship, Tanker~~  
 having a poop, bridge and forecastle.

(Type of Superstructures.)

Port of Survey

Date of Survey 7th Dec. 1936.

Name of Surveyor

Ship's Name

Nationality and Port of

Official Number

Gross Tonnage

Date of Build

British PowerBritish  
London.1653548333.991936Moulded Dimensions: Length 465.08 Breadth 61.5 Depth 34.03Moulded displacement at moulded draught = 85 per cent. of moulded depth 18372 tonsCoefficient of fineness for use with Tables .777Particulars of Classification +100A1  
Carry petroleum in bulk  
(Contemplated).

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... .. <u>34.03</u>	(a) Where D is greater than Table depth (D - Table depth) R = <u>(34.10 - 31.01) x 3 = + 9.27</u>	Moulded Breadth (B) <u>61.5</u>
Stringer plate ... .. <u>.82</u> ... <u>.07</u>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R = <u>✓</u>	Standard Round of Beam = $\frac{B \times 12}{50} = 14.76$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ <u>✓</u>	If restricted by superstructures <u>✓</u>	Ship's Round of Beam $14.75 - \frac{1}{16} = 14.44$
Depth for Freeboard (D) = <u>34.10</u>		Difference <u>.32</u>
		Restricted to
		Correction = $\frac{\text{Diff}^{\circ}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.32}{4} \times .5807 = +.05$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..	<u>101.84</u>	<u>101.84</u>	<u>8.0</u>	<u>-</u>	<u>101.84</u>
" overhang ... ..	<u>3.50</u>	<u>1.75</u>	<u>-</u>	<u>-</u>	<u>1.75</u>
R.Q.D. enclosed ... ..					
" overhang ... ..					
Bridge enclosed ... ..	<u>36.00</u>	<u>36.00</u>	<u>8.0</u>	<u>-</u>	<u>36.00</u>
" overhang aft ... ..	<u>3.00</u>	<u>2.25</u>	<u>-</u>	<u>-</u>	<u>2.25</u>
" overhang forward ... ..	<u>3.50</u>	<u>1.75</u>	<u>-</u>	<u>-</u>	<u>1.75</u>
F'cle enclosed <u>equivalent</u> ... ..	<u>49.12</u>	<u>49.12</u>	<u>8.0</u>	<u>-</u>	<u>49.12</u>
" overhang ... ..	<u>4.56</u>	<u>2.28</u>	<u>-</u>	<u>-</u>	<u>2.28</u>
Trunk aft ... ..					
" forward ... ..					
Tonnage opening aft ... ..					
" " forward ... ..					
Total ... ..	<u>201.52</u>	<u>194.99</u>			<u>194.99</u>

Standard Height of Superstructure 7.5" " R.Q.D. ✓Deduction for complete superstructure 42Percentage covered  $\frac{S}{L} = 43.33$ " "  $\frac{S_1}{L} = 41.93$ " "  $\frac{E}{L} = 41.93$ Percentage from Table, Line A. -

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. Tanker 32.93

(corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required)

Deduction =  $42 \times 32.93 = -13.83$ 

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ... ..	<u>56.51</u>	<u>1</u>		<u>56.51</u>	<u>51.00</u>	<u>51.00</u>	<u>1</u>		<u>51.00</u>
$\frac{1}{6}$ L from A.P. ... ..	<u>25.15</u>	<u>4</u>		<u>100.60</u>	<u>23.38</u>	<u>23.38</u>	<u>4</u>		<u>93.52</u>
$\frac{2}{6}$ L " ... ..	<u>6.22</u>	<u>2</u>		<u>12.44</u>	<u>5.88</u>	<u>5.88</u>	<u>2</u>		<u>11.76</u>
Amidships ... ..	<u>-</u>	<u>4</u>		<u>-</u>	<u>-</u>	<u>-</u>	<u>4</u>		<u>-</u>
$\frac{2}{6}$ L from F.P. ... ..	<u>12.43</u>	<u>2</u>		<u>24.86</u>	<u>11.13</u>	<u>11.13</u>	<u>2</u>		<u>22.26</u>
$\frac{1}{6}$ L " ... ..	<u>50.29</u>	<u>4</u>		<u>201.16</u>	<u>44.88</u>	<u>44.88</u>	<u>4</u>		<u>179.52</u>
F.P. ... ..	<u>113.02</u>	<u>1</u>		<u>113.02</u>	<u>102.00</u>	<u>102.00</u>	<u>1</u>		<u>102.00</u>
Total ... ..				<u>508.59</u>					<u>460.06</u>

Mean actual sheer aft = DeficientMean actual sheer forward = DeficientLength of enclosed superstructure forward of amidships =  
" " aft of " = } Tanker.Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{48.53}{18} \left( .75 - \frac{21.66}{2 \times 465} \right) = +1.44$ 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.

 Ft.  
 Depth to Freeboard Deck = 34.10  
 Summer freeboard = 6.79  
 Moulded draught (d) = 27.31

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches =  $6.83 = 6\frac{3}{4}$ Addition for Winter North Atlantic Freeboard (if required) =  $6.83 + 4.65 = 11.48$   
= 11 $\frac{1}{2}$ 

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 17375$ 

Tons per inch immersion at summer load water line

T = 58.67Deduction =  $\frac{\Delta}{40 T}$  inches= 7.40  
= 7 $\frac{1}{2}$ 

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

 $\frac{.777 + .68}{1.36} = \frac{1.457}{1.36} =$ Depth Correction ... .. 9.27 -Deduction for superstructures ... .. -13.83Sheer correction ... .. 1.44 -Round of Beam correction ... .. 0.05 -Correction for Thickness of Deck amidships ... .. -Other corrections, scantlings, etc. ... .. -10.76 13.83 -3.07Summer Freeboard = 81.53SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck:—Tropical Fresh Water Line above Centre of Disc ... .. 14 $\frac{1}{4}$ Fresh Water Line " " ... .. 7 $\frac{1}{2}$ Tropical Line " " ... .. 6 $\frac{3}{4}$ Winter Line below " " ... .. 6 $\frac{3}{4}$ Winter North Atlantic Line " " ... .. 11 $\frac{1}{2}$ Tropical Fresh Water Freeboard ... .. 5-7 $\frac{1}{4}$ Fresh Water " " ... .. 6-2Tropical " " ... .. 6-2 $\frac{3}{4}$ Winter " " ... .. 7-4 $\frac{1}{4}$ Winter North Atlantic " " ... .. 7-9

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## PARTICULARS OF PROTECTION TO OPENINGS, ETC.

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

## 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 ...								

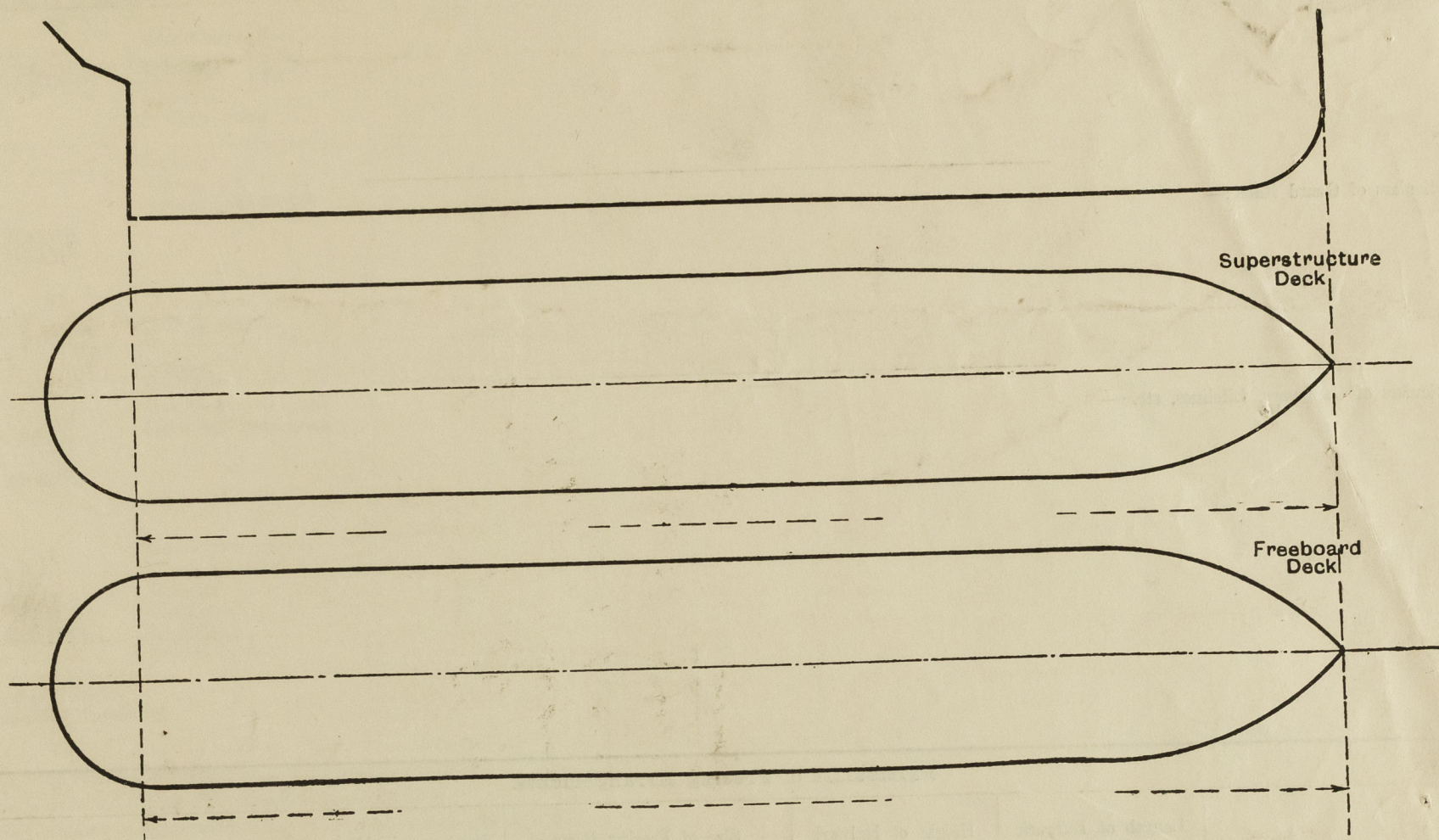
## Particulars of Closing Appliances (state if capable of being manipulated from both sides).

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 ...	



British Power

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:—



For other particulars see C11 for dated 21.11.36  
(gk. Rpt. No 57698).

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

<u>Fcl.</u>	Total length	58.25
Revs in inch	$\frac{13.5 \times 18.08}{53.42}$	= $\frac{4.57}{53.68}$ equivalent
Equivalent enclosed	$\frac{49.12}{4.56}$	= equivalent overhang.

Builder's name and yard number

Names of sister ships

Owners

Fee £ : : :

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