

Preliminary

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

 Index. No. **35285**
 (For London Office only.)

 Computation of Freeboard for Steamer, ~~Sailing Ship, Tanker~~
 having Complete Superstructure with Tonnage Opening aft.

Port of Survey

Date of Survey **28/4/37.**

Name of Surveyor

 Particulars of Classification **100 A1 with Fbd.**
Class contemplated.

 (Type of Superstructures.)
 Builder's ~~Ship's~~ Name **Bartram & Sons. No 280.**
 Nationality and Port of Registry
 Official Number
 Gross Tonnage
 Date of Build
 To CR. OF RUDDER STOCK
 Moulded Dimensions: Length **410.75** Breadth **56.29** Depth **27.67**
 Moulded displacement at moulded draught = 85 per cent. of moulded depth **11420 (given)** tons
 Coefficient of fineness for use with Tables **.735**

 Depth for Freeboard (D)
 Moulded depth **27.67**
 Stringer plate assumed **.03**
 Sheathing on exposed deck
 $T \left(\frac{L-S}{L} \right) =$ **✓**
 Depth for Freeboard (D) = **27.70**

 Depth correction
 (a) Where D is greater than Table depth
 (D - Table depth) R =
 $(27.70 - 27.38) 3 = +.96"$
 (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) = **56.29**
 Standard Round of Beam = $\frac{B \times 12}{50} =$ **13.51"**
 Ship's Round of Beam = **13.00"**
 Difference **deficient = .51"**
 Restricted to
 Correction = $\frac{\text{Diff}^a}{4} \times \left(1 - \frac{S_1}{L} \right) =$ $\frac{.51}{4} \times .0063 =$ **Nil.**

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	27.25	27.25	8.00	✓	27.25
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	378.33	378.33	8.50	✓	378.33
" overhang aft					
" overhang forward					
F'cle enclosed					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft	5.17	2.58	✓	✓	2.58
" forward					
Total	410.75	408.16			408.16

 Standard Height of Superstructure **7.50'**
 " " R.Q.D. **✓**
 Deduction for complete superstructure **42.00"**
 Percentage covered $\frac{S}{L} =$ **100.00**
 " " $\frac{S_1}{L} =$ **99.37**
 " " $\frac{E}{L} =$ **99.37**
 Percentage from Table, Line A. **99.22**
 (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 = **42.00 × .9922 = 41.67"**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	51.75	1	51.75	51.75	+12.00	119.00	1	119.00	
$\frac{1}{2}L$ from A.P.	23.03	4	92.12	49.00	49.00	52.95	4	211.80	
$\frac{2}{3}L$ "	5.69	2	11.38	12.00	12.00	13.09	2	26.18	
Amidships	-	4	-	-	-	-	4	-	
$\frac{2}{3}L$ from F.P.	11.38	2	22.76	13.50	13.50	17.16	2	34.32	
$\frac{1}{2}L$ "	46.06	4	184.24	58.00	58.00	69.42	4	277.68	
F.P.	103.50	1	103.50	144.00	144.00	156.00	1	156.00	
Total			465.75	+12.00				824.98	

 Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ $\frac{359.23}{18} (.75 - .50) =$ **-4.99"**
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 = **27.70**
 Summer freeboard = **2.69**
 Moulded draught (d) = **25.01**

 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **6.25 = 6 $\frac{1}{4}$ "**
 Addition for Winter North Atlantic Freeboard (if required) = **✓**

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 = $\frac{\Delta}{40T}$ inches
 = $\frac{d}{4} =$ **6 $\frac{1}{4}$ "**
TABULAR FREEBOARD ~~corrected for Flush Deck (if required)~~
 Correction for coefficient $\frac{.735 + .68}{1.36} =$ $\frac{1.415}{1.36}$

	+	-
Depth Correction96	-
Deduction for superstructures	-	41.67
Sheer correction	-	4.99
Round of Beam correction	-	-
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	.96	46.66
		- 45.70

Summer Freeboard = **32.14**SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck:—

Tropical Fresh Water Line above Centre of Disc	12$\frac{1}{2}$"	Tropical Fresh Water Freeboard	2$\frac{3}{4}$"
Fresh Water Line " "	6$\frac{1}{4}$"	Fresh Water " "	1$\frac{1}{4}$"
Tropical Line " "	6$\frac{1}{4}$"	Tropical " "	2$\frac{1}{2}$"
Winter Line below " "	6$\frac{1}{4}$"	Winter " "	2$\frac{1}{2}$"
Winter North Atlantic Line " "	6$\frac{1}{4}$"	Winter North Atlantic " "	3$\frac{1}{2}$"

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	...							
	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 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. :—

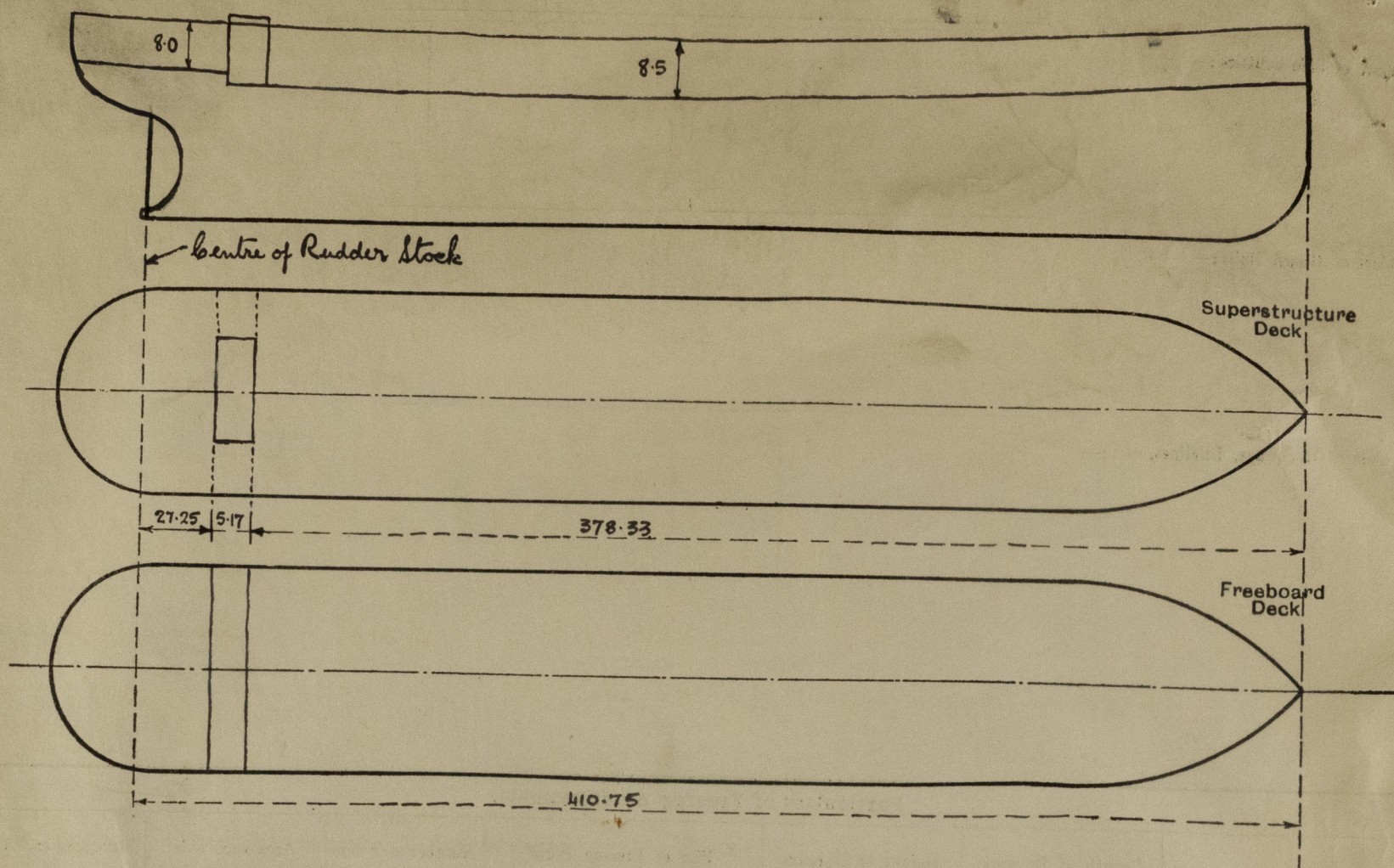
Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well ...						
Forward Well ...						

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 ...	

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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