

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, ~~Sailing Ship~~, ~~Tanker~~  
 having ~~Complete~~ ~~Shelter~~ ~~Deck~~ ~~Flush Deck~~

(Type of Superstructures.)

Port of Survey *Newcastle on Tyne*

Date of Survey *26 Oct. 1932*

Name of Surveyor *A. J. Akerley*

Ship's Name *Blythmoor*

Nationality and Port of Registry *British London*

Official Number *146540*

Gross Tonnage *6582*

Date of Build *1922*

Moulded Dimensions: Length *420* Breadth *53.75* Depth *37' to Shelter Deck*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *16053* tons

Coefficient of fineness for use with Tables *.791*

Particulars of Classification *+ 100 A1 Shelter Deck S.S. No. 2-31 with freeboard*

**Depth for Freeboard (D)**

Moulded depth ... .. *37.00*

Stringer plate ... .. *.05*

Sheathing on exposed deck

$T \left( \frac{L-S}{L} \right) =$

Depth for Freeboard (D) = *37.05*

**Depth correction**

(a) Where D is greater than Table depth  
 $(D - \text{Table depth}) R =$   
 $(37.05 - 28.00) 3.00 = 27.15$

(b) Where D is less than Table depth (if allowed)  
 $(\text{Table depth} - D) R =$

If restricted by superstructures

**Round of Beam correction**

Moulded Breadth (B) *53.75*

Standard Round of Beam =  $\frac{B \times 12}{50} = 12.90$

Ship's Round of Beam = *13*

Difference *.10*

Restricted to

Correction =  $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.10}{4} \times 1 = -.02$

## 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 ... ..					
Funnel enclosed ... ..					
" overhang ... ..					
Trunk aft ... ..					
" forward ... ..					
Tonnage opening aft ... ..					
" forward ... ..					
Total ... ..					

Standard Height of Superstructure

" " R.Q.D.

Deduction for complete superstructure

Percentage covered  $\frac{S}{L} =$  *nil*" "  $\frac{S_1}{L} =$  *nil*" "  $\frac{E}{L} =$  *nil*

Percentage from Table, Line A.

(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 = *nil*

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..	52.00	1	52.00	48	48.00	1	48.00
$\frac{1}{8}L$ from A.P. ... ..	23.14	4	92.56	21	20.93	4	83.72
$\frac{2}{8}L$ " ... ..	5.72	2	11.44	5.4	5.23	2	10.46
Amidships ... ..		4				4	
$\frac{3}{8}L$ from F.P. ... ..	11.44	2	22.88	13	13.03	2	26.06
$\frac{4}{8}L$ " ... ..	46.28	4	185.12	52	52.14	4	208.56
F.P. ... ..	104.00	1	104.00	120	120.0	1	120.00
Total ... ..			468.00				496.80

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{28.80}{18} \times .75 = -1.20$

If limited on account of midship superstructure.

Mean actual sheer aft = *Deficient*  $\frac{126.46}{138.58} = 91.3\%$

Mean standard sheer aft

Mean actual sheer forward = *Excess*

Mean standard sheer forward

Length of enclosed superstructure forward of amidships = *nil*

L

" " aft of " = *nil*

Standard	Actual
52.00	48.00
23.14	20.93
5.72	5.23
0	0
11.44	13.03
46.28	52.14
104.00	120.0
	138.58

If limited to maximum allowance of 1½ ins. per 100 ft.

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *37.05* Ft.

Summer freeboard = *9.75*

Moulded draught (d) = *27.30*

Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = *6.82 = 6¾*

Addition for Winter North Atlantic Freeboard (if required) =

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 13866$

Tons per inch immersion at summer load water line

T = *45.02*

Deduction =  $\frac{\Delta}{40 T}$  inches

= *7.70*

= *7¾*

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

Correction for coefficient

$\frac{791 + .68}{1.36} = \frac{1.471}{1.36}$

Depth Correction ... .. *27.15*

Deduction for superstructures ... .. *1.20*

Sheer correction ... .. *.02*

Round of Beam correction ... ..

Correction for Thickness of Deck amidships ... ..

Other corrections, scantlings, etc. ... ..

Summer Freeboard = *116.89*

## SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:

Tropical Fresh Water Line above Centre of Disc ... ..	<i>14½</i>
Fresh Water Line " " ... ..	<i>7¾</i>
Tropical Line " " ... ..	<i>6¾</i>
Winter Line below " " ... ..	<i>6¾</i>
Winter North Atlantic Line " " ... ..	<i>✓</i>

Tropical Fresh Water Freeboard ... .. *9' - 9"*

Fresh Water " " ... .. *5' - 6½"*

Tropical " " ... .. *9' - 1¼"*

Winter " " ... .. *9' - 2¼"*

Winter North Atlantic " " ... .. *10' - 3¾"*



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Description of Hatchway	No 1	No 2	No 3	No 4.5	To Fore Peak Hatch	Coal Hatch	Coal Hatch	On Coaming top	Aft	
Dimensions of Hatchway	26' x 22'	30'4" x 22'	23'10" x 22'	26' x 22'	3'6" x 3'6"	4'2" x 22'	2'0" x 3'	4' x 18'	3' x 3'	
COAMINGS	Height above Deck	32"	32"	32"	24"	32"	32"	12"	18"	
	Thickness	.46	.46	.46	.46	.40	.40	.35	.35	
	Stiffeners	7" B.A.	7" B.A.	7" B.A.	7" B.A.					
	Brackets, Stays	2 Stays	2 Stays at sides							
HATCH BEAMS	Number	5	6	4	5					
	Spacing	4'-4"	4'-4"	4'-9"	4'-4"					
	Scantling and Sketch	19 1/2 x 3 1/2	Same as No 1							
	Bearing Surface	3"	3"	3"	3"					
FORE AND AFTERS	Number									
	Spacing									
	Unsupported Lengths									
	Scantling* and Sketch									
HATCH COVERS	Material	Wood	Wood	Wood	Wood	Wood	Wood	Wood	Wood	
	Thickness	3"	3"	3"	3"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	
	How fitted	F&A	F&A	F&A	F&A	F&A	F&A	F&A	F&A	
	Bearing Surface	3" x 4"	3" x 4"	3" x 4"	3" x 4"	3" x 4"	3" x 4"	3" x 4"	3" x 4"	
Spacing of Cleats	6" at ends	6" at ends	6" at ends	6" at ends	8" 12" 24"	6" 18" 24"	9" 18" 24"	12" 24"	7" 21"	
Number of Tarpaulins	3	not less than 3	3	3	2	3	2	2	2	
*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:—

Stokehold gratings Covered by Strong Steel hinged covers.   
 Fiddle, funnel Ventilators in efficient condition.   
 Engine skylight of steel strongly constructed.   
 Substantial wood skylight over galley.

Particulars of Flush Bunker Scuttles:—

none

Particulars of Companionways:—

On freeboard deck to tween decks forward, steel 4' x 3'6" x 6'6" high opening at aft end, of wood 5'2" x 2'2", 16" sill, padlock fitted.   
 to Crews quarters in tween decks aft. Strong steel house openings 2 @ 5' x 2'3", 16" sill doors are of tank & can be operated from both sides.

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

1 @ 12" dia. to fore peak 36" Coaming   
 14 @ 20" " to Holds 36" "   
 8 @ 16" " to tween decks 36" "   
 2 @ 12" G.N. to Bunkers 40" high   
 2 @ 8" dia. " " 36" Coaming   
 3 @ 6" " " " 30" "   
 4 @ 12", 1 @ 8" & 1 @ 9" to after store & steen. 30 & 36" Coamings   
 All vents have wood plugs & Canvas covers & are constructed in accordance with the rules.

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

1 @ 3" dia to fore peak 3" off deck   
 20 @ 3" dia to double bottoms & 17" x 18" high   
 2 @ 7" dia " " 13" high   
 Air pipes have Canvas covers.

Particulars of Gangway Cargo and Coaling Ports:—

none





Blythwood

Particulars of Scuppers and Sanitary Discharge Pipes:—

Sanitary pipes from midship house and accommodation aft discharging below the deck are fitted with malleable cast iron valve at ship's side.

Particulars of Side Scuttles:—

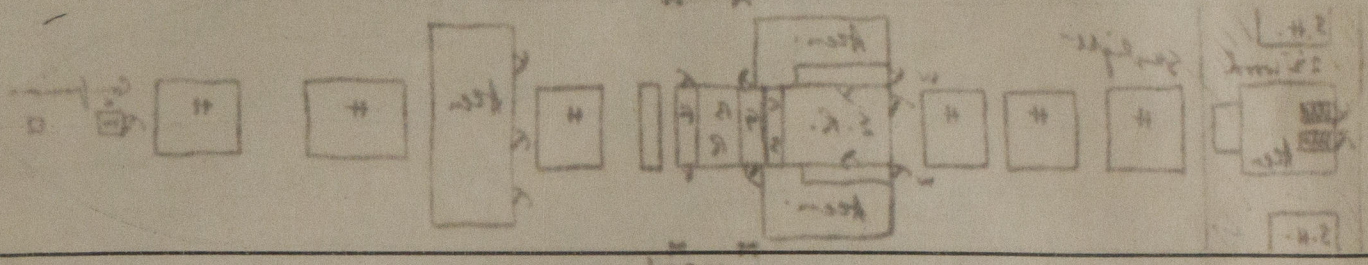
Sidelights to crew's quarters aft in forward store are fitted with strong hinged deadlights.

Particulars of Guard Rails:—

Steel Bulwark at fore and to fore end of Hatch & from fore end of officers' deckhouse to aft end of Engrs. house 3'-6" high: elsewhere rails 3'-6" high, having 3 rods & stanchions 5 ft. apart.

Particulars of Gangways, Lifelines, etc.:—

Lifelines arranged for crew in the ordinary working of ship.



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 (F. and A. position and height above deck edge) } After Well:— 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 ...	40	34	3 1/2 x 3 x 36	26	none	4 @ 4'-3" x 2'-8" 17'-18" 2 @ 4'-8" x 2'-4" 21" 1 @ 5'-2" x 3'-5" 30"		7'-6"
Exposed Machinery Casings on Superstructure Decks ...								
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...								
Deckhouses on Flush Deck Ships ...	38	34	3 1/2 x 3 x 36	36		3 @ 4'-8" x 2'-4"	18	7'-6"

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

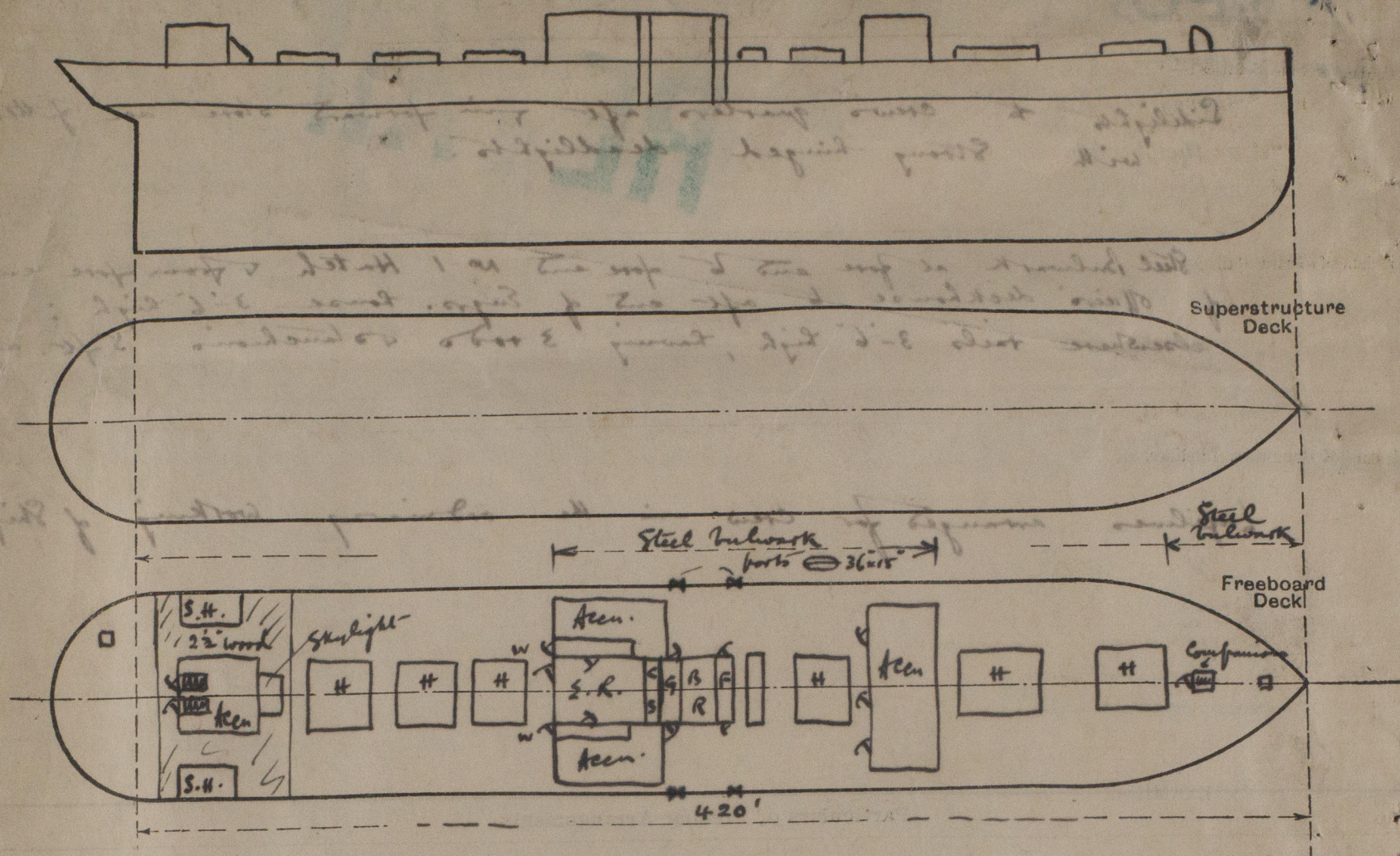
Poop Bulkhead ...	
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead ...	
Bridge, Forward Bulkhead ...	
Forecastle Bulkhead ...	
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	Steel doors to E.R., Gallery & filley, wood to accommodation, all capable of being operated from both sides.
Exposed Machinery Casings on Superstructure Decks ...	
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	
Deckhouses on Flush Deck Ships ...	Strong leak doors operated from both sides.

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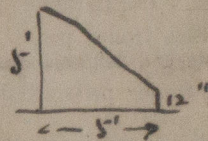
Blythman

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:—

Steel skylight to crew's quarters 5' x 6' x 5' + 12" high  
having strong leak hinged top.



Vessel examined afloat.

OK IT

Builder's name and yard number

W. Duxford & Sons Ltd.

Names of sister ships

S.S. "Castlemoor"

Owners

Moor Line Ltd.

Fee £

14 : 9 : 0

Received by me

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