

Rpt. C.11.

# Lloyd's Register of Shipping. SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker  
having *Poop, Raised Quarter Deck, Bridge + Forecastle.*

Port of Survey *Birkenhead.*

Date of Survey *April 28<sup>th</sup> 1932 and Subsequently.*

Name of Surveyor *Ab. Murray.*

Particulars of Classification *+100 A1.*

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build
<i>FOYNES.</i>	<i>British Limerick London</i>	<i>139121</i>	<i>822</i>	<i>1916-4</i>

Moulded Dimensions: Length *179.83* Breadth *30'-0"* Depth *13'-9"*  
Moulded displacement at moulded draught = 85 per cent. of moulded depth *1250* tons  
Coefficient of fineness for use with Tables *.694*

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth ... <i>13'-9"</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>(13.78 - 11.99) 1.384 = 2.40</i>	Moulded Breadth (B) <i>30'-0"</i> Standard Round of Beam = $\frac{B \times 12}{50} = \frac{360}{50} = 7.20$ Ship's Round of Beam = <i>7'-2"</i>
Stringer plate ... <i>4'-4"</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Difference <i>Excess .30</i>
Sheathing on exposed deck T $\left(\frac{L-S}{L}\right) =$	If restricted by superstructures	Restricted to Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S}{L}\right) = \frac{.30}{4} \times 2.506 = .19$
Depth for Freeboard (D) = <i>13.78</i>		

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (Si)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	18.83'	18.83'	4'-6"		18.83'
" overhang ...					
R.Q.D. enclosed ...	34.83'	34.83'	4'-0"		34.83'
" overhang ...					
Bridge enclosed ...	56.83'	56.83'	4'-3"		56.83'
" overhang aft ...	2'-4"				
" overhang forward ...	23.05'	23.05'	4'-3 1/2"		23.05'
Fore enclosed ...	2.22'	2.22'			1.22'
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	135.99	134.76			134.76

Standard Height of Superstructure *6.0*  
" " R.Q.D. *3.53*  
Deduction for complete superstructure *23.98*  
Percentage covered  $\frac{S}{L} = \frac{45.62}{44.94} = 1.01$   
Percentage from Table, Line A. *69.08*  
(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 =  $.6908 \times 23.98 = 16.57$

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	27.98	1		27.98	38.0	35.0	1		40.64
1/4 L from A.P. ...	12.45	4		49.80	16.5	15.80	4		72.36
1/2 L " ...	3.08	2		6.16	4.5	3.94	2		8.94
Amidships ...	-	4		-	-	-	4		-
3/4 L from F.P. ...	6.16	2		12.32	8.75	7.78	2		15.56
3/4 L " ...	24.91	4		99.64	32.5	31.20	4		124.80
F.P. ...	55.94	1		55.94	40.0	37.00	1		42.00
Total ...				251.84					334.30

Correction =  $\frac{\text{Difference between sums of products}}{18} = \frac{251.84 - 334.30}{18} = -4.58$   
If limited on account of midship superstructure. *✓*

Mean actual sheer aft = *4.0*  
Mean standard sheer aft = *3.53*  
Mean actual sheer forward = *4.0*  
Mean standard sheer forward = *3.53*  
Length of enclosed superstructure forward of amidships = *10.6*  
aft of " = *.5L*

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Addition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.694 + .68}{1.36} = \frac{1.374}{1.36}$
Depth to Freeboard Deck = <i>13.78</i>	$\Delta = 12.74$	Depth Correction ... <i>2.48</i>
Summer freeboard = <i>13.78</i>	Tons per inch immersion at summer load water line	Deduction for superstructures ... <i>16.57</i>
Moulded draught (d) = <i>13.54</i>	T = <i>10.8</i>	Sheer correction ... <i>1.10</i>
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>3.38</i>	Deduction = $\frac{\Delta}{40 T}$ inches = <i>2.96</i>	Round of Beam correction ... <i>.02</i>
Addition for Winter North Atlantic Freeboard (if required) = <i>5 1/2</i>		Correction for Thickness of Deck amidships ...
		Other corrections, scantlings, etc. ...
		Summer Freeboard = <i>43.16</i>

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line.		Wood, Steel, Deck: -	
Tropical Fresh Water Line above Centre of Disc	<i>5 3/4</i>	Tropical Fresh Water Freeboard	<i>MINUS 0'-1 1/2"</i>
Fresh Water Line	<i>5 3/4</i>	Fresh Water	<i>MINUS 0'-0 3/4"</i>
Tropical Line	<i>5 3/4</i>	Tropical LIMITED	<i>MINUS 0'-2"</i>
Winter Line	<i>5 3/4</i>	Winter	<i>MINUS 0'-7 1/2"</i>
Winter North Atlantic Line	<i>5 3/4</i>	Winter North Atlantic	<i>MINUS 0'-9 1/2"</i>

112 MAY 1932

RECEIVED  
29 FEB 1936  
RECEIVED  
W/394-02141172



# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
Description of Hatchway	No. 1.	No. 2.	No. 3.	At Peak Hatch					
Dimensions of Hatchway	11'0" x 9'0"	13'6" x 14'0"	20'2" x 11'0"	4'5" x 5'10"					
COAMINGS									
Height above Deck	2'6"	3'0"	2'6"	2'6"					
Thickness	.36	.44	.44	.36					
Stiffeners	.36	.40	.40	.36					
Brackets, Stays	1	✓	✓	✓					
HATCH BEAMS									
Number	1	2	3	5					
Spacing	5'6"	4'4" x 4'10"	5'0"	5'0"					
Scantling and Sketch	1 1/2" x 2 1/2" x 24"	1 1/2" x 3" x 7 1/2"	1 1/2" x 3" x 7 1/2"	1 1/2" x 3" x 7 1/2"	None				
Bearing Surface	3"	3"	3"	3"					
FORE AND AFTERS									
Number	1								
Spacing	4'6"								
Unsupported Lengths	5'0"								
Scantling* and Sketch	7" x 6"	None	None	None					
Bearing Surface	3"								
HATCH COVERS									
Material	Spruce	Spruce	Spruce	Spruce					
Thickness	3"	3"	3"	3"					
How fitted	Shutters	F.A.	F.A.	Shutters					
Bearing Surface	2"	3"	3"	3"					
Spacing of Cleats	24"	24"	24"	24"					
Number of Tarpaulins	2	2	2	2					

\*Are wood fore and afters steel shod at all bearing surfaces? *Yes.*  
 Are battens and wedges efficient and in good condition? *Yes.*  
 Are tarpaulins in good condition and in accordance with rule requirements? *Yes.*  
 Are lashings provided in accordance with rule requirements? *Yes.*

Particulars of fidley, funnel and ventilator coamings:— *Fidley Funnel & Ventilator coamings in efficient condition.*  
*E.R. Skylights strongly constructed of steel with steel hinged flaps.*  
*Fidley gratings covered with steel hinged covers.*

Particulars of Flush Bunker Scuttles:— *One Port and one Starboard on Bridge deck. 18" dia Cast. screw fitting fitted with chains*

Particulars of Companionways:—

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—  
 2-6" Vents, coamings 3'0" x 1/4" on Forecastle Deck to Forecastle.  
 1-6" Vent, coaming 6" x 1/4" on Forecastle Deck to Forecastle.  
 4-15" Vents, coamings 3'0" x 1/4" on Foreboard Deck to Holds.  
 1-8" Vent, coaming 3'0" x 1/4" on Foreboard Deck to Hold.  
 2-15" Vents, coaming 3'0" x 1/4" on R.D. Deck to Aftd.  
 1-8" Vent coaming 3'0" x 1/4" on R.D. Deck to Tunnel.

*Ventilator coamings fitted with wood plugs & canvas covers.*

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

3" Air pipes 18" high on Forecastle Deck to F.P. Tank.  
 3" Air pipes 36" high on Foreboard Deck to DB Tank.  
 2-3" Air pipes 36" high on Foreboard Deck to DB Tanks.  
 2-3" Air pipes 30" high on R.D. Deck to DB Tanks.  
 2-3" Air pipes 18" high on Poop Deck to A.P. Tank.

*Air pipes fitted with wood plugs.*  
*All air pipes have snifting hole in top of bend.*

Particulars of Gangway Cargo and Coaling Ports:—

*None.*

Particulars of Scuppers and Sanitary Discharge Pipes:— *Stringer Scuppers 5"x2 1/2" 2 pipe scuppers from Poop. 3" open pipes above foreboard deck.*  
*All Sanitary Discharge pipes fitted with storm valves at the Ship's side.*

Particulars of Side Scuttles:—

*All Side Scuttles of substantial construction and are fitted with deadlights.*

Particulars of Guard Rails:—

*On Forecastle Deck. 3'3" high, stanchions spaced 4'6" apart, 3 rails.*  
*On Bridge Deck. 3'5" high, stanchions spaced 4'7" apart, 4 rails.*  
*On Poop. 3'2" high, stanchions spaced 3'7" apart, 2 rails.*

Particulars of Gangways, Lifelines, etc.:—

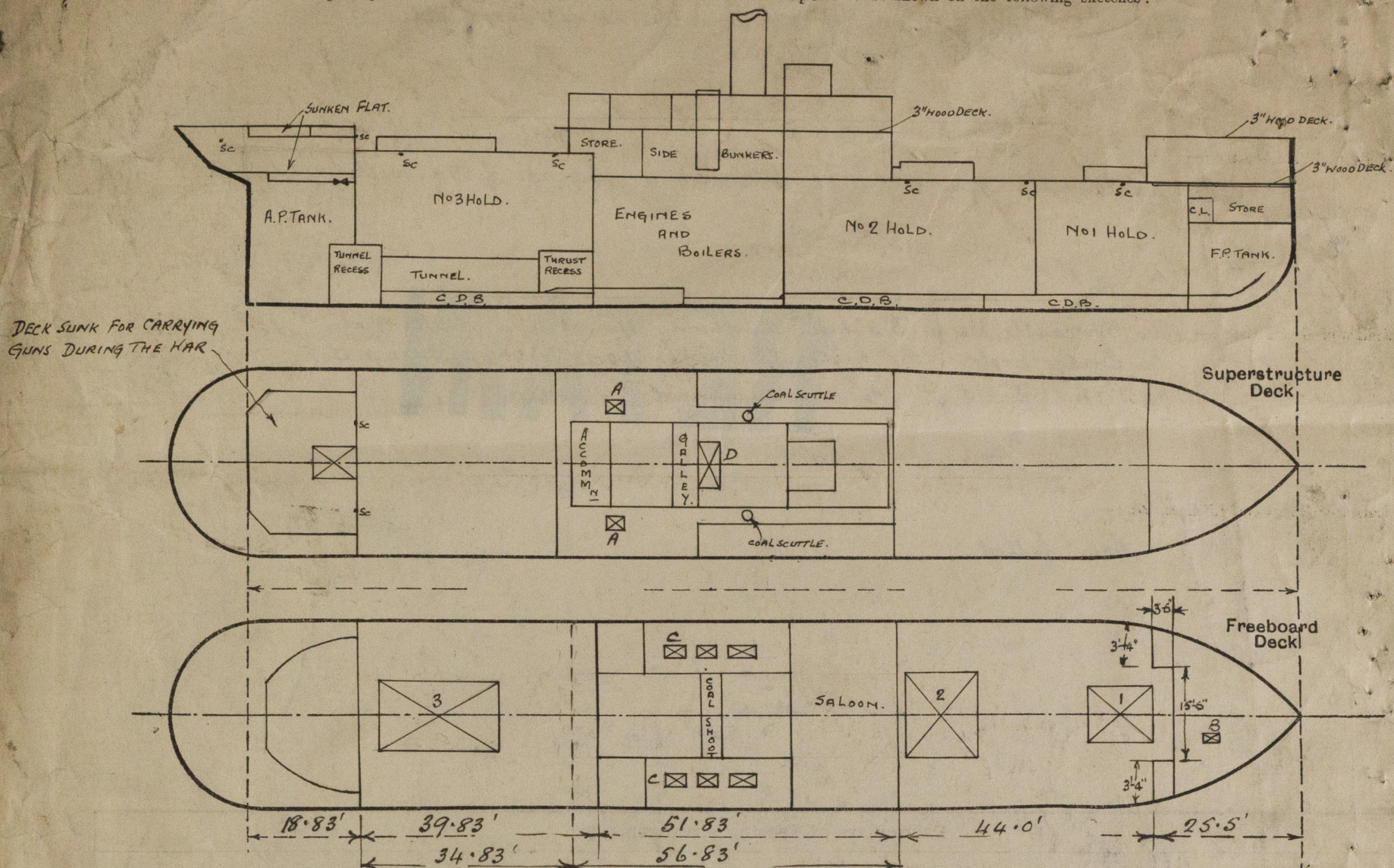
*None fitted.*

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	34'-8"	3'-4"	3'-0" x 1'-8"	2	<del>10.00</del> 4.96 sq. ft.	10.-
Forward Well	44'-0"	7'-6"	2'-6" x 1'-5"	3	10.65 sq. ft.	11.-
State position of each freeing port (F. and A. position and height above deck edge) After Well:— <i>13'-6" 8'-0" Bridge off Bkd.</i> Forward Well:— <i>13'-3" 7'-3" 14'-6" Fore Bkd. Sub 9"</i>						
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— <i>hinged shutters.</i>						
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	—	5/16"	4x3 x 7/16"	2'-0"	None	—	—	7'-6"
Raised Quarter Deck Bulkhead	—	1/4"	2 brackets to coaming	—	None	None	—	—
Bridge, After Bulkhead	—	1/4"	2'-6" x 2'-5" x 3/8"	—	Brackets top & bottom	None	—	4'-8" steel to under wood
Bridge, Forward Bulkhead	3/8"	5/16"	6x3 x 7/16 B.A.	2'-6"	—	None	—	4'-3 1/2" steel to under wood
Forecastle Bulkhead	3/8"	1/4"	3 x 2 1/2 x 7/16"	3'-9"	None	4'-0" x 22"	21"	—
Trunk, Aft	✓	—	—	—	—	—	—	—
Trunk, Forward	✓	—	—	—	—	—	—	—
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	5/16"	1/4"	2 1/2 x 2 1/2 x 1/4"	3'-0"	None	None	—	4'-3"
Exposed Machinery Casings on Superstructure Decks	5/16"	5/16"	2 1/2 x 2 1/2 x 3/8"	2'-4"	Bkts at top	3'-11" x 22"	14"	6'-6"
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	✓	<i>No openings</i>						
Raised Quarter Deck Bulkhead	✓	<i>No openings</i>						
Bridge, After Bulkhead	✓	<i>No openings</i>						
Bridge, Forward Bulkhead	✓	<i>No openings</i>						
Forecastle Bulkhead	✓	<i>Strong steel sword hinged doors Manipulated from both sides.</i>						
Exposed Machinery Casings on Freeboard or Raised Quarter Decks	✓	<i>Strong steel hinged doors Manipulated from both sides</i>						
Exposed Machinery Casings on Superstructure Decks	✓	<i>Strong steel hinged doors Manipulated from both sides</i>						
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	✓	<i>Strong steel hinged doors Manipulated from both sides</i>						
Deckhouses on Flush Deck Ships	✓	<i>Strong steel hinged doors Manipulated from both sides</i>						



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:—



Hatches "A" on bridge deck 3'4" x 2'6" 9" wood coaming 2 1/2" thick. Cleats spaced 2'4" x 1'6" 11 tarpaulins. 1/2" spruce wood covers rabbeted over coamings, leading to intact stores above the freeboard deck.  
 "B" 2'0" x 20" opening from within Forecastle to A.P. store. 3" plug cover, no battening angle.  
 "C" Three trimming hatches in side bunkers on freeboard deck openings 5'7" x 3'0", 3'4" x 3'0" and 4'8" x 3'0" no coamings.  
 D. Bunker Hatch on side top. 3'6" x 9'6" 12" coaming cleats spaced 24". 3" spruce covers fitted F&A bearing 2 1/2" 2 tarpaulins.  
 State any special features in the construction of the ship:— *all small hatchways supplied with Tarpaulins (2)*

FORECASTLE:  $L = 25.5$  COVERED.  
 $RECESS = \frac{15.5 \times 3.5}{22.15} = 2.45$  OVERHANG  
 EQUIV CLOSED: 23.05

Builder's name and yard number *Goole Shipbuilding & Repairing Co. Ltd. No 175.*

of other ships

Owners *Limerick P.S. Co. Ltd. (Sg K Croycroft Mgr)*

Fee £ *6 : 16 : 0*

Received by me



© 2020  
 Lloyd's Register  
 Foundation