

Rpt. C.11.

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

18129.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having *Foucault, Ling Bridge & Pooh*

Port of Survey *Luth*

(Type of Superstructures.)

Ship's Name *GLITRA* Nationality and Port of Registry *British* Official Number *127074* Gross Tonnage *2684* Date of Build *1910 2*

Moulded Dimensions: Length *331.0* Breadth *47.31* Depth *23.0*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *6580 7022* tons

Coefficient of fineness for use with Tables *.803* (LETTER 11-2-32.)

Date of Survey *February 32.*

Name of Survey *Ernest Edwards*

Particulars of Classification *+100A1*

Depth for Freeboard (D)		Depth correction		Round of Beam correction	
Moulded depth	23.0	(a) Where D is greater than Table depth (D - Table depth) R =		Moulded Breadth (B)	47.31
Stringer plate	.038	(23.04 - 22.07) x 2.546 =	+2.47	Standard Round of Beam = $\frac{B \times 12}{50}$	11.35
Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth - D) R =		Ship's Round of Beam	11.83
T $\left(\frac{L-S}{L}\right) =$				Difference	.48
Depth for Freeboard (D) =	23.038	If restricted by superstructures		Restricted to	
	.04			Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right)$	$\frac{.48}{4} (1 - \frac{78.18}{2182}) = -.03$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed	27.12	27.54	7.8		27.13	
" overhang	8.2	.35			.35	
R.Q.D. enclosed						
" overhang		.08				
Bridge enclosed	202.1	202.44	7.8		202.08	
" overhang aft	3	.19			.19	
" overhang forward	3	.12			.12	
F'cle enclosed	28.11	28.44	7.8		28.92	
" overhang		.92				
Trunk aft						
" forward						
Tonnage opening aft						
" forward	.33	258.79				
Total	259.4	257.92			258.79	

Standard Height of Superstructure *6.672 6.81*

" " R.Q.D. ☒

Deduction for complete superstructure *37.40*

Percentage covered  $\frac{S}{L} = 78.38$

"  $\frac{S_1}{L} = 78.18$

"  $\frac{E}{L} = 78.18$

Percentage from Table, Line A. ☒

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. *73.06*

(corrected for absence of forecastle (if required))

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

Deduction =  $37.40 \times 73.06 = -27.32$

## SHEER CORRECTION.

Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product	
A.P.	43.075	1	43.075	53.5	53.50	1	53.50	Mean actual sheer aft = EXCESS
1/2 L from A.P.	19.178	4	76.712	21.82	21.82	4	87.28	Mean actual sheer forward = EXCESS
3/4 L	4.74	2	9.48	5.45	5.45	2	10.90	Mean standard sheer forward
Amidships		4				4		Length of enclosed superstructure forward of amidships = 305.4
3/4 L from F.P.	9.48	2	18.96	10.09	10.09	2	20.18	" aft of " = 305.4
1/2 L	38.345	4	153.38	40.38	40.38	4	161.52	
F.P.	86.75	1	86.75	96.25	96.25	1	96.25	
Total	200.955		307.745	229.25			429.63	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L}\right) = \frac{41.77}{18} \left(75 - \frac{3919}{3581}\right) = -.83$

If limited on account of midship superstructure. ☒

If limited to maximum allowance of 1 1/2 ins. per 100 ft. ☒

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 23.04

Summer freeboard = 2.52

Moulded draught (d) = 20.52

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = 5.13 = 5 1/4

## Addition for Winter North Atlantic Freeboard (if required)

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 7055.7438$

Tons per inch immersion at summer load water line

T = 33

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

5.34 5.63 = 5 3/4

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

Correction for coefficient  $\frac{803+68}{1.36} = \frac{1.483}{1.36}$

Depth Correction ... 2.47

Deduction for superstructures ... 27.32

Sheer correction ... .83

Round of Beam correction ... .03

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. ...

2.47 28.18 - 25.71

Summer Freeboard = 30.19

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

Tropical Fresh Water Line above Centre of Disc ... 11"

Fresh Water Line " " ... 5 3/4"

Tropical Line " " ... 5 1/4"

Winter Line below " " ... 5 1/4"

Winter North Atlantic Line " " ...

Tropical Fresh Water Freeboard ... 1 1/4"

Fresh Water " " ... 2 1/2"

Tropical " " ... 2 1/2"

Winter " " ... 2 1/2"

Winter North Atlantic " " ...

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## PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
		N <sup>o</sup> 1 N <sup>o</sup> 2 N <sup>o</sup> 3 N <sup>o</sup> 4 N <sup>o</sup> 5					N <sup>o</sup> 2 N <sup>o</sup> 3 N <sup>o</sup> 4				
Description of Hatchway		Forward D <sup>m</sup> Forward Bulk Midge Bulk Midge Bulk Midge After Bulk Forward D <sup>m</sup>					Forward D <sup>m</sup> Below Bulk D <sup>m</sup>				
Dimensions of Hatchway		25'x17' 25'x17' 18'9"x14' 25'x17' 25'x17'					25'x17' 18'9"x14' 25'x17'				
COAMINGS	Height above Deck	36" 30" 30" 30" 36"					18" 18" 18"				
	Thickness	.44" .44" .44" .44" .44"					.38" .38" .38"				
	Stiffeners	Horizontal 6x3x40 L Nil Nil Nil 6x3x40 L					Heavy D mild heading				
	Brackets, Stays	Nil Nil Nil Nil Nil					Nil Nil Nil				
HATCH BEAMS	Number	5 5 3 5 5					5 3 5				
	Spacing	5'-0" 5'-0" 6'-4" 5'-0" 5'-0"					5'-0" 6'-4" 5'-0"				
	Scantling and Sketch	angles 4x3x40 3/4"x16" → 20 → 20 → 20 → 20					angles 4x3x40 3/4"x16" → 20 → 20 → 20				
	Bearing Surface	JL					JL				
FORE AND AFTERS	Number										
	Spacing										
	Unsupported Lengths										
	Scantling* and Sketch										
Bearing Surface											
HATCH COVERS	Material	White Pine					W.P.				
	Thickness	3"					3" → 20 → 20				
	How fitted	Fore & Aft					Fore & Aft				
	Bearing Surface	3"					3"				
Spacing of Cleats		24"					24" 24" 24"				
Number of Tarpaulins		3									
<p>*Are wood fore and afters steel shod at all bearing surfaces? <i>now</i></p> <p>Are battens and wedges efficient and in good condition? <i>yes</i></p> <p>Are tarpaulins in good condition and in accordance with rule requirements? <i>yes</i></p> <p>Are lashings provided in accordance with rule requirements? <i>yes</i></p>											

Particulars of fiddle, funnel and ventilator coamings:— *situated on top of steel casing over Bridge Dr.  
condition satisfactory.*

Liddley openings covered by strong steel hinged covers.

Particulars of Flush Bunker Scuttles:—

NIL

Particulars of Companionways: — Companion to Crews Quarters on Deck D<sup>th</sup>, 4'-0" x 3'-0", of steel  $\frac{5}{20}$  plate. Having solid transverse bulkheads at after end, with 12" construction steel.

NOTE:- there are no opening through foreboard D<sup>th</sup> in way of Pook - except bolted manhole cover to after Peak -

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—  
 Hull decks & on Bridge-Deck are, 17" diam. 36" high, of steel plate 40, bottom angles  
 3x3x36 rivets  $3\frac{1}{2}$ " apart 3 C.P.C. The deck plating in way is in good condition, not  
 specially strengthened but bottom angles extend up deck beams &  
 Plugs & covers in good condition. Also on Bridge deck one Vent. to each beam  
 12" diam 30" high of 40 steel plate and two Sampson ports forming Vents in good condition.

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—			
Air Pipes to Fore Peak Tank	3 1/2"	ABOVE DECK	6" on Foreboard DECK Under Foil
" " " No 1 Double Bottom Tank	2"	10"	" " "
" " " No 2 " "	2"	10"	" on Bridge DECK
" " " No 3 " "	2"	10"	" on Fiddley Top
" " " No 4 " "	7"	10"	" in Engine Room
" " " No 5 " "	2"	10"	" on Bridge DECK
" " " No 6 " "	2"	10"	" " "
" " " after Peak Tank	3"	1-6"	on Post DECK

Condition good.  
Air pipes provided with  
wood plugs for closing

Particulars of Gangway Cargo and Coaling Ports:—

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Particulars of Scuppers and Sanitary Discharge Pipes — Sanitary discharge pipes to crew's quarters in Port do not pass through foreboard deck, valves are fitted at opening in shell, not inboard. Sanitary discharge pipes to officers quarters in Bridge, <sup>as per</sup> pass through foreboard deck, valves are fitted at openings in shell, the above mentioned pipes are in good condition, valves not fitted at inboard end. There are two scuppers Port & Starboard in way of Bridge that pass through foreboard deck, 3" dia., are plugged at shell with cement and have steel plate bolted water tight at deck.

Particulars of Side Scuttles:

Particulars of Side Scuttles:

NIL

Particulars of Guard Rails:— at Post, Bridge & Felli:— Solid forged stanchions spaced 4'-6" apart; having three steel rails 12" apart.

Particulars of Gangways, Lifelines, etc. :- To cross quarters:-  
an efficient gangway is fitted from after end of Bridge Deck to fore end of Poop Deck, on Starboard side of Vessel, having solid forged stanchions & steel life line.  
a life line has been fitted on Port & Starboard sides of the forward well. These are fastened to eyebolts at the forecastle & bridge front bulkheads & can be adjusted with block & tackle.

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 ... ..	37'-6"	4'-0"	2-9" x 2'-0"	2	11'-0" <sup>+</sup> $\phi$	10 <sup>-25</sup> <sup>++</sup> $\phi$
Forward Well ... ..	35-6	4'-0"	2-9" x 2'-0"	2	11'-0" <sup>+</sup> $\phi$	10 <sup>-25</sup> <sup>++</sup> $\phi$
<p>State position of each freeing port ... .. } After Well :— 12'-6" aft end of Bridge. 6'-9" fore for Foot. 12" above deck  (F. and A. position and height above deck edge) { Forward Well :— 11'-2" " " Foeli 6'-9" " " Bridge 12" "</p> <p>State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such :— Fitted with shutters.  Bars also are fitted spaced 9" apart.</p> <p>Additional area where sheer is less than standard.</p>						

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ... ..	40	35	5 x 3 1/2	32" apart	none	none except to cross WC spaces which are spaced 22" apart	22"	7'-8"
Raised Quarter Deck Bulkhead ...	✓		3 x 3 x 3/8 L - also 7 1/2 x 3 1/2 L -	32" apart	none	none		7'-8"
Bridge, After Bulkhead ... ..	32	25	4 1/2 x 3 1/2 L -	48"	beaknuts T & B	none, original openings have been plated over		7'-8"
Bridge, Forward Bulkhead ... ..	40	35	7 1/2 x 3 1/2 L -	30"	beaknuts T & B	3'-0" x 3'-6"	2.5	7'-8"
Forecastle Bulkhead ... ..	side houses only							
Trunk, Aft ... ..	/							
Trunk, Forward ... ..								
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...								
Exposed Machinery Casings on Superstructure Decks ... ..	40	25	3 1/2 x 3 1/2	3'-4"	none	2'-4" x 2'-8"	20"	7'-0"
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	...	...	

*Manipulated from after side only*  
*Two strong backs fitted 3x3" channel*  
*Steel doors hinged with strong lock can be manipulated from both sides*

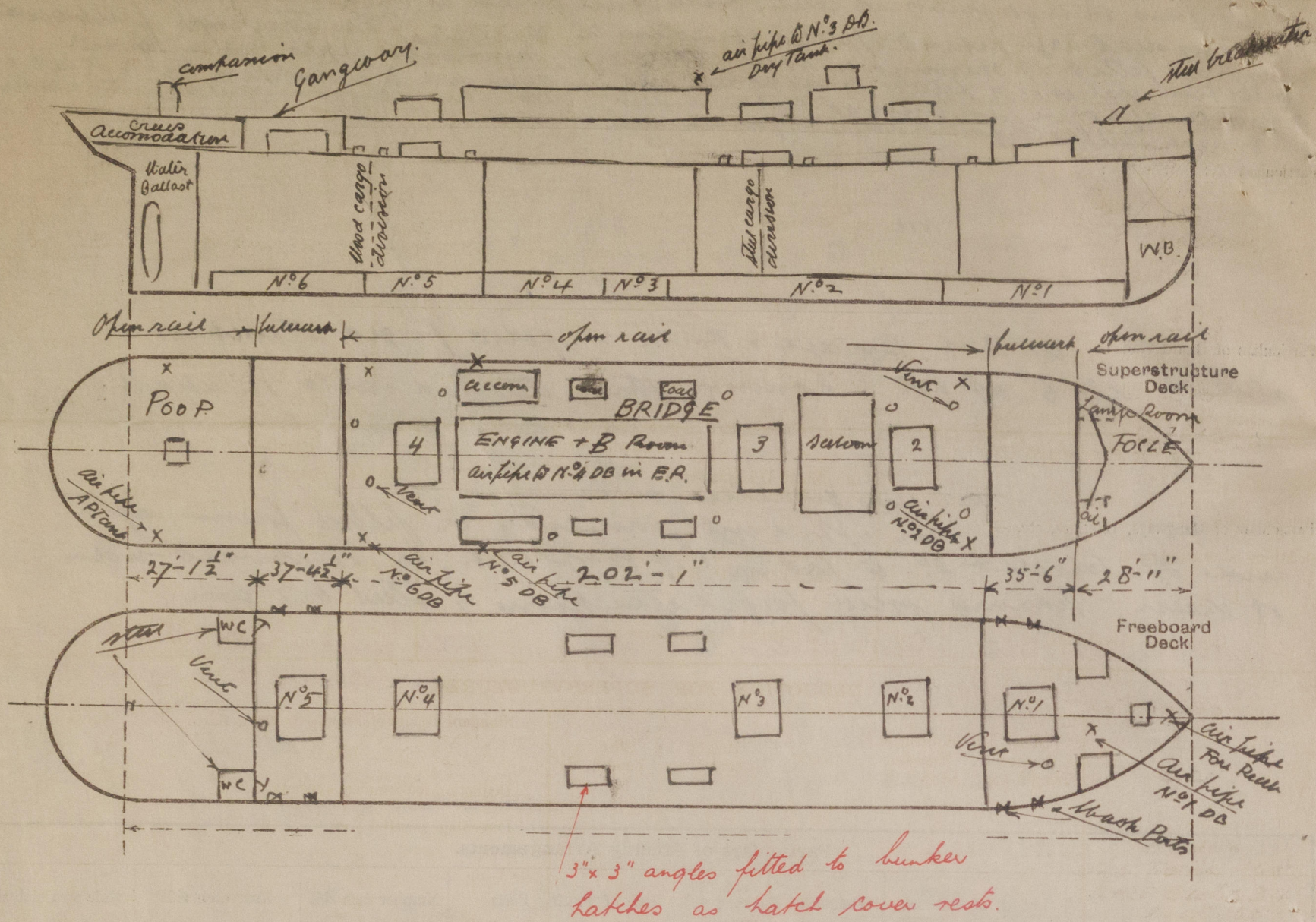
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Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the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



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

Timber deck cargoes.

● Strong sockets (of angles) have been efficiently secured to the stringer plate and over same, flat steel straps have been bolted to the bulwark top ball angle, these are spaced less than 10 ft apart & are suitable for the securing of uprights in the fore & after well decks.

Eyeplates for lashings have been riveted to the sheer strake less than 10 ft apart, the first eye plate being not more than 6 ft 6 ins from the end bulkhead of a superstructure.

The double bottom tanks (excepting No 1 & the after d. b. tank) have been subdivided by fitting at the holes in the cr. girder steel plates bolted and/or wood plugs, leaving sufficient openings in way of the streams for drainage.

The steering rods are carried over the after well deck on the port side by steel stanchions & on the starboard side by a strong gangway at the same height as the bridge deck & found efficient. In the event of a breakdown provision for steering is made by hand gear & by relieving tackle.

Protection is given to steering rods by the arrangement of cargo.

Builder's name and yard number Richardson Dicks & Co

Names of sister ships

Owners South Georgia Co Ltd

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