

Reg 9 attached.

B.T. COPY

CARDIFF

49.965

WRECK DAY

No. 1124322

Index. No.

(For London Office only.)

13 DEC 1932

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

Surveying *Quartermaster, Bridge and Forecastle*

Port of Survey *Cardiff*

Date of Survey *8th-9th December 1932*

Name of Surveyor *V. Lockamy*

Particulars of Classification *+100A1.*
S.S. B.L. No. 3 - 11.27.
S.S. C.L. No. 1 - 30.

Ship's Name *PARKHILL ex* (Type of Superstructures.)

Ship's Name *GLENARCH*

Nationality and Port of Registry *British Cardiff*

Official Number *136981*

Gross Tonnage *500*

Date of Build *1915-9*

Moulded Dimensions: Length *162'* Breadth *25'5"* Depth *12'0"*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *850* tons

Coefficient of fineness for use with Tables *.706*

Depth for Freeboard (D) *12.04*

Depth correction

(a) Where D is greater than Table depth
 (D - Table depth) R = $(12.04 - 10.80) \times 1.246 = +1.54"$

(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) *25.50*

Standard Round of Beam = $\frac{B \times 12}{50} = 6.12$

Ship's Round of Beam = *6.2*

Difference *.38 excess*

Restricted to

Correction = $\frac{\text{Diff}^*}{4} \times (1 - \frac{S_1}{L}) = \frac{.38}{4} \times .1972 = -.02"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed ...						Standard Height of Superstructure <i>6.00</i>
" overhang ...						" " R.Q.D. <i>3.413</i>
R.Q.D. enclosed ...	<i>95.50</i>	<i>95.50</i>	<i>4.0"</i>		<i>95.50</i>	Deduction for complete superstructure <i>22.20</i>
" overhang ...	<i>11.94</i>	<i>11.94</i>	<i>7.0"</i>		<i>11.94</i>	Percentage covered $\frac{S}{L} = 80.99\%$
Bridge enclosed ...	<i>10.72</i>	<i>10.72</i>	<i>7.0"</i>		<i>10.72</i>	" " $\frac{S_1}{L} = 80.28\%$
" overhang aft ...	<i>11.94</i>	<i>11.94</i>	<i>7.0"</i>		<i>11.94</i>	" " $\frac{E}{L} = 80.28\%$
" overhang forward ...	<i>21.45</i>	<i>21.45</i>	<i>7.0"</i>		<i>21.45</i>	Percentage from Table, Line A. <i>75.65%</i>
Fore enclosed ...	<i>2.30</i>	<i>1.15</i>			<i>1.15</i>	(corrected for absence of forecastle (if required))
" overhang ...						Percentage from Table, Line B.
Trunk aft ...						(corrected for absence of forecastle (if required))
" forward ...						Interpolation for bridge less than .2L (if required)
Tonnage opening aft ...						Deduction = $22.20 \times .7565 = -16.79"$
" " forward ...						
Total ...	<i>131.19</i>	<i>130.04</i>			<i>130.04</i>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ...	<i>26.20</i>	<i>1</i>	<i>26.20</i>	<i>45</i>	<i>45.00</i>	<i>52.04</i>	<i>1</i>	<i>52.04</i>		Mean actual sheer aft = <i>Excess</i>
$\frac{1}{2}$ L from A.P. ...	<i>11.66</i>	<i>4</i>	<i>46.64</i>	<i>19.5</i>	<i>19.57</i>	<i>23.16</i>	<i>4</i>	<i>92.64</i>		Mean actual sheer forward = <i>Excess</i>
$\frac{3}{8}$ L " ...	<i>2.88</i>	<i>2</i>	<i>5.76</i>	<i>4.87</i>	<i>4.88</i>	<i>5.72</i>	<i>2</i>	<i>11.44</i>		Length of enclosed superstructure forward of amidships = <i>> .1L</i>
Amidships ...		<i>4</i>		<i>0</i>			<i>4</i>			" " aft of " = <i>.7.1L</i>
$\frac{3}{8}$ L from F.P. ...	<i>5.76</i>	<i>2</i>	<i>11.52</i>	<i>7.82</i>	<i>7.82</i>	<i>7.82</i>	<i>2</i>	<i>15.64</i>		
$\frac{1}{2}$ L " ...	<i>23.32</i>	<i>4</i>	<i>93.28</i>	<i>31.3</i>	<i>31.28</i>	<i>31.28</i>	<i>4</i>	<i>125.12</i>		
F.P. ...	<i>52.40</i>	<i>1</i>	<i>52.40</i>	<i>72</i>	<i>72.00</i>	<i>72.00</i>	<i>1</i>	<i>72.00</i>		
Total ...	<i>335.8</i>		<i>235.80</i>					<i>368.88</i>		

$$\text{Correction} = \frac{\text{Difference between sums of products}}{18} = \frac{(-75 - \frac{S}{2L})}{18} = \frac{(-75 - \frac{.4049}{.18})}{18} = -2.55"$$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.*2.43"*

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = *16.04*Summer freeboard = *4.17*Moulded draught (d) = *11.87*

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = *2.97* = *3"*Addition for Winter North Atlantic Freeboard (if required) = *2"*

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta = 1021$

Tons per inch immersion at summer load water line

T = *8.05*Deduction = $\frac{\Delta}{40T}$ inches= $\frac{1021}{40 \times 8.05} = 3.17$ = *3"*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{.706 + .68}{.36} = \frac{1.386}{.36} = 3.85$ Depth Correction ... *1.54*Deduction for superstructures ... *16.79*Sheer correction ... *2.43*Round of Beam correction ... *.02*

Correction for Thickness of Deck amidships ...

Other corrections, scantlings, etc. R.Q.D. ... *48.00**49.54* *19.24* *+ 30.30*Summer Freeboard = *47.81*

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

Tropical Fresh Water Line above Centre of Disc ... *3"*Fresh Water Line " " ... *3"*Tropical Line " " ... *NIL*Winter Line below " " ... *3"*Winter North Atlantic Line " " ... *5"*Tropical Fresh Water Freeboard ... *3'-10 3/4"*Fresh Water " " ... *3'-10 3/4"*Tropical " " ... *4'-2" (LIMITED)*Winter " " ... *4'-5" (LIMITED)*Winter North Atlantic " " ... *4'-7"*

W481-0157 (114)

RECEIVED

RECEIVED

11 NOV 1933

Lloyd's Register

Foundation

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
FORWARD WELL.									
RAISED QUARTER DECK.									
Description of Hatchway	...	...	No 1.			No 2			
Dimensions of Hatchway	...	...	23' 3 1/2" x 15' 0"			26' 10 1/2" x 15' 0"			
COAMINGS	{	Height above Deck	3' 8 1/2"			2' 11 1/2"			
		Thickness Sides	.46			.46			
		Thickness Ends	.46			.46			
		Stiffeners	7 x 3 1/2" x 40 BA			7 x 3 1/2" x 40 BA			
Brackets, Stays	...	1' 10 1/2" from side			1' 6" from side				
			None			None			
HATCH BEAMS	{	Number	4			5			
		Spacing	4' 8"			4' 8 1/2"			
		Scantling and Sketch							
			14" x 19"			13" x 15"			
		x 40			x 40				
Bearing Surface	...	3 x 3 x 40			3 x 3 x 40				
		3"			3"				
FORE AND AFTERS	{	Number	...			...
		Spacing	...			...
		Unsupported Lengths	...			...
		Scantling and Sketch	...	None		None			
Bearing Surface	...	...			...
HATCH COVERS	{	Material	...			...
		Thickness	...	W.P.		W.P.			
		How fitted	...	2 1/2"		2 1/2"			
		Bearing Surface	...	F + A		F + A			
		...	3' x 6 1/2"		3' x 6 1/2"				
Spacing of Cleats	...	...	2' 0"			2' 0"			
Number of Tarpaulins	...	...	2			2			
*Are wood fore and afters steel shod at all bearing surfaces? ✓									
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 fiddle, funnel and ventilator coamings:—

*Stokehold gratings covered by strong steel hinged covers.
Fidley funnel and ventilator coamings in efficient condition.
Engine room skylight of steel strongly constructed. (See note on back page)*

Particulars of Flush Bunker Scuttles:—

None.

Particulars of Companionways:—

None.

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

*On Forecastle. 10 9" dia 2' 10" high .25" thick - forecastle accommodation
10 9" dia 3' 0" high .25" thick - No 1 hold.
1 galvanized 14" dia 18" high from W.C. starts out.
Rear quarters deck. 10 9" dia 3' high .25" thick - No 2 hold.*

Efficient closing arrangements are provided

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

*On Forecastle - 1 @ 2" W.I. pipe 3 1/2" from deck. - F.P. tank.
Forward well - 1 @ 4 1/2" dia W.I. pipe 3" from deck. - No 1 hold.
Rear quarters deck. - 1 @ 4 1/2" dia 8" from deck. No 2 hold. X
1 @ 2 1/2" dia W.I. 8" from deck. A.P. tank.*

Efficient closing arrangements are provided

Particulars of Gangway Cargo and Coaling Ports:—

None.

Rpt. C. 11 (Contd.)

Index No. 24322

Lloyd's Register of Shipping.

Ship's Name PARKHILL

Official No. 136981

Memorandum of alterations reported since ship was surveyed for assignment of Load Lines

in DEC., 1932.

There is a bunker hatch on fidley casing top of this vessel.

15'0" x 5'3". Coaming at sides and forward end formed with

extended casing plates, fitted with 1/2 round mouldings. After

coaming, plate and foundation angle to fidley top. Thickness .28"

Height of coamings 12" above casing top. No beams on fore ~~or~~

afters. Hatches 3" WP fitted fore and aft, Rest angles 3 1/2" wide.

Cleats spaced 2'0" apart. Fitted with tarpaulins and batten bars.

(Nwc., Feb., 1939).

RETURN

© 2020

Lloyd's Register Foundation

Lloyd's Register of Shipping.

Ship's Name GLENARCH

Official No. 136981

Memorandum of alterations reported since ship was surveyed for assignment of Load Lines
in DECEMBER, 1932.

FREEBOARD. Lower wood belting (6" width) on both sides of ship removed, belting angles cut back to shell and freeboard marks previously on belting now cut in on ship's sides. Markings checked and found correct (Cff. Rpt. 8 No. 51950 dated 11.5.37.)

Particulars of Scuppers and Sanitary Discharge Pipes:—

Scuppers - Forewell 2 P. 23. through gunwale to 5' x 4" /
 Raised Q. D. 4 P. 45. 5' x 4" /

Sanitary discharge Starts side forewell 1-4" dia pipe with storm valve to 1 hole /
 Gunwale, port side 1-4" /
 Aft. port side 1-4" /

Particulars of Side Scuttles:—

Forecastle - 3 P. 35. fitted with hinges and lights in forewell side. /

Particulars of Guard Rails:—

Guard rails at side and aft end of forewell. /
 Lifelines 3' 5" high 4' 6" apart, having three rods. /

Particulars of Gangways, Lifelines, etc.:—

None.

Provision is made for rigging lifelines on the
 forewell deck and on the Raised Quarter Deck.

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
RAISED QUARTER DECK ...	95.50	3' 8 1/2"	2' 4" x 1' 6" 2' 8" x 1' 6"	3 2	42.77 sq ft 19	17.10 sq ft
Forward Well ...	32.0"	4' 0"	3' 0" x 1' 9"	2	10.50 sq ft	9.77 sq ft

State position of each freeing port ... RAISED QUARTER DECK - 7' 10", 29' 2" and 51' 5" from Bridge aft Bulk to forward edge.
 (F. and A. position and height above deck edge) Forward Well:— 16' 9" and 27' 8" from forewell long house bulkhead to forward edge.
 State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Hinged shutters.
 Additional area where sheer is less than standard. Height above deck edge F. 11"
 A. 3 1/2"

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 ...	none	.25	not visible without removing work lining.			none	✓	3' 0" above R.Q.D.
Bridge, Forward Bulkhead ...	none	.28	horizontal 5' x 3' x .40	2' 3"	Brackets at top horizontal bottom	none	✓	7' 0"
Forecastle Bulkhead ...	none	.30	2 1/2' x 2 1/2' x .25	2' 6"	none	2 @ 4' 9" x 2' 0"	1' 6"	7' 0"
Trunk, Aft ...								
Trunk, Forward ...								
Exposed Machinery Casings on Raised Quarter Decks ...	.32	.28	5' x 3' x .25	3' 5"	Brackets at top	3 @ 4' 9" x 2' 0" 2 aft. 4' 9" x 2' 0"	23"	7' 0" from 7' 3" aft.
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).

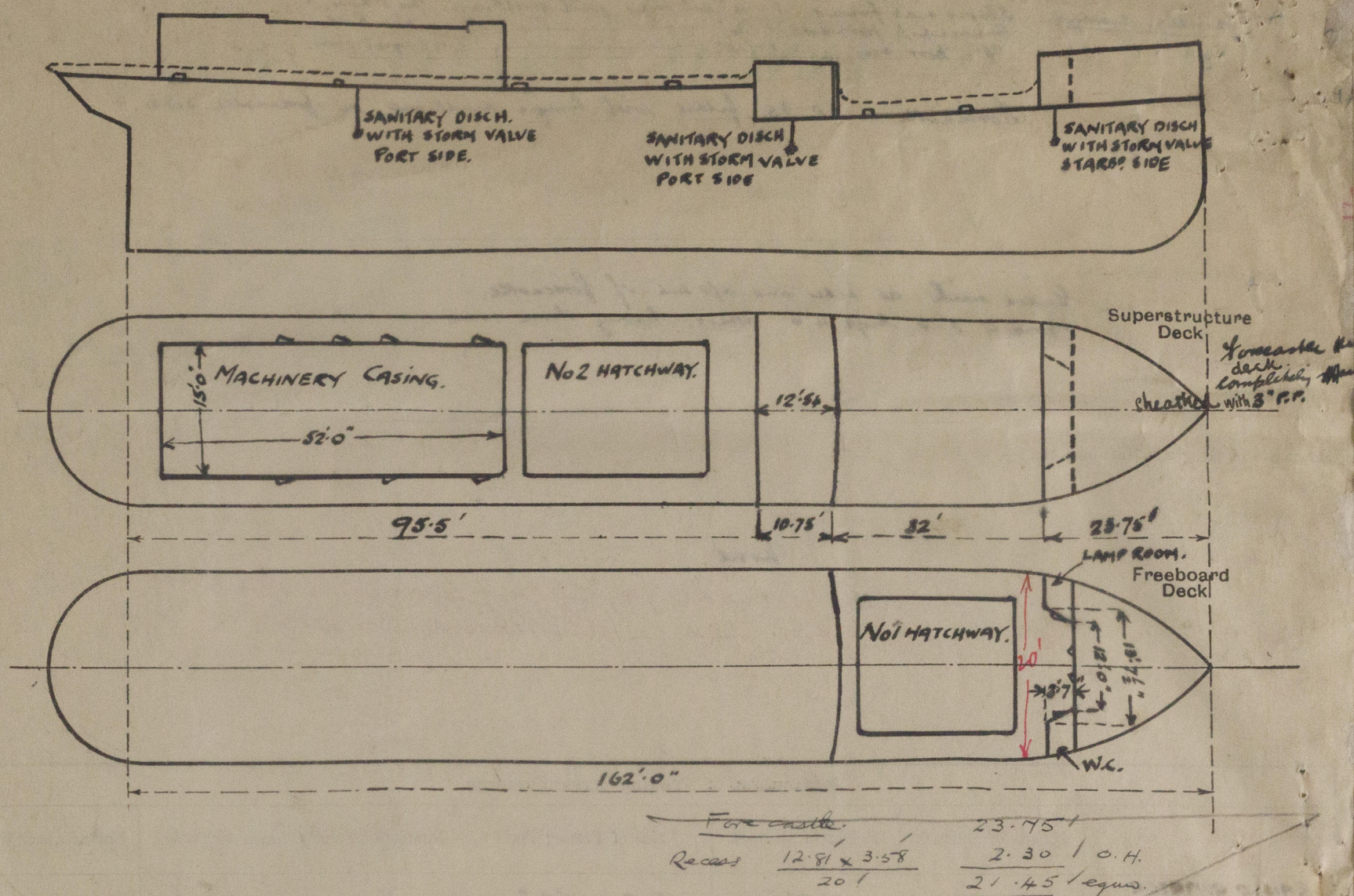
Poop Bulkhead ...	
Raised Quarter Deck Bulkhead ...	
Bridge, After Bulkhead ...	none /
Bridge, Forward Bulkhead ...	none /
Forecastle Bulkhead ...	2 - 1 3/8" kick down workable from both sides, each 4' 9" x 2' 0" /
Exposed Machinery Casings on Raised Quarter Decks ...	3 sturdy steel 4' 9" x 2' 0" aluminum kick workable from both sides { 2 at aft end to accommodation 1 1/2" kick down workable 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 ...	



© 2020

Lloyd's Register Foundation

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 shown on the following sketches:—



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

- The following recommendations were made but not carried out.
1. All hatch beams to be overhauled.
 2. The forward side angle of No 2 hatchway to be fixed.
 3. Some glasses to renew in fore-castle side scuttles.
 4. Means to be provided for battening down engine room skylights.

From Vessel draft, DW scale

Draft	DW.
12'0"	495 TONS.
12'3"	520 "
12'6"	547 "
12'9"	572 "
13'0"	598 "

This vessel has been under survey at this time for correction of freeboard measurement only. The vessel has now sailed, and it is understood that she will return as lastoff in about ten days time when it is intended to accept the new freeboard.

Builder's name and yard number Anderson D.D. and S.B. Co. Ltd. Glasgow.

Names of sister ships

Owners Reglan S.S. Co. Ltd. (H. Elliott Mgr.)

Fee £ 6 : 16 : 0

Received by me