

Rpt. 11.

Index. No.

31498

(For London Office only.)

Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.

GLASGOW REPORT No 52914

Computation of Freeboard for Steamer, <del>Sailing Ship, Tanker</del> having <i>Forecastle, raised quarter deck and bridge.</i>					Port of Survey <i>Glasgow.</i>
Type of Superstructures.) <i>TYNLECASTLE</i>					Date of Survey <i>19<sup>th</sup> September 1932</i>
Ship's Name <i>TURQUOISE</i>	Nationality and Port of Registry <i>British Glasgow.</i>	Official Number <i>147938</i>	Gross Tonnage <i>570</i>	Date of Build <i>1924-12m</i>	Name of Surveyor <i>A. D. Aitken</i>
Moulded Dimensions: Length <i>164.66</i> Breadth <i>26.5</i> Depth <i>12.6</i> <i>well</i> Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>951</i> <i>6.3 R.Q.D.</i> tons					Particulars of Classification <i>+100 A-1</i>
Coefficient of fineness for use with Tables <i>.718</i>					<i>S.S. App No 1-29</i>

Depth for Freeboard (D)		Depth correction	Round of Beam correction
Moulded depth ... ..	<i>12.5</i>	(a) Where D is greater than Table depth (D-Table depth) R = <i>(12.53-10.97)/1.267 = +1.98</i>	Moulded Breadth (B) <i>26.5</i>
Stringer plate ... ..	<i>.36</i>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>6.36</i>
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	<i>.03</i>		Ship's Round of Beam = <i>6.54</i>
Depth for Freeboard (D) =	<i>12.53</i>	If restricted by superstructures	Difference <i>.14</i>
			Restricted to
			Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.14}{4} \left( 1 - \frac{.7825}{.2175} \right) = -.01$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)	
Poop enclosed ... ..						Standard Height of Superstructure <i>6.0</i>
" overhang ... ..						" " R.Q.D. <i>3.43</i>
R.Q.D. enclosed ... ..	<i>93.66</i>	<i>93.66</i>	<i>3.75</i>	<i>✓</i>	<i>93.66</i>	Deduction for complete superstructure <i>22.47</i>
" overhang ... ..	<i>None</i>					Percentage covered $\frac{S}{L} =$ <i>79.12</i>
Bridge enclosed ... ..	<i>10.00</i>	<i>10.00</i>	<i>7.0</i>	<i>✓</i>	<i>10.00</i>	" " $\frac{S_1}{L} =$ <i>78.25</i>
" overhang aft ... ..	<i>None</i>					" " $\frac{E}{L} =$ <i>78.25</i>
" overhang forward ... ..	<i>None</i>					Percentage from Table, Line A. (corrected for absence of forecastle (if required))
Fore enclosed ... ..	<i>23.75</i>	<i>23.75</i>	<i>7.0</i>	<i>✓</i>	<i>23.75</i>	Percentage from Table, Line B. <i>73.14</i> (corrected for absence of forecastle (if required))
" overhang ... ..	<i>2.88</i>	<i>1.44</i>			<i>1.44</i>	Interpolation for bridge less than .2L (if required) <i>✓</i>
Trunk aft ... ..						Deduction = <i>22.47</i> x <i>73/100</i> = <i>-16.44</i>
" forward ... ..						
Tonnage opening aft ... ..						
" forward ... ..						
Total ... ..	<i>130.29</i>	<i>128.85</i>			<i>128.85</i>	

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. ... ..	<i>26.47</i>	<i>1</i>		<i>26.47</i>	<i>27</i>	<i>27</i>	<i>1</i>		<i>30.84</i>	Mean actual sheer aft = <i>EXCESS.</i>
$\frac{1}{2}$ L from A.P. ... ..	<i>11.78</i>	<i>4</i>		<i>47.12</i>	<i>12</i>	<i>12.04</i>	<i>4</i>		<i>54.88</i>	Mean standard sheer aft = <i>3.84</i>
$\frac{3}{4}$ L " ... ..	<i>2.91</i>	<i>2</i>		<i>5.82</i>	<i>3</i>	<i>3.01</i>	<i>2</i>		<i>6.78</i>	Mean actual sheer forward = <i>EXCESS.</i>
Amidships ... ..	<i>-</i>	<i>4</i>		<i>-</i>	<i>-</i>	<i>-</i>	<i>4</i>		<i>-</i>	Mean standard sheer forward = <i>EXCESS.</i>
$\frac{3}{4}$ L from F.P. ... ..	<i>5.82</i>	<i>2</i>		<i>11.64</i>	<i>6</i>	<i>6.01</i>	<i>2</i>		<i>12.02</i>	Length of enclosed superstructure forward of amidships = <i>.13</i>
$\frac{1}{2}$ L " ... ..	<i>23.56</i>	<i>4</i>		<i>94.24</i>	<i>24</i>	<i>24.10</i>	<i>4</i>		<i>96.40</i>	" " aft of " = <i>.50</i>
F.P. ... ..	<i>52.94</i>	<i>1</i>		<i>52.94</i>	<i>56</i>	<i>56</i>	<i>1</i>		<i>56.00</i>	
Total ... ..				<i>238.23</i>					<i>256.92</i>	

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{18.69}{18} \left( .75 - \frac{.3956}{.3544} \right) = -.37$

If limited on account of midship superstructure. *✓*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 = *16.28*  
Summer freeboard = *4.02*  
Moulded draught (d) = *12.26*Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = *3.06* = *3"*Addition for Winter North Atlantic Freeboard (if required) = *2"*

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta = 1128$

Tons per inch immersion at summer load water line

$T = 8.61$

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

$= 3.28$

$= 3\frac{1}{4}"$

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

Correction for coefficient  $\frac{.718+.68}{1.36} = \frac{1.398}{1.36}$ 

	+	-
Depth Correction ... ..	<i>1.98</i>	<i>-</i>
Deduction for superstructures ... ..	<i>-</i>	<i>16.44</i>
Sheer correction ... ..	<i>-</i>	<i>.37</i>
Round of Beam correction ... ..	<i>-</i>	<i>.01</i>
Correction for Thickness of Deck amidships ... ..	<i>45.00</i>	<i>-</i>
Other corrections, scantlings, etc. ... ..	<i>-</i>	<i>-</i>

Summer Freeboard = *48.20*SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel Deck:—Tropical Fresh Water Line above Centre of Disc ... *4\frac{1}{2}"*  
Fresh Water Line ... *3\frac{1}{2}"*  
Tropical Line ... *1\frac{1}{4}"*  
Winter Line ... *3"*  
Winter North Atlantic Line " " ... *5"*Tropical Fresh Water Freeboard ... *4'-0\frac{1}{2}"*  
Fresh Water ... *3'-7\frac{3}{4}"*  
Tropical ... *3'-9"*  
Winter ... *3'-11"*  
Winter North Atlantic ... *4'-3\frac{1}{2}"*  
Winter North Atlantic ... *4'-5\frac{1}{4}"*

22 SEP 1932

MARKING FORM

24 APR 1940

RECEIVED

29 FEB 1938

RECEIVED

1 MAY 1933

MARKING FORM

RECEIVED

24 SEP 1932



Turquoise

## Particulars of Scuppers, and Sanitary Discharge Pipes :—

Particulars of Scuppers and Sanitary Discharge Pipes:—  
 No. scupper discharge below freeboard deck. ✓  
 Sanitary pipes discharge below freeboard deck as shown on sketch put. and  
 ex. fitted with non return valves. ✓

## Particulars of Side Scuttles:—

Particulars of Side Scuttles:—  
 No side scuttles below freeboard deck. ✓  
 Side scuttles in forecabin 9" glass. ✓ No handlights fitted. ✓  
 do. in bridge 9" do. ✓ do. do. ✓

Particulars of Guard Rails :—

Particulars of Guard Rails:—

<u>On forecastle deck</u>	2 steel rods.	3' 0" high.	stanchions 4' 6" apart.	✓
<u>Forward well.</u>	25" Steel bulwark	4' 0" high.	stays of 6" bull plate 5' 5" apart	✓
<u>Bridge.</u>	25" do.	3' 6" do.	do. 2 1/2" x 2 1/2" x 3/8 angle 2' 9" apart.	✓
<u>Raised quarter deck.</u>	25" do.	3' 3 1/2" do.	stays of 6" bull plate 5' 0" apart.	✓

Particulars of Gangways, Lifelines, etc. :—

A wood gangway is fitted on port side from bridge ladder to hatch cover from hatch to fore-castle entrance. ✓

Stanchions in sockets on hatch side coaming fitted with life line attached to bridge front & fore-castle end in forward well

Particulars of fiddley, funnel and ventilator coamings :—

Particulars of dirdley, tunnel and ventilator workings:—

- Engine skylight on casing top of steel strongly constructed. ✓
- Dirdley openings protected by guttings and strong steel braced covers. ✓
- Ventilators on casing top in good condition ✓

Particulars of Flush Bunker Scuttles:— *None.*

Minor Hatches.

DESCRIPTION	SIZE	QTY	UNIT	PRICE	TOTAL
To fore peak stone	3'-7" x 3'-6"	Crowning	24' x 36'	Covers	2 1/2" W.P.
To hold start ford	2'-6" x 1'-5"	Do.	24' x 36'	do.	2" W.P.
To after peak	2'-8" x 1'-9"	Do.	24' x 36'	do.	2 1/2" W.P.
To coal (or crum top)	16'-0" x 5'-5"	Do.	10' x 36'	do.	2" W.P.
Tarpanlines bottom and wedges in good condition.					

Particulars of Companionways :—

None.

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

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :—					
1. On foremast deck to stow at middle line forward.	36" x 32" coaming.	6" dia.	✓	Coamings constructed	
2. (1/2) do. to crew.	36" x 32" do.	6" do.	✓	in accordance with the	
1 in fwd. well stand. to hold.	36" x 34" do.	10" do.	✓	Rules. ✓	
2 on R.Q.D. post to hold.	36" x 34" do.	10" do.	✓	Wood planks & canvas	
				covers supplied for all ventilator	
				coamings.	

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

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

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

1	air pipe on forecathle deck forward to fore peak tank.	5½" diam.	16" to lip.	20" to head.	✓
do.	at aft end of raising to after peak tank.	3½" do.	18" to lip.	24" to head.	✓

Particulars of Gangway Cargo and Coaling Ports :—

None.

## Particulars of Superstructures, Trunks, Casings, Deckhouses.

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 ✓	24" ✓	3" x 2 1/2" x 30" ✓ 3" x 3" x 30"	30" ✓	Buckets top ✓ Bottom ✓	None ✓	✓	✓
Bridge, Forward Bulkhead ... ..	None ✓	24" ✓	5 1/2" x 3" x 40 ft. ✓	30" ✓	Do. Do. ✓	None ✓	✓	7'0"
Forecastle Bulkhead ... ..	30" ✓	25" ✓	2 1/2" x 2 1/2" x 25" ✓	30" ✓	None ✓	4'8" x 1'8" ✓	15" ✓	7'0"
Trunk, Aft ... ..								
Trunk, Forward ... ..								
Exposed Machinery Casings on <del>Deck</del> Raised Quarter Deck ...	30" ✓	24" ✓	2 1/2" x 2 1/2" x 24" ✓	24" ✓	Buckets at top ✓	19'3, 4'8" x 1'8" ✓ 19'3, 4'11" x 2'0" ✓	15" ✓ 15" ✓	7'0"
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).

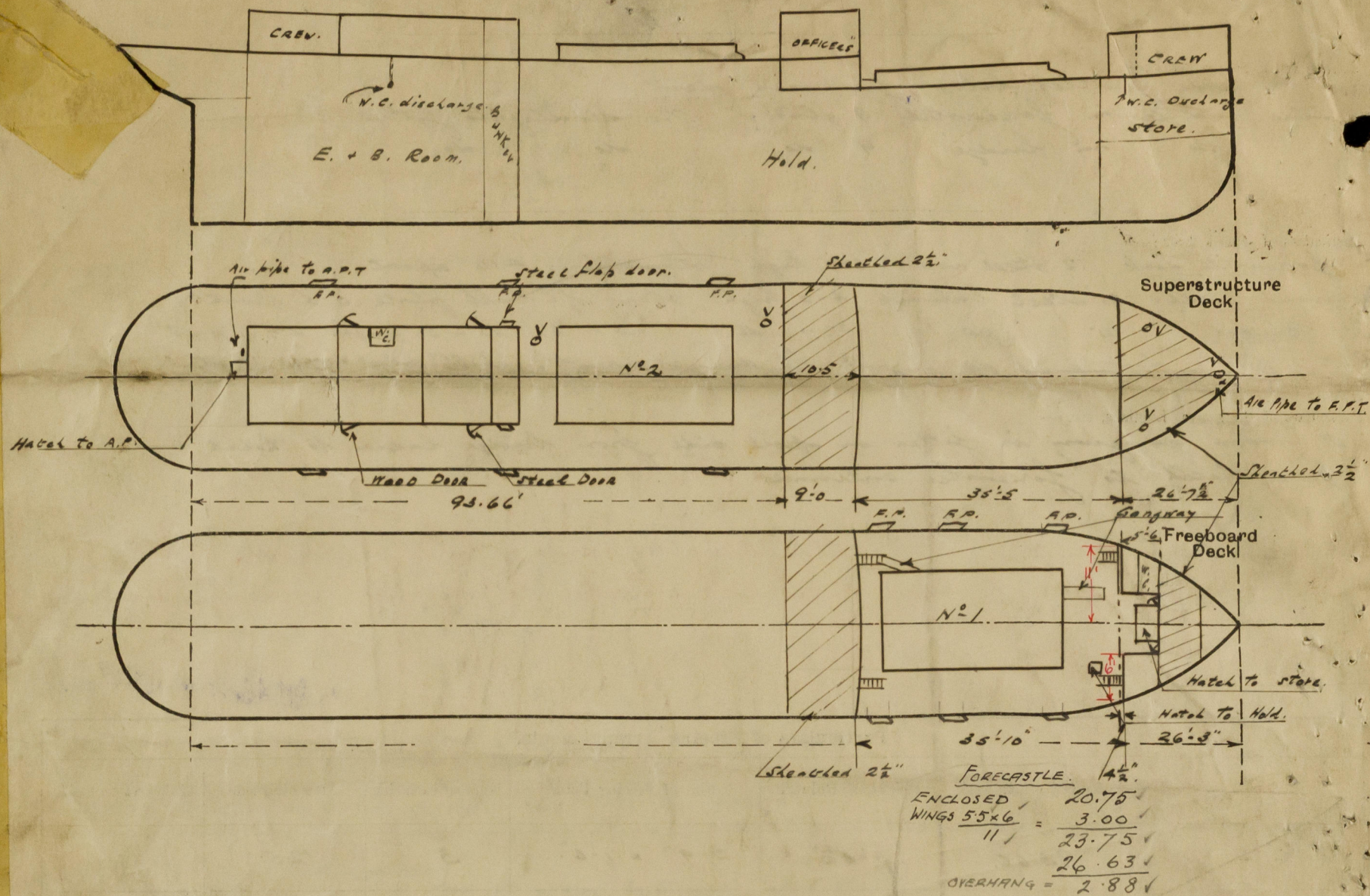
Poop Bulkhead	...	...	✓	
Raised Quarter Deck Bulkhead	...	None.	} no openings.	
Bridge, After Bulkhead	...	None.		
Bridge, Forward Bulkhead	...	None.		
Castle Bulkhead	...	...	✓	
Enclosed Machinery Casings on Poop Deck or Raised Quarter Decks	...	...	✓	
Enclosed Machinery Casings on Superstructure Decks	...	...	✓	
Enclosed Machinery Casings within Superstructure not fitted with Class I Closing Appliances	...	...	✓	
Decks on Flush Deck Ships	...	...	✓	

$1\frac{1}{2}$  test road doors 1P. 15 fitted with locks manipulated from both sides. ✓  
 $1\frac{1}{2}$  test doors 1P. 15 do. do. do. to E. R.  
 steel slip doors 1P. 15 do. do. outside only. to ladder. ✓  
 1P. 15 do. do.



*Turquoise*

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:— *This vessel is engaged in the British and Continental coasting trade. Timber freeboard not required.*  
*Full displacement at 12'0" full draught = 1040 tons. Tons per inch. 8.55 tons.*  
*do. do. 15'0" do. = 1143. do. 8.63 tons*  
*This survey has been held afloat and confined to an examination of the means of closing the openings in the decks & sides of the vessel.*  
*No part of a Special Survey has been held.*

Builder's name and yard number. *Alsa S. B. Co. Ltd. N° 391.*

Names of sister ships *S.S. Beryl. Builder N° 390. (Logbook report N° 52727)*

Owners *W. Robertson.*

Fee £ *6* : *16* : *0.*

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