

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.Index. No. 34784
(For London Office only.)

21 OCT 1936

G.R. REPORT N° 20214

Computation of Freeboard for Steamer, Sailing Ship, Tanker
having Poop, Bridge & Fore
(Type of Superstructures.)
Port of Survey Port Glasgow
Date of Survey Whilst Building
Name of Surveyor T.R. McIlvenna
Particulars of Classification +100 A.1.
Carrying Petroleum in Bulk
Longitudinal Framing at Bottom
and Deck (Contingent)

Ship's Name	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build	
<u>BRITISH TRIUMPH</u>	<u>British</u> <u>London</u>	<u>165358</u>	<u>8501</u> <u>8450</u> <u>8402-11</u>	<u>Building</u>	
Moulded Dimensions: Length	<u>465'-1"</u>	Breadth	<u>61'-6"</u>	Depth	<u>34'-0"</u>
Moulded displacement at moulded draught	= 85 per cent. of moulded depth				<u>18252</u> tons
Coefficient of fineness for use with Tables	<u>774</u>				

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>34'-0"</u>	(a) Where D is greater than Table depth (D-Table depth) R = $(34.07 - 31.01) 3 = + 9.18$	Moulded Breadth (B) <u>61'-6"</u>
Stringer plate <u>07"</u>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <u>14.76</u>
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <u>15 1/2"</u>
Depth for Freeboard (D) = <u>34.07</u>		Difference <u>.74</u>
		Restricted to
		Correction = $\frac{\text{Diff}^2}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.74^2}{4} \times 5807 = -.11$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	<u>101.83'</u>	<u>101.83</u>	<u>8'-0"</u>	-	<u>101.83</u>	Standard Height of Superstructure <u>7.5'</u>
" overhang	<u>3.50'</u>	<u>1.75</u>	-	-	<u>1.75</u>	" " R.Q.D. <u>✓</u>
R.Q.D. enclosed	<u>✓</u>					Deduction for complete superstructure <u>42"</u>
" overhang	<u>✓</u>					Percentage covered $\frac{S}{L} =$ <u>43.34</u>
Bridge enclosed	<u>36.00'</u>	<u>36.00</u>	<u>8'-0"</u>	-	<u>36.00</u>	" " $\frac{S_1}{L} =$ <u>41.93</u>
" overhang aft	<u>3.00'</u>	<u>2.25</u>	-	-	<u>2.25</u>	" " $\frac{E}{L} =$ <u>41.93</u>
" overhang forward	<u>3.50'</u>	<u>1.75</u>	-	-	<u>1.75</u>	Percentage from Table, Line A. <u>Tankers</u> <u>32.93</u>
Fore enclosed <u>equivalent</u>	<u>58.25'</u>	<u>49.18</u>	<u>8'-0"</u>	-	<u>49.18</u>	(corrected for absence of forecastle (if required))
" overhang	<u>✓ 4.53</u>	<u>2.26</u>	-	-	<u>2.26</u>	Percentage from Table, Line B. <u>✓</u>
Trunk aft	<u>✓</u>					(corrected for absence of forecastle (if required))
" forward	<u>✓</u>					Interpolation for bridge less than 2L (if required)
Tonnage opening aft	<u>✓</u>					Deduction = <u>42 × 32.93 = 13.83</u>
" " forward	<u>✓</u>					
Total	<u>201.54</u>	<u>195.02</u>			<u>195.02</u>	

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P. and 19' 4" forward of A.P.	<u>56.51</u>	1		<u>56.51</u>	<u>57.0"</u>	<u>56.51</u>	1		<u>56.51</u>	Mean actual sheer aft = <u>Deficient</u> <u>Excess (Practically standard)</u>
1/4 L from A.P. ...	<u>25.145</u>	4		<u>100.58</u>	<u>26.66"</u>	<u>25.145</u>	4		<u>100.58</u>	Mean actual sheer forward = <u>90.29% Standard</u>
3/4 L " ...	<u>6.22</u>	2		<u>12.44</u>	<u>6.66"</u>	<u>6.22</u>	2		<u>12.44</u>	Mean standard sheer forward
Amidships ...		4		<u>0</u>	<u>0</u>		4			Length of enclosed superstructure forward of amidships =
3/4 L from F.P. ...	<u>12.44</u>	2		<u>24.88</u>	<u>11.33"</u>	<u>11.33</u>	2		<u>22.66</u>	" " aft of " =
1/4 L " ...	<u>50.29</u>	4		<u>201.16</u>	<u>45.33"</u>	<u>45.33</u>	4		<u>181.32</u>	
F.P. ...	<u>113.02</u>	1		<u>113.02</u>	<u>102.00"</u>	<u>102.00</u>	1		<u>102.00</u>	
Total ...				<u>508.59</u>					<u>475.51</u>	
Correction = $\frac{\text{Difference between sums of products}}{18} \left(75 - \frac{S}{2L} \right) = \frac{33.08}{18} \left(75 - \frac{5333}{2167} \right) = +.98$										
If limited on account of midship superstructure. <u>✓</u>										
If limited to maximum allowance of 1 1/2 ins. per 100 ft. <u>✓</u>										

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 34.07 Ft.
Summer freeboard = 6.73
Moulded draught (d) = 27.34

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = 6.84 = 6 3/4"Addition for Winter North Atlantic Freeboard (if required) = 6.84 + 4.65 = 11.49 = 11 1/2"

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ 17343

Tons per inch immersion at summer load water line

 $T =$ 58.45Deduction = $\frac{\Delta}{40T}$ inches= $\frac{17343}{40 \times 58.45} = 7.42 = 7 1/2"$ Draft Δ S.W. T.P.127' 16976 58.1728' 17680 58.67

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{774 + .68}{1.36} = \frac{1.454}{1.36}$

	+	-
Depth Correction	<u>9.18</u>	-
Deduction for superstructures	-	<u>13.83</u>
Sheer correction	<u>0.98</u>	-
Round of Beam correction	-	<u>0.11</u>
Correction for Thickness of Deck amidships	-	-
Other corrections, scantlings, etc.	-	-
	<u>10.16</u>	<u>13.94</u>

Summer Freeboard = 80.66SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck: 6'-8 3/4"Tropical Fresh Water Line above Centre of Disc 14 1/4"Fresh Water Line " " " " " " 7 1/2"Tropical Line " " " " " " 6 3/4"Winter Line below " " " " " " 6 3/4"Winter North Atlantic Line " " " " " " 11 1/2"Tropical Fresh Water Freeboard 5'-6 1/2"Fresh Water " " " " " " 6'-1 1/4"Tropical " " " " " " 6'-2"Winter " " " " " " 7'-3 1/2"Winter North Atlantic " " " " " " 7'-8 1/4"

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS											
FREEBOARD DECK						POOP DECK					
Description of Hatchway			DIL TIGHT HATCHES 12 IN FORD WELL 15 IN ART. WELL	FORWARD CARGO HATCH.	HATCH TO FORD STORE	HATCH TO FORD STORE	4 HATCHES TO POOP SPACE	HATCH TO REAR STORES	2 TRUNKED HATCHES & O.F. BUNKERS	HATCH TO ART. STORE	
Dimensions of Hatchway			6'-0" x 4'-0"	6'-9" x 10'-0"	2'-6" x 1'-10"	2'-6" x 1'-10"	3'-0" x 3'-0"	2'-6" x 3'-0"	3'-0" x 3'-0"	2'-0" x 2'-0"	
COAMINGS	Height above Deck Thickness Stiffeners Brackets, Stays	Sides	12"	30"	9"	24	30"	30"	30"	30"	
		Ends	12 x 3 1/2 x .50 BR	.44	.35"	.35"	.35"	.35"	.35"	.35"	
				.44	.35"	.35"	.35"	.35"	.35"	.35"	
				9 x 3 x .40 BR	.35"	.35"	.35"	.35"	.35"	.35"	
HATCH BEAMS	Number Spacing Scantling and Sketch		64 Steel Hinged Covers secured by Toggles spaced 13 1/2" on Sides & 15" on Ends	Painted sliding N.T. Hatch Cover by Nash Williamson & 26 Belvidere Street London E.C. 3. Top Plate .30 Stiffened by 3 x 3 x .38 angles 3-6 apart. Cover secured by							
		Bearing Surface									
FORE AND AFTERS	Number Spacing Unsupported Lengths Scantling and Sketch		MANHOLES 36 for main C/Pain 3 1/2 aft. main C/Pain 23" x 18" 12 x 3 1/2 x 3 1/2 x .50 C. Ang. 50 Top plates secured by bolts 7 1/2" apart.	Cleats 39" x 36" apart. Copy of Plan enclosed for reference.							
		Bearing Surface									
HATCH COVERS	Material Thickness How fitted Bearing Surface				W.P. 2 1/2 ✓ 3"	Steel .45" (W.T.) Hinged ✓	W.P. 2 1/2 ✓ 3	W.P. 2 1/2 ✓ 3	Steel .45" Hinged (O.T.) ✓	Steel .45" Hinged (AT) ✓	
Spacing of Cleats					18	Toggles spaced 18" Apart	18	18	Toggles spaced 18" Apart	Toggles spaced 18" Apart	
Number of Tarpaulins					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 fiddley, funnel and ventilator coamings :—

Engine Skylight of Steel Strongly Constructed
Funnel & vent coamings efficient

Particulars of Flush Bunker Scuttles:—

bone.

Particulars of Companionways:—

Pump Room Intrauces in ^{Ind} & after wells.
Openings in Steel Houses efficiently constructed.
Hinged watertight doors fitted over openings with 18" sill.
Doors capable of being operated from both sides.

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

FOODS DECK			POOP DECK		
8	1 Vent 7" dia.	Cmg 3 1/4" x 30 1/2"	4	1 Vent 12" dia.	Cmg 30" x 3 1/4 1/2"
1	1 Vent 2"	3 1/4" x 34 1/2"	4	16"	30" x 38 1/2"
2	1 Vent 18"	3 1/4" x 40 1/2"	3	8"	30" x 32"
2	10"	3 1/4" x 32 1/2"	2	6"	30" x 30"
1	1 Vent 6"	3 1/4" x 30 1/2"	2	6"	30" x 30"
1	9"	3 1/4" x 32 1/2"	2	6"	30" x 30"

FOAD WELL :-
2 Vents 20" dia Cing 36"x 40 1/2 Pump Room

AFTER WELL :-
2 Vents 20" dia Cing 36"x 40 1/2 Pump Room

All Ventilator Coamings fitted with wood
Plugs & Canvas Covers.

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

POOP DECK:

1-6" dia M.L. Air Pipe (P+S)	18" 1/2	Up to	Off Peak
2-3" " " " " " "	18" " "	"	to Red water
1-3" " " " " " "	36" " "	"	to Lub. oil
1-3" " " " " " "	18" " "	"	to C/Water
1-3" " " " " " "	36" " "	"	to Oil fuel
1-4" " " " " " "	36" " "	"	to Oil Bunker

UPPER DECK:-

1-4" dia M.L. Air Pipe (P+S)	36" 1/2	Up to	Off Peak
1-4" " " " " " "	" " " "	"	to Red water
1-4" " " " " " "	" " " "	"	to Lub. oil
1-4" " " " " " "	" " " "	"	to C/Water
1-4" " " " " " "	" " " "	"	to Oil fuel
1-4" " " " " " "	" " " "	"	to Oil Bunker

FOCLE DECK:-

1-4" dia M.L. Air Pipe (P+S)	36" 1/2	Up to	Off Peak
1-6" " " " " " "	18" " "	"	to Red water
1-6" " " " " " "	" " " "	"	to Lub. oil
1-6" " " " " " "	" " " "	"	to C/Water
1-6" " " " " " "	" " " "	"	to Oil fuel
1-6" " " " " " "	" " " "	"	to Oil Bunker

All Air Pipes to Oil Tank
jacketed with monel metal
Tanze. Elsewhere wood
Plugs & canvas covers
supplied.

Particulars of Gangway Cargo and Coaling Ports:—

home

Lloyd's Register of Shipping.

Ship's Name M.V. BRITISH TRIUMPH

Official No. 165358

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

iii Carried out at Birkenhead. — June-July 1938.

4 Hatchcs on poop deck (1 P. 1 S. to coal bunkers) + (1 P. 1 S. to Stores) have been dispensed with and deck in way plated over.

a steel companionway has been constructed on the poop deck P. & S. abreast the engine casing giving access to the poop space

Companionways of steel + strongly constructed - opening 5'-4" x 2'-9" (sill 18") closed by hinged steel weatherlight doors, operated from both sides.

2 additional 8" dia Vents have been fitted on poop deck 30" Coamings x 32

2 @ 12" dia Vents have been fitted to Companionway tops 30" " x 34.

all closed by wood plugs + canvas covers.

Additional porthlights fitted to shell P.O.s in poop and fore-castle spaces, all complete with efficient deadlights.

Notes *Long* *Dependent*

54 AUG 1938

W438-02ss

"*Bentish Triumph*" 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 ...	<i>Forward</i> 39'-6"	} 4'-0"	4'-0" x 1'-6"	2	} 16.79 sq feet.	✓
	<i>aft</i> 39'-9"		4'-0" x 9"	2		
Forward Well ...	<i>Forward</i> 34'-11"	} 4'-0"	4'-0" x 9"	2	} 8.63 sq feet.	✓
	<i>aft</i> 19'-6"		4'-0" x 9"	1		

State position of each freeing port ... { After Well:— 6'-6" and 27'-3" from Poop front. — 6'-3" and 30'-3" from Bridge End. } 12" above Deck Edge.
 (F. and A. position and height above deck edge) { Forward Well:— " from Bridge front — 14'-6" and 26'-3" from Poop front. }

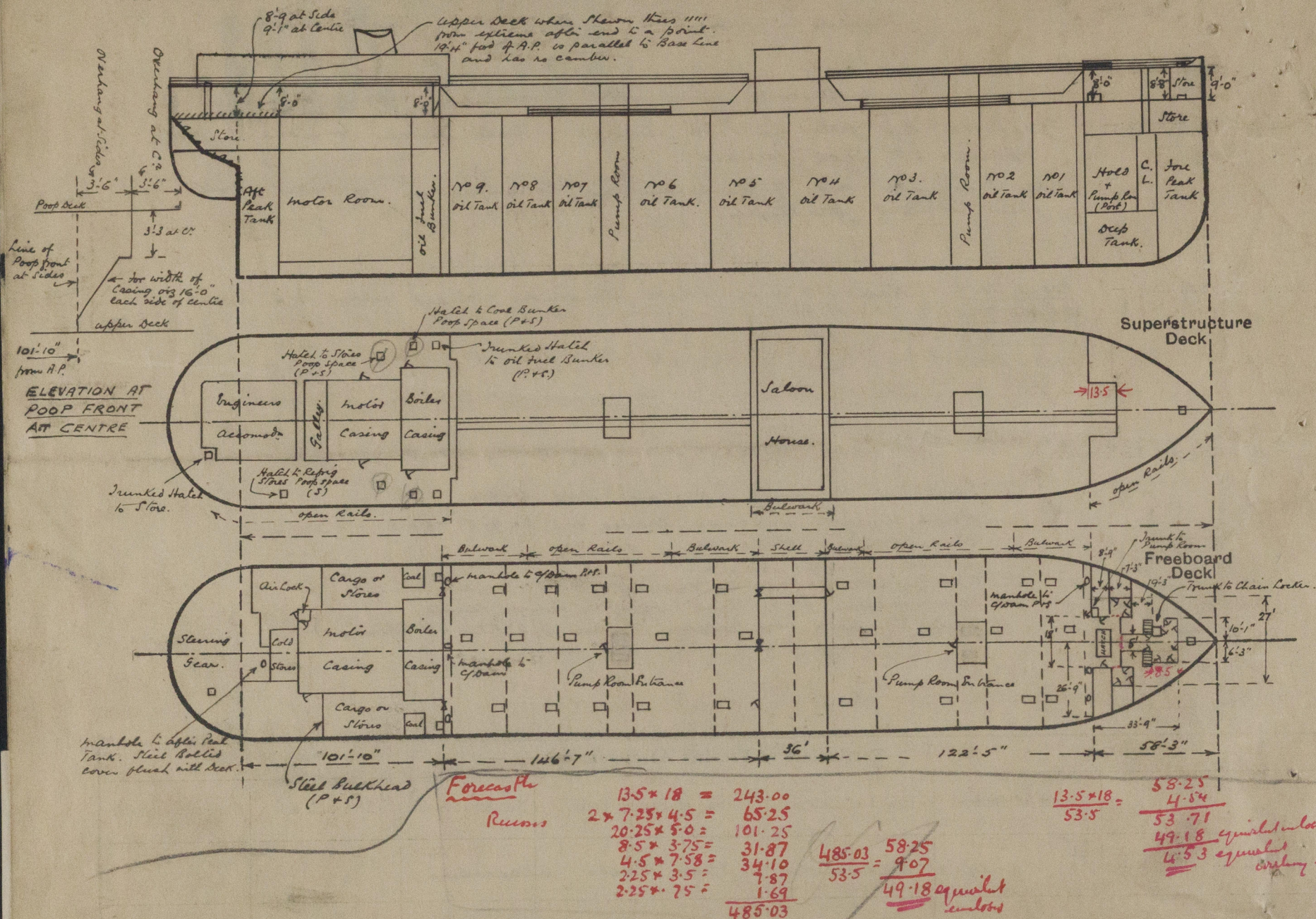
State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:—
 on Freeing Ports 18" in depth
 one rod is fitted horizontally
 at middle of depth.

Additional area where sheer is less than standard.

W438-0253 3/4

British Triumph

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:—

This vessel is an oil tanker & has been built in accordance with the approved plans & in general conformity with the Rules for the class contemplated.

The vessel will be engaged on International trade.

The approved plans of midship section & profile are enclosed for reference.

Builder's name and yard number.

Lithgows Ltd No. 886.

Names of sister ships.

Owners.

British Tanker Co Ltd

Fee £

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