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42040

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(For London Office only.)

Hd 7972

Rpt. C.11 (Comp.).  
British Scientist  
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Similar.

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>BRITISH TRIUMPH</b>	Official Number <b>183162</b>	Nationality and Port of Registry <b>British London</b>	Gross Tonnage <b>8640 8636-76</b>	Date of Build <b>1949-</b>	Port of Survey <b>Liverpool</b>
Moulded Dimensions: Length <b>463.46'</b> Breadth <b>61.75'</b> Depth <b>34.0'</b>				Date of Survey <b>During construction</b>	
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>Extreme Displacement and Tons per inch 27.0' - 16,928 Tons, 58.0 Tons per inch.</b>				Surveyor's Signature <b>A. Jackson</b>	
Coefficient of fineness for use with Tables <b>77.4</b> <b>28.0' - 17,630 " 58.4 " "</b>				Particulars of Classification <b>100A1 - "Carrying Petroleum in Bulk"</b>	

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... .. <b>34.00</b>	(a) Where D is greater than Table depth (D-Table depth) R = <b>(34.06 - 30.90) 3 = +9.48"</b> ✓	Moulded Breadth (B) <b>61.75'</b>
Stringer plate ... .. <b>.06</b>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = ✓	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{61.75 \times 12}{50} = 14.82$
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ <b>Nil</b>	If restricted by superstructures ✓	Ship's Round of Beam = <b>15.5"</b>
Depth for Freeboard (D) = <b>34.06</b>		Difference = <b>+ .68</b>
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.68}{4} \times .5731 = -.10"$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>i</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed <b>Equiv</b> ...	<b>97.92</b>	<b>97.92</b>	<b>8.0</b>		<b>97.92</b>
„ overhang <b>(B.W. 4.0)</b> ...	<b>1.83</b>	<b>.91</b>	<b>8.0</b>		<b>.91</b>
R.Q.D. enclosed ...	✓		✓		
„ overhang ...	✓		✓		
Bridge enclosed <b>Equiv</b> <b>(B.W. 4.0)</b> ...	<b>47.67</b>	<b>47.67</b>	<b>8.0</b>		<b>47.67</b>
„ overhang aft ...	<b>3.0</b>	<b>2.25</b>	<b>8.0</b>		<b>2.25</b>
„ overhang forward ...	<b>.83</b>	<b>.41</b>	<b>8.0</b>		<b>.41</b>
F'cle enclosed <b>Equiv</b> <b>(B.W. 4.0)</b> ...	<b>46.13</b>	<b>46.13</b>	<b>8.0</b>		<b>46.13</b>
„ overhang ...	<b>2.56</b>	<b>2.56</b>	<b>8.0</b>		<b>2.56</b>
Trunk aft ...			✓		
„ forward ...			✓		
Tonnage opening aft ...			✓		
„ „ forward ...			✓		
Total ...	<b>199.94</b>	<b>197.85</b>			<b>197.85</b>

Standard Height of Superstructure	<b>7.50'</b>
„ „ R.Q.D.	
Deduction for complete superstructure	<b>42.00"</b>
Percentage covered $\frac{S}{L} =$	<b>43.14</b>
„ „ $\frac{S_i}{L} =$	
„ „ $\frac{E}{L} =$	<b>42.69</b>
Percentage from Table, Line A. <b>Tanker</b>	<b>33.69</b>
(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 = <b>42.00 × .3369 = -14.15"</b>	

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<b>56.35</b>	<b>1</b>		<b>56.35</b>	<b>56.75</b>	<b>56.75</b>	<b>1</b>		<b>56.75</b>
$\frac{1}{2}$ L from A.P. ...	<b>25.07</b>	<b>4</b>		<b>100.28</b>	<b>25.50</b>	<b>25.50</b>	<b>4</b>		<b>102.00</b>
$\frac{3}{8}$ L „ ...	<b>6.197</b>	<b>2</b>		<b>12.39</b>	<b>6.25</b>	<b>6.25</b>	<b>2</b>		<b>12.50</b>
Amidships ...	-	<b>4</b>		-	-	-	<b>4</b>		-
$\frac{5}{8}$ L from F.P. ...	<b>12.39</b>	<b>2</b>		<b>24.78</b>	<b>12.25</b>	<b>12.25</b>	<b>2</b>		<b>24.50</b>
$\frac{1}{2}$ L „ ...	<b>50.14</b>	<b>4</b>		<b>200.56</b>	<b>50.25</b>	<b>50.25</b>	<b>4</b>		<b>201.00</b>
F.P. ...	<b>112.69</b>	<b>1</b>		<b>112.69</b>	<b>113.50</b>	<b>113.50</b>	<b>1</b>		<b>113.50</b>
Total ...				<b>507.05</b>					<b>510.25</b>

Mean actual sheer aft = **Excess.**  
Mean standard sheer aft =Mean actual sheer forward = **Excess.**  
Mean standard sheer forward =Length of enclosed superstructure forward of amidships = } **Tanker.**  
„ „ aft of „ = }Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{S}{2L} - .75 \right) = \frac{3.20}{18} (.75 - .2134) = -.10"$   
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 = **34.06**  
Summer freeboard = **6.58**  
Moulded draught (d) = **27.48**

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = **6.87" = 6¾"**Addition for Winter North Atlantic Freeboard (if required) = **6.87 + 4.63 = 11.50" = 11½"**

## Deduction for Fresh Water.

Displacement in salt water at summer load water line  
 $\Delta = 17221$   
Tons per inch immersion at summer load water line  
 $T = 58.17$ Deduction =  $\frac{\Delta}{40 T}$  inches= **7.40**= **7½"**

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

Correction for coefficient  $\frac{.774 + .68}{1.36} = \frac{1.454}{1.36}$ Depth Correction ... **9.48**  
Deduction for superstructures ... **14.15**  
Sheer correction ... **.10**  
Round of Beam correction ... **.10**  
Correction for Thickness of Deck amidships ...  
Other corrections, scantlings, etc. ...

+	-
<b>9.48</b>	
	<b>14.15</b>
	<b>.10</b>
	<b>.10</b>
<b>9.48</b>	<b>14.35</b>

Summer Freeboard = **79.12**

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

Tropical Fresh Water Line above Centre of Disc ... **14½"**  
Fresh Water Line „ „ ... **7½"**  
Tropical Line „ „ ... **6¾"**  
Winter Line below „ „ ... **6¾"**  
Winter North Atlantic Line „ „ ... **11½"**Tropical Fresh Water Freeboard ... **6' - 7"**  
Fresh Water „ „ ... **5' - 4½"**  
Tropical „ „ ... **5' - 11½"**  
Winter „ „ ... **6' - 0½"**  
Winter „ „ ... **7' - 1¾"**  
Winter North Atlantic „ „ ... **7' - 6½"**

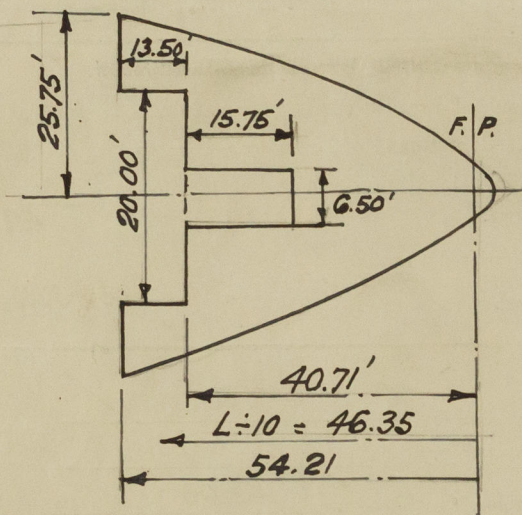


# British Triumph

A new form should be prepared if any alterations that affect the freeboard have been made. If no such alterations have been made, the Surveyor should endorse the form on this side with his signature and the date.

$$\begin{aligned} \text{Poop at side} &= 95.25' \\ \frac{2}{3} \times 4.0 &= 2.67' \\ \text{Equivalent length} &= 97.92' \\ \text{" overhang} &= 1.83' \\ &\quad 4.5 - 2.67 \end{aligned}$$

$$\begin{aligned} \text{Bridge at side} &= 45.00' \\ \frac{2}{3} \times 4.0 &= 2.67' \\ \text{Equivalent length} &= 47.67' \\ \text{" overhang ford} &= .83' \\ &\quad 3.5 - 2.67 \end{aligned}$$



Forward of  $\frac{1}{10}$

$$\begin{aligned} \text{Less } \frac{15.75 \times 6.50}{40} &= 2.56' = \text{Overhang.} \\ \text{Add } \frac{5.64 \times 27.2}{47} &= 3.26' \\ &= 41.41' \end{aligned}$$

Aft of  $\frac{1}{10}$

$$\begin{aligned} \frac{7.86 \times 30.50}{50} &= 4.72' \\ \text{Equivalent enclosed} &= 46.13' \end{aligned}$$

Trade of ship Oil Tanker

Names of sister ships Similar to the same Builders "BRITISH SCIENTIST" Liv. P.M. Rpt.

Builder's name and yard number Messrs. Cammell, Laird & Co. N<sup>o</sup>. 1199.

Owners The British Tanker Co. Ltd.

Fee £



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