

Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

N<sup>o</sup> 34466

Ship's Name <b>"BRITISH MARQUIS"</b>	Official Number <b>180869</b>	Nationality and Port of Registry <b>British London</b>	Gross Tonnage <b>8563</b>	Date of Build <b>5 mo. 1946</b>	Port of Survey <b>Sunderland.</b>
Moulded Dimensions: Length <b>463.46</b> Breadth <b>61.75</b> Depth <b>34.08</b> <i>To centre of nadder block.</i>					Date of Survey <b>During construction</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>18231</b> tons					Surveyor's Signature <b>Paul F. H. Duncanson</b>
Coefficient of fineness for use with Tables <b>7696.770</b>					Particulars of Classification <b>+100 A1</b> <b>Carrying petroleum in Bulk.</b>

<b>Depth for Freeboard (D).</b>	<b>Depth correction.</b>	<b>Round of Beam correction.</b>
Moulded depth ... <b>34.08</b>	(a) Where D is greater than Table depth (D - Table depth) R = <b>(34.14 - 30.89) X 3 = 9.75</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 = <b>3.25</b>	Standard Round of Beam = $\frac{B \times 12}{50}$ = <b>14.82</b>
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures <input checked="" type="checkbox"/>	Ship's Round of Beam = <b>15.50</b>
Depth for Freeboard (D) = <b>34.14</b>		Difference <b>0.68</b>
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times \left( 1 - \frac{S_1}{L} \right)$ = <b><math>\frac{.68 \times 5828}{4} = 10</math></b>

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed <i>Equip.</i>	<b>96.79</b>	<b>96.79</b>	<b>8.0</b>		<b>96.79</b>
" overhang ...	<b>1.33</b>	<b>.66</b>	"		<b>.66</b>
R.Q.D. enclosed					
" overhang					
Bridge enclosed <i>Equip.</i>	<b>42.67</b>	<b>42.67</b>	"		<b>42.67</b>
" overhang aft	<b>3.50</b>	<b>2.63</b>	"		<b>2.63</b>
" overhang forward	<b>.83</b>	<b>.42</b>	"		<b>.42</b>
F'cle enclosed <i>Equip.</i>	<b>50.18</b>	<b>50.16</b>	"		<b>50.16</b>
" overhang <i>Equip.</i>					
Trunk aft					
" forward					
Tonnage opening aft					
" forward					
Total	<b>195.30</b>	<b>193.33</b>			<b>193.33</b>

Standard Height of Superstructure	<b>7.5</b>
" " R.Q.D.	<b>-</b>
Deduction for complete superstructure	<b>42.0</b>
Percentage covered $\frac{S}{L} =$	<b>42.14</b>
" " $\frac{S_1}{L} =$	<b>41.72</b>
" " $\frac{E}{L} =$	<b>32.72</b>
Percentage from Table, Line A <i>Tanker</i>	<b>32.72</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>42.0 X .3272 = 13.74</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</b>	<b>56.0</b>	<b>1</b>		<b>56.00</b>
$\frac{1}{2}$ L from A.P. ...	<b>25.075</b>	<b>4</b>		<b>100.30</b>	<b>25</b>	<b>25.0</b>	<b>4</b>		<b>100.00</b>
$\frac{2}{3}$ L " ...	<b>6.198</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>-</b>	<b>4</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>4</b>		
$\frac{2}{3}$ L from F.P. ...	<b>12.39</b>	<b>2</b>		<b>24.78</b>	<b>12.125</b>	<b>12.125</b>	<b>2</b>		<b>24.25</b>
$\frac{1}{2}$ L " ...	<b>50.15</b>	<b>4</b>		<b>200.60</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>111.25</b>	<b>111.25</b>	<b>1</b>		<b>111.25</b>
Total				<b>507.11</b>					<b>505.00</b>

Mean actual sheer aft = **< 1**  
Mean standard sheer aftMean actual sheer forward = **< 1**  
Mean standard sheer forwardLength of enclosed superstructure forward of amidships = **not applicable**  
" " aft of " =Correction =  $\frac{\text{Difference between sums of products}}{18} \left( 1 - \frac{S}{2L} \right) = \frac{2.11}{18} (1 - \frac{2107}{2107}) = +.06$   
If limited on account of midship superstructure.If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft.

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **34.14**  
Summer freeboard = **6.64**  
Moulded draught (d) = **27.50**

## Deduction for Tropical freeboard and addition for

Winter freeboard =  $\frac{d}{4}$  inches = **6.875**Addition for Winter North Atlantic Freeboard (if required) = **6.87 + 4.63 = 11.50**

## Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$  **17300**

Tons per inch immersion at summer load water line

T = **58.30**Deduction =  $\frac{\Delta}{40T}$  inches= **7.42**= **7 1/2**

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

Correction for coefficient

**770 + .68 = 1.45****1.36**Depth Correction ... **9.75**Deduction for superstructures ... **13.74**Sheer correction ... **0.06**Round of Beam correction ... **.10**

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. ...

**9.81 13.84 4.03**Summer Freeboard = **79.74**

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

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' 5 1/2"**Fresh Water " " ... **6' 0 1/4"**Tropical " " ... **6' 1"**Winter " " ... **7' 3 1/2"**Winter North Atlantic " " ... **7' 7 1/4"**



# British Marquis.

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.

Displacement Extreme at Summer Load draft = 17,298 tons.

Tons per inch = 58.15 tons.

## Equivalent length of Poop.

Length at centre = 98.375'

" " sides = 93.625'

$$4.75 \times \frac{2}{3} = 3.17$$

93.62

Equivalent enclosed length = 96.79

Equivalent overhang = 4.5' - 3.17' = 1.33'

## Equivalent length of Bridge.

Centre 44.0

$$\text{side } \frac{40.0}{4.0} \times \frac{2}{3} = 2.67$$

40.00

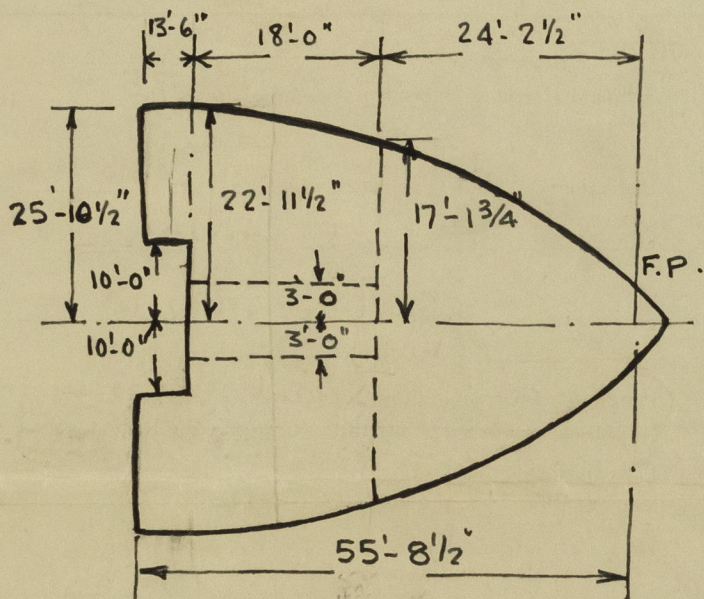
$$\text{Equiv.} = \frac{40.00}{2} = 20.00$$

Overhang forward = 3.5'

2.67

(Overhang aft. = 3.5)

0.83 Equis.



## Forecastle Equivalent length.

Length forward of passage = 24.21

at sides of passage

$$\frac{22.96 + 17.14}{2} = 20.05$$

$$\frac{18 \times 17.05}{20.05} = +15.31$$

Passage.

$$(18.0 - 15.31) \times .993 = 2.69$$

+ 2.67

Sidehouses

$$\frac{25.87 + 22.96}{2} = 24.42$$

10.0

14.42

$$\frac{13.5 \times 14.42}{24.42} = 7.97$$

+ 7.97

50.16

Equivalent Enclosed length.

Equivalent covered

18.0

24.21

42.21

$$\frac{13.5 \times 14.42}{24.42} = 7.97$$

7.97

50.18

Sheer forward.

standards actual

12.39	3	37.17	12.125	3	36.37
50.15	3	150.45	50.25	3	150.75
112.69	1	112.69	111.25	1	111.25
		300.31			298.37

$$\frac{298.37}{300.31} = .993$$

Trade of ship Tanker.

Names of sister ships M.V. "BRITISH MAJOR"

Builder's name and yard number Wm Duffell & Sons Ltd. Yard no. 735

Owners British Tanker Co. Ltd.

Fee £ 19 - 0 - 0

Will be charged on F.C.



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