

AMENDED

with 1966 tabular freeboard

CI

Rpt. C.11 (Comp.)

# LLOYD'S REGISTER OF SHIPPING

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

For LONDON OFFICE ONLY

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Ship's Name <b>BRITISH CROWN</b>	Official Number <b>184648</b>	Nationality and Port of Registry <b>BRITISH LONDON</b>	Gross Tonnage <b>42050</b>	Date of Build <b>MAY 1952</b>	Port of Survey <b>LONDON HQ</b>
Moulded Dimensions: Length <b>611.00'</b> Breadth <b>81.00'</b> Depth <b>44.49'</b> Freeboard Length ..... Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>42050</b> tons (excluding bossing) Coefficient of fineness for use with Tables <b>.787</b>					Date of Survey <b>10.6.66</b>
Surveyor's Signature .....					Particulars of Classification <b>+ 100 A1</b> <b>C.P.I.B</b>

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth	44.49	(a) Where D is greater than Table depth (D-Table depth) R =		Moulded Breadth (B)	
Stringer plate	1.12"	(44.58-40.73) 3 = 11.55"		Standard Round of Beam = $\frac{B \times 12}{50}$	
Wood Sheathing on exposed deck		(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Ship's Round of Beam	
$T \left( \frac{L-S}{L} \right) =$				Difference	
Depth for Freeboard (D) =	44.58	If restricted by superstructures		Restricted to	
				Correction = $\frac{\text{Diff}^e}{4} \times \left( 1 - \frac{S_1}{L} \right)$	= - .08"

DEDUCTION FOR SUPERSTRUCTURES.				
	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Effective Length (E)
Poop enclosed	135.20	135.20	8.00'	135.20
" overhang				
R.Q.D. enclosed				
" overhang				
Bridge enclosed	60.54	59.05	7.50'	59.05
" overhang aft				
" overhang forward				
F'cle enclosed	83.08	83.08	7.50'	83.08
" overhang				
Trunk aft				
" forward				
Tonnage opening aft				
" " forward				
Total	278.82	277.33		277.33

Standard Height of Superstructure **7.50'**  
" " R.Q.D. ....  
Deduction for complete superstructure **42.00"**  
Percentage covered  $\frac{S}{L} = 45.63$   
" "  $\frac{S_1}{L} = 45.39$   
" "  $\frac{E}{L} =$   
Percentage from Table, Line A, TANKER **36.39**  
(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 =  $42.00 \times .3639 = 15.28"$

SHEER CORRECTION.							
Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	M	Product
A.P.		1				1	
$\frac{1}{4}$ L from A.P.		4				4	
$\frac{1}{2}$ L		2				2	
Amidships	O	4	O	O	O	4	O
$\frac{3}{4}$ L from F.P.		2				2	
$\frac{1}{4}$ L		4				4	
F.P.		1				1	
Total			639.90				183.96

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{(455.94 - 0.44)}{18} (.75 - .2282) = 12.99"$   
If limited on account of midship superstructure.  
If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100ft.

<p><b>Deduction for Tropical Freeboard.</b></p> <p><b>Addition for Winter and Winter North Atlantic Freeboard.</b></p> <p>Depth to Freeboard Deck = <b>44.60</b></p> <p>Summer freeboard = <b>9.50</b></p> <p>Moulded draught (d) = <b>35.10</b></p> <p>Keel allowance =</p> <p>Extreme draught =</p> <p>Deduction for Tropical freeboard and addition for =</p> <p>Winter freeboard = <math>\frac{d}{4}</math> inches =</p> <p>Addition for Winter North Atlantic Freeboard (if required) =</p>	<p><b>Deduction for Fresh Water.</b></p> <p>Displacement in salt water at summer load water line</p> <p><math>\Delta =</math></p> <p>Tons per inch immersion at summer load water line</p> <p>T =</p> <p>Deduction = <math>\frac{\Delta}{40 T}</math> inches</p>	<p><b>TABULAR FREEBOARD</b> corrected for Flush Deck (if required)</p> <p>Correction for coefficient <math>\frac{.787 + .68}{1.36} = \frac{1.467}{1.36}</math></p> <table border="1"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction</td> <td>11.55"</td> <td></td> </tr> <tr> <td>Deduction for superstructures</td> <td></td> <td>15.28</td> </tr> <tr> <td>Sheer correction</td> <td>12.99</td> <td></td> </tr> <tr> <td>Round of Beam correction</td> <td></td> <td>.08</td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td>0.21</td> <td></td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td></td> <td></td> </tr> <tr> <td></td> <td>24.75</td> <td>15.36</td> </tr> <tr> <td>Summer Freeboard =</td> <td>14.06</td> <td></td> </tr> </table>		+	-	Depth Correction	11.55"		Deduction for superstructures		15.28	Sheer correction	12.99		Round of Beam correction		.08	Correction for Thickness of Deck amidships	0.21		Other corrections, scantlings, etc.				24.75	15.36	Summer Freeboard =	14.06	
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-			
Tropical Fresh Water Line above Centre of Disc	...	Tropical Fresh Water Freeboard	...
Fresh Water Line	"	Fresh Water	"
Tropical Line	"	Tropical	"
Winter Line below	"	Winter	"
Winter North Atlantic Line	"	Winter North Atlantic	"