

TIMBER

012888-012897-0261

(Comp.).

Index. No. 34332
(For London Office only).

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name RD BYRON (ARCGOW.)	Official Number 163465	Nationality and Port of Registry BRITISH, LONDON	Gross Tonnage 4118.65	Date of Build 1934.	Port of Survey Greenock,
Moulded Dimensions: Length 360.0 Breadth 57.25 Depth 26.75					Date of Survey While building
Moulded displacement at moulded draught = 85 per cent. of moulded depth 9389 tons					Surveyor's Signature
Coefficient of fineness for use with Tables .701					Particulars of Classification * 100 A1.

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
depth ... 26.75	(a) Where D is greater than Table depth (D-Table depth) R = (26.78-24) x 2.769 = +7.70	Moulded Breadth (B) 57.25
plate39"	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = ✓	Standard Round of Beam = $\frac{B \times 12}{50} =$ 13.74
on exposed deck $\frac{L-S}{L} =$		Ship's Round of Beam = 14.50
Depth for Freeboard (D) = 26.78	If restricted by superstructures	Difference .76
		Restricted to
		Correction = $\frac{\text{Diff}^*}{4} \times (1 - \frac{S_1}{L}) =$.76/4 x .4863 = -.09

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
enclosed	33.08	33.08	7.50	✓	33.08
overhang					
enclosed					
overhang					
enclosed... ..	119.00	119.00	7.75	✓	119.00
overhang aft ...	3.00	2.25			2.25
overhang forward					
enclosed	30.58	30.58	7.50	✓	30.58
overhang					
aft					
forward					
opening aft ...					
„ forward					
Total	185.66				184.91

Standard Height of Superstructure	7.10
" " R.Q.D.	✓
Deduction for complete superstructure	39.33
Percentage covered $\frac{S}{L} =$	51.57
" " $\frac{S_1}{L} =$	51.37
" " $\frac{E}{L} =$	51.37
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	
Percentage from Table, Line B. Timber	70.10
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than .2L (if required)	
Deduction = 39.33 x .7010	= - 27.57

SHEER CORRECTION.

Position	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
...		1					1		
A.P. ...		4					4		
...		2					2		
ps ...		4					4		
F.P. ...		2					2		
...		4					4		
...		1					1		
total ...									

Mean actual sheer aft =
Mean standard sheer aft =Mean actual sheer forward =
Mean standard sheer forward =Length of enclosed superstructure forward of amidships = **.1687**" " aft of " = **.1618**Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) =$ **-1.31**

limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.Correction for Tropical Freeboard.
Correction for Winter and Winter North Atlantic Freeboard.Depth to Freeboard Deck = **26.78**
Summer freeboard = **3.25**
Moulded draught (d) = **23.53**

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$ **9840**

Tons per inch immersion at summer load water line

 $T =$ **41.00**Deduction = $\frac{\Delta}{40T}$ inches $=$ **6.00** $=$ **6"**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient **.701 x .68** **1.381**
1.36 **1.360**

+

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Depth Correction ... **7.70**Deduction for superstructures ... **27.57**Sheer correction ... **1.31**Round of Beam correction ... **0.09**

Correction for Thickness of Deck amidships

Other corrections, scantlings, etc. ...

7.70 28.97 -21.27Summer Freeboard = **39.05**TIMBER SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~and~~ Steel, Deck:

TIMBER	Tropical Fresh Water Line above Centre of Disc	...	25"
"	Fresh Water Line	...	19"
"	Tropical Line	...	19"
"	Winter Line	...	5 1/4"
"	Winter North Atlantic Line	...	13"
"	Summer	...	5 1/2"

TIMBER	Tropical Fresh Water Freeboard	...	3'-3"
"	Fresh Water	...	2'-3"
"	Tropical	...	2'-9"
"	Winter	...	2'-9"
"	Winter North Atlantic	...	3'-10 3/4"
"	Summer	...	4'-9 1/2"