

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>Radfield</i>	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length <i>312.5'</i> Breadth <i>43.82'</i> Depth <i>23.25'</i>					Date of Survey <i>11 Nov 46</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>6255</i> tons					Surveyor's Signature
Coefficient of fineness for use with Tables <i>.809</i>					Particulars of Classification <i>+100TT</i>

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth	(a) Where D is greater than Table depth (D-Table depth) R = <i>+5.91</i> ✓	Moulded Breadth (B)
Stringer plate	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50}$ =
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam =
Depth for Freeboard (D) = <i>23.29</i>		Difference
		Restricted to
		Correction = $\frac{\text{Diff}^e}{4} \times \left(1 - \frac{S_1}{L}\right)$ = <i>N/A</i> ✓

DEDUCTION FOR SUPERSTRUCTURES.					
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
Wing enclosure					
" overhang					
Trunk aft					
" forward					
Deck opening aft					
" forward					
Total					

Standard Height of Superstructure
" " R.Q.D.
Deduction for complete superstructure *36.16* ✓
Percentage covered $\frac{S}{L} =$ } *51.17* ✓
" " $\frac{S_1}{L} =$ }
" " $\frac{E}{L} =$ }
Percentage from Table, Line A. *Timber 69.98* ✓
(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 = *36.16 x .6998 = -25.01.30* ✓

SHEER CORRECTION.							
Station	Standard Ordinate	S	Product	Actual Ordinate	Effective Ordinate	S	Product
... ..		1				1	
From A.P.		4				4	
"		2				2	
amidships		4				4	
From 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 =
" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) =$ *-.97* ✓
If limited on account of midship superstructure. If limited to maximum allowance of 1½ ins. per 100 ft.

<p>Correction for Tropical Freeboard.</p> <p>Correction for Winter and Winter North Atlantic Freeboard.</p> <p>Depth to Freeboard Deck = <i>23.29</i></p> <p>Summer freeboard = <i>2.54</i></p> <p>Moulded draught (d) = <i>20.75</i></p> <p>Correction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>5.19 = 5 1/4</i></p> <p>Correction for Winter North Atlantic Freeboard (if required) = $\frac{d}{3}$ = <i>6.92 = 7</i></p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>$\Delta =$</p> <p>Tons per inch immersion at summer load water line</p> <p>T =</p> <p>Deduction = $\frac{\Delta}{40 T}$ inches</p> <p><i>d/4 = 5 1/4</i></p>	<p>TABULAR FREEBOARD corrected for Flush Deck (if required)</p> <p>Correction for coefficient</p> <table border="1"> <tr><td>+</td><td>-</td></tr> <tr><td><i>5.91</i></td><td><i>25.30</i></td></tr> <tr><td><i>-</i></td><td><i>-</i></td></tr> <tr><td><i>-.97</i></td><td><i>-.97</i></td></tr> <tr><td><i>-</i></td><td><i>-</i></td></tr> <tr><td><i>5.91</i></td><td><i>26.27</i></td></tr> <tr><td><i>6.88</i></td><td><i>25.30</i></td></tr> </table> <p>Summer Freeboard = <i>30.57</i></p>	+	-	<i>5.91</i>	<i>25.30</i>	<i>-</i>	<i>-</i>	<i>-.97</i>	<i>-.97</i>	<i>-</i>	<i>-</i>	<i>5.91</i>	<i>26.27</i>	<i>6.88</i>	<i>25.30</i>
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-					
<i>Timber</i>	Tropical Fresh Water Line above Centre of Disc	<i>22 1/4</i>	<i>Timber</i>	Tropical Fresh Water Freeboard	<i>2 - 6 1/2</i>
	Fresh Water Line	<i>17</i>		Fresh Water	<i>1 - 8</i>
	Tropical Line	<i>17</i>		Tropical	<i>2 - 1 1/4</i>
	Winter Line	<i>17 1/4</i>		Winter	<i>3 - 1 1/2</i>
	Winter North Atlantic Line	<i>5 1/2</i>		Winter North Atlantic	<i>3 - 11 3/4</i>
		<i>11 3/4</i>			