

Amended Computation

C.11 (Comp.).

Index No. 15508
(For London Office only.)

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 <i>1902-1</i>	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>+10001</i>

DEPTH FOR FREEBOARD (D). Moulded depth ... <i>23.25</i> Stringer plate ... <i>.04</i> Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <i>23.29</i>	DEPTH CORRECTION. (a) Where D is greater than Table depth (D-Table depth) R = $(23.29 - 20.88) \times 2.46 = +5.91$ (b) Where D is less than Table depth (if allowed) (Table depth-D) R = If restricted by superstructures	ROUND OF BEAM CORRECTION. Moulded Breadth (B) <i>43.82</i> Standard Round of Beam = $\frac{B \times 12}{50} = 10.52$ Ship's Round of Beam = <i>10.50</i> Difference Restricted to Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.02}{4} \times \frac{4883}{15989} = .0007$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	<i>31.00</i>	<i>31.00</i>	<i>7.0</i>	-	<i>31.00</i>
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed	<i>94.00</i>	<i>94.00</i>	<i>7.0</i>	-	<i>94.00</i>
„ overhang aft					
„ overhang forward					
F'cle enclosed <i>equivalent</i>	<i>34.89</i>	<i>34.89</i>	<i>7.25</i>		<i>34.89</i>
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft					
„ „ forward					
Total	<i>159.89</i>	<i>159.89</i>			<i>159.89</i>

Standard Height of Superstructure	<i>6.625</i>
„ „ R.Q.D.	<i>✓</i>
Deduction for complete superstructure	<i>36.16</i>
Percentage covered $\frac{S}{L} =$	<i>51.17</i>
„ „ $\frac{S_1}{L} =$	
„ „ $\frac{E}{L} =$	
Percentage from Table, Line A. (corrected for absence of forecastle (if required))	
Percentage from Table, Line B. <i>37.17</i>	
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than .2L (if required)	
Deduction =	<i>36.16 \times 37.17 = 13.44</i>

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<i>41.25</i>	1		<i>41.25</i>	<i>44.00</i>	<i>44.00</i>	1		<i>44.00</i>
„ L from A.P.	<i>18.35</i>	4		<i>73.40</i>	<i>18.96</i>	<i>18.96</i>	4		<i>75.84</i>
„ L „	<i>4.54</i>	2		<i>9.08</i>	<i>4.74</i>	<i>4.74</i>	2		<i>9.48</i>
Amidships	-	4		-	-	-	4		-
„ L from F.P.	<i>9.08</i>	2		<i>18.16</i>	<i>10.17</i>	<i>10.17</i>	2		<i>20.34</i>
„ L „	<i>36.71</i>	4		<i>146.84</i>	<i>40.68</i>	<i>40.68</i>	4		<i>162.72</i>
F.P.	<i>82.50</i>	1		<i>82.50</i>	<i>94.00</i>	<i>94.00</i>	1		<i>94.00</i>
Total				<i>371.23</i>					<i>406.38</i>

Mean actual sheer aft	
Mean standard sheer aft	
Mean actual sheer forward	
Mean standard sheer forward	
Length of enclosed superstructure forward of amidships =	<i>> .1</i>
„ „ aft of „ =	<i>> .1</i>

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{35.15}{18} \left(.75 - \frac{2558}{4942} \right) = -.97$
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.

Deduction for Fresh Water.

Displacement in salt water at summer load water line
 $\Delta =$
Tons per inch immersion at summer load water line
 $T =$

Deduction = $\frac{\Delta}{40 T}$ inches

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches =
Addition for Winter North Atlantic Freeboard (if required) =

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ...
Deduction for superstructures ...
Sheer correction ...
Round of Beam correction ...
Correction for Thickness of Deck amidships ...
Other corrections, scantlings, etc. ...

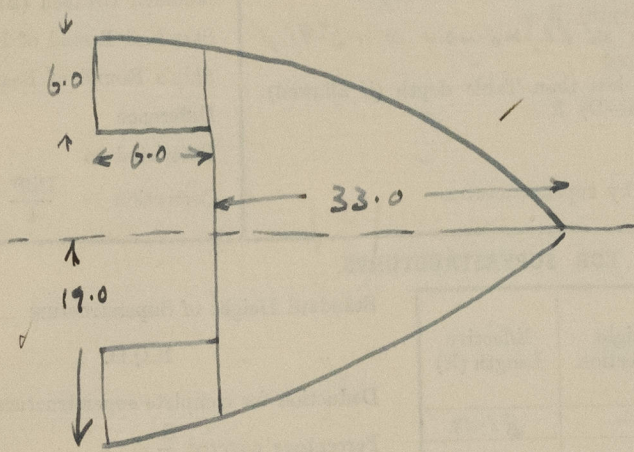
+	-
<i>5.91</i>	<i>13.44</i>
<i>-</i>	<i>.97</i>
<i>-</i>	<i>-</i>
<i>-</i>	<i>-</i>
<i>-</i>	<i>-</i>
<i>5.91</i>	<i>14.41</i>
Summer Freeboard = <i>42.43</i>	

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

Tropical Fresh Water Line above Centre of Disc ...
Fresh Water Line „ „ ...
Tropical Line „ „ ...
Winter Line below „ „ ...
Winter North Atlantic Line „ „ ...

Tropical Fresh Water Freeboard ...
Fresh Water „ „ ...
Tropical „ „ ...
Winter „ „ ...
Winter North Atlantic „ „ ...

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.



$$\frac{6 \times 6}{19} =$$

$$\begin{array}{r} 33.00 \\ 1.89 \\ \hline 34.89 \end{array}$$

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £.....



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Foundation