

T.O. closed (W.E.)

11 (Comp.)

valued 32696

Index. No. 33348.  
(For London Office only).

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>Madale</b>	Official Number <b>161299</b>	Nationality and Port of Registry <b>British, London</b>	Gross Tonnage <b>1929</b>	Date of Build <b>-9 mo.</b>	Port of Survey <b>30.3.41</b>
Dimensions: Length <b>410.0'</b> Breadth <b>54.0'</b> Depth <b>38.29'</b>					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth tons					Particulars of Classification <b>+ 100 A1</b>
Coefficient of fineness for use with Tables <b>.773 (estimated)</b>					<b>with freeboard</b>

Depth for Freeboard (D).		Depth correction.		Round of Beam correction.	
Moulded depth ...	<b>38.29</b>	(a) Where D is greater than Table depth	<input checked="" type="checkbox"/>	Moulded Breadth (B)	<b>54.00</b>
Stringer plate ...	<b>.58</b>	(D - Table depth) R =	<b>(38.34 - 27.33) x 3.00 = +33.03"</b>	Standard Round of Beam = $\frac{B \times 12}{50}$	<b>= 12.96</b>
Sheathing on exposed deck	<input checked="" type="checkbox"/>	(b) Where D is less than Table depth (if allowed)	<input checked="" type="checkbox"/>	Ship's Round of Beam	<b>= 13.25</b>
$T \left( \frac{L-S}{L} \right) =$	<input checked="" type="checkbox"/>	(Table depth - D) R =	<input checked="" type="checkbox"/>	Difference	<b>.29</b>
Depth for Freeboard (D) =	<b>38.34</b>	If restricted by superstructures	<input checked="" type="checkbox"/>	Restricted to	<b>.29</b>
				Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right)$	<b>= <math>\frac{.29}{4} \times 1 = -.07</math></b>

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...					
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...					

Standard Height of Superstructure **7.50**

" " R.Q.D. **7.50**

Deduction for complete superstructure **7.50**

Percentage covered  $\frac{S}{L} =$  ☒

" "  $\frac{S_1}{L} =$  ☒

" "  $\frac{E}{L} =$  ☒

Percentage from Table, Line A. ☒

(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 = **Nil.**

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<b>51.00</b>	1		<b>51.00</b>	<b>54.00</b>	<b>54.00</b>	1		<b>54.00</b>
$\frac{1}{4}L$ from A.P. ...	<b>22.69</b>	4		<b>90.76</b>	<b>23.70</b>	<b>23.70</b>	4		<b>94.80</b>
$\frac{2}{4}L$ " ...	<b>5.61</b>	2		<b>11.22</b>	<b>5.92</b>	<b>5.92</b>	2		<b>11.84</b>
Amidships ...	<input checked="" type="checkbox"/>	4		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4		<input checked="" type="checkbox"/>
$\frac{3}{4}L$ from F.P. ...	<b>11.22</b>	2		<b>22.44</b>	<b>14.81</b>	<b>14.81</b>	2		<b>29.62</b>
$\frac{1}{4}L$ " ...	<b>45.39</b>	4		<b>181.56</b>	<b>59.24</b>	<b>59.24</b>	4		<b>236.96</b>
F.P. ...	<b>102.00</b>	1		<b>102.00</b>	<b>132.00</b>	<b>132.00</b>	1		<b>132.00</b>
Total ...				<b>458.98</b>					<b>559.22</b>

Mean actual sheer aft = **Excess.**

Mean standard sheer aft =

Mean actual sheer forward =

Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = **Flush deck.**

" " aft of " =

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - S}{.2L} \right) = \frac{100.24}{18} \times .75 = -4.18$

If limited on account of midship superstructure. **No.**

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 = **38.34'**

Summer freeboard = **10.98'**

Moulded draught (d) = **27.36'**

Correction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = **6.84 = 6  $\frac{3}{4}$**

Addition for Winter North Atlantic Freeboard (if required) =

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

= **7  $\frac{1}{4}$ "**

TABULAR FREEBOARD corrected for Fresh Water (if required)

Correction for coefficient

**74.60 + 6.15 = 80.75**

**.773 + .68 = 1.453 / 1.36 = 86.26**

Depth Correction ...	<b>33.03</b>	
Deduction for superstructures ...	<b>-</b>	
Sheer correction ...	<b>-4.18</b>	<b>82.8</b>
Round of Beam correction ...	<b>.07</b>	<b>30.3.41</b>
Correction for Thickness of Deck amidships ...	<b>-</b>	
Other corrections, scantlings, etc. to correspond to a summer moulded draught of 27'-4 $\frac{1}{4}$ (27'-4 $\frac{3}{8}$ " actual)	<b>16.71</b>	
Summer Freeboard =	<b>131.75</b>	

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

Tropical Fresh Water Line above Centre of Disc	<b>14"</b>
Fresh Water Line	<b>7 <math>\frac{1}{4}</math>"</b>
Tropical Line	<b>6 <math>\frac{3}{4}</math>"</b>
Winter Line below	<b>6 <math>\frac{3}{4}</math>"</b>
Winter North Atlantic Line	<b>7 <math>\frac{1}{4}</math>"</b>

Tropical Fresh Water Freeboard	<b>10'-11 <math>\frac{3}{4}</math>"</b>
Fresh Water	<b>10'-4 <math>\frac{1}{2}</math>"</b>
Tropical	<b>10'-5 <math>\frac{1}{2}</math>"</b>
Winter	<b>11'-6 <math>\frac{1}{2}</math>"</b>
Winter North Atlantic	<b>11'-6 <math>\frac{1}{2}</math>"</b>



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.

$$\left(\frac{26}{27}\right)^2 \times 13.5 = \frac{13.52}{12.52}$$

$$\begin{array}{r} 29 - \cancel{10} \\ 8 - \cancel{4\frac{1}{2}} \\ \hline 38 - 2\frac{1}{2} \\ 1 \end{array}$$

Trade of ship.....

Names of sister ships.....

Builder's name and yard number.....

Owners.....

Fee £.....



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Foundation