

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having POOP - TRUNK - FEELS

(Type of Superstructures.)

Ship's Name <u>Chloragonda</u>	Nationality and Port of Registry	Official Number	Gross Tonnage	Date of Build <u>1930</u>
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Port of Survey _____

Date of Survey 3-11-31

Name of Surveyor _____

Particulars of Classification 100A1
Carrying Pet. in Bulk

Moulded Dimensions: Length 260 Breadth 48.0 Depth 14.75

Moulded displacement at moulded draught = 85 per cent. of moulded depth _____ tons

Coefficient of fineness for use with Tables 771

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth <u>14.75</u>	(a) Where D is greater than Table depth (D - Table depth) = _____	Moulded Breadth (B) _____
Ring plate <u>.04</u>	(b) Where D is less than Table depth (Table depth - D) = _____	Standard Round of Beam = $\frac{B \times 12}{50} = \frac{11.52}{50} = 11.52$
Leaking on exposed deck <u>✓</u>	(c) Where D is less than Table depth (Table depth - D) = _____	Ship's Round of Beam = <u>12.00</u>
$T \left(\frac{L-S}{L} \right) =$ _____	(17.33 - 14.79) = <u>-5.08</u>	Difference = <u>.48</u>
Depth for Freeboard (D) = <u>14.79</u>	If restricted by superstructures _____	Restricted to _____
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.48}{4} \times \left(1 - \frac{.48}{12} \right) = .1052 - .02 = .0852$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poep enclosed	<u>86.46</u>	<u>86.46</u>	<u>7'-3"</u>		<u>86.46</u>
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
F'cle enclosed	<u>46.50</u>	<u>46.50</u>			<u>46.50</u>
" overhang					
Trunk aft	<u>-</u>	<u>74.72</u>	<u>7'-3"</u>	<u>-</u>	<u>74.72</u>
" forward	<u>-</u>	<u>9.34</u>		<u>-</u>	<u>9.34</u>
Tonnage opening aft					
" " forward					
Total	<u>132.96</u>	<u>217.02</u>			<u>217.02</u>

Standard Height of Superstructure _____

" " R.Q.D. _____

Deduction for complete superstructure 32.00

Percentage covered $\frac{S}{L} = \frac{51.15\%}{L}$

" " $\frac{S_1}{L} = \frac{83.48\%}{L}$

" " $\frac{E}{L} = \frac{83.48\%}{L}$

Percentage from Table, Line A. _____

(corrected for absence of forecastle (if required))

Percentage from Table, Line B. 79.62

(corrected for absence of forecastle (if required))

Interpolation for bridge less than 2L (if required) _____

Deduction = 32 x .7962 = -25.48

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
P.	<u>36.00</u>	1			<u>30.75</u>	<u>30.75</u>	1		<u>30.75</u>
from A.P.	<u>16.02</u>	4			<u>11.85</u>	<u>11.85</u>	4		<u>47.40</u>
"	<u>3.96</u>	2			<u>2.95</u>	<u>2.95</u>	2		<u>5.90</u>
amidships	<u>-</u>	4			<u>-</u>	<u>-</u>	4		<u>-</u>
from F.P.	<u>7.92</u>	2			<u>6.30</u>	<u>6.30</u>	2		<u>12.60</u>
"	<u>32.04</u>	4			<u>25.28</u>	<u>25.28</u>	4		<u>101.12</u>
P.	<u>72.00</u>	1			<u>54.00</u>	<u>54.00</u>	1		<u>54.00</u>
Total				<u>324.00</u>					<u>251.77</u>

Mean actual sheer aft = deficient

Mean standard sheer aft = _____

Mean actual sheer forward = deficient

Mean standard sheer forward = _____

Length of enclosed superstructure forward of amidships = _____

" " aft of " = _____

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{72.23}{18} \times .4943 = +1.98$

If limited on account of midship superstructure. _____

If limited to maximum allowance of 1½ ins. per 100 ft. _____

<p>Deduction for Tropical Freeboard.</p> <p>Addition for Winter and Winter North Atlantic Freeboard.</p> <p>Depth to Freeboard Deck = <u>14.79</u></p> <p>Summer freeboard = <u>.58</u></p> <p>Moulded draught (d) = <u>14.21</u></p> <p>Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <u>3.55</u></p> <p>Addition for Winter North Atlantic Freeboard (if required) = _____</p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line _____</p> <p>Δ = _____</p> <p>Tons per inch immersion at summer load water line _____</p> <p>T = _____</p> <p>Deduction = $\frac{\Delta}{40 T}$ inches = _____</p>	<p>TABULAR FREEBOARD corrected for Flush Deck (if required)</p> <p>Correction for coefficient <u>771 + 68</u></p> <p><u>1.36</u></p> <table border="1"> <tr> <th></th> <th>+</th> <th>-</th> </tr> <tr> <td>Depth Correction</td> <td><u>-</u></td> <td><u>5.08</u></td> </tr> <tr> <td>Deduction for superstructures</td> <td><u>-</u></td> <td><u>25.48</u></td> </tr> <tr> <td>Sheer correction</td> <td><u>1.98</u></td> <td><u>-</u></td> </tr> <tr> <td>Round of Beam correction</td> <td><u>-</u></td> <td><u>.02</u></td> </tr> <tr> <td>Correction for Thickness of Deck amidships</td> <td><u>-</u></td> <td><u>-</u></td> </tr> <tr> <td>Other corrections, scantlings, etc.</td> <td><u>-</u></td> <td><u>-</u></td> </tr> <tr> <td></td> <td><u>1.98</u></td> <td><u>30.58</u></td> </tr> </table> <p>Summer Freeboard = <u>6.93</u></p>		+	-	Depth Correction	<u>-</u>	<u>5.08</u>	Deduction for superstructures	<u>-</u>	<u>25.48</u>	Sheer correction	<u>1.98</u>	<u>-</u>	Round of Beam correction	<u>-</u>	<u>.02</u>	Correction for Thickness of Deck amidships	<u>-</u>	<u>-</u>	Other corrections, scantlings, etc.	<u>-</u>	<u>-</u>		<u>1.98</u>	<u>30.58</u>
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:— 6.93

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 " " ... ..	...