

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name Ident Fillmore Mongolia	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build 1903.	Port of Survey
Moulded Dimensions: Length 599.25' Breadth 65.30' Depth 43.33.				Date of Survey 28.2.40.	Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth				Particulars of Classification 100 A1 Rules Br with freeboard.	
Efficient of fineness for use with Tables 745 estimated.					

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth 43.33 Deck plate08 Freeboard on exposed deck $\left(\frac{L-S}{L} \right) =$ ✓	(a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(43.41 - 39.95) 3 = +10.38$ 3.46 (b) Where D is less than Table depth (if allowed) $(\text{Table depth} - D) R =$ ✓	Moulded Breadth (B) 65.30 Standard Round of Beam $= \frac{B \times 12}{50} =$ 15.67 Ship's Round of Beam $=$ 8.50 Difference 7.17 Restricted to Correction $= \frac{\text{Diff}^a}{4} \times \left(1 - \frac{S_1}{L} \right) =$ 7.17 × .1266 = +.23
Depth for Freeboard (D) = 43.41	If restricted by superstructures ✓	

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
p enclosed ...	31.75	31.75	8.0'	✓	31.75
overhang ...	41.25	20.63			20.63
D. enclosed					
overhang					
lge enclosed...	451.34	338.50	8.0'	✓	338.50
overhang aft					
overhang forward					
le enclosed ...	28.00	28.00	8.0'	✓	28.00
overhang to L/O.	31.93	28.65			28.65
ank aft					
forward ...					
mage opening aft	15.00	45.86	8.0'	✓	45.86
" forward					
Total ...	599.25	523.39			523.39

CTURES.

Standard Height of Superstructure..... 7.50 ✓

" " R.Q.D. ✓

Deduction for complete superstructure..... 42.00

Percentage covered $\frac{S}{L} = 100$ ✓

" " $\frac{S_1}{L} = 87.34$ ✓

" " $\frac{E}{L} = 87.34$ ✓

Percentage from Table, Line A. *and B* 84.40 ✓
(~~corrected for absence of forecaste (if required)~~) ✓

Percentage from Table, Line B. ✓
(corrected for absence of forecaste (if required)) ✓

Interpolation for bridge less than $\cdot 2L$ (if required) ✓

✓ Deduction = $42.00 \times 84.40 = -35.44$

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
...	69.93	1	69.93	47.50	53.50	1	53.50
rom A.P. ...	31.12	4	124.48	12.20	18.50	4	73.20
"	7.69	2	15.38	3.05	5.88	2	11.76
lships	-	4	-	-	-	4	-
rom F.P. ...	15.38	2	30.76	12.44	14.80	2	27.60
"	62.14	4	248.96	49.45	55.85	4	223.40
...	139.85	1	139.85	119.50	125.50	1	125.50
Total	...		629.36	66	500.20		514.56

TION.

Actual live deck height = $8'-0''$
Standard " " " " = $7'-6''$
 $-6''$

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 = } Deficient
aft of " " = } sheer.

Forward sheer.

Standard	Actual	Difference
15.88	46.14	30.26
62.24	136.72	74.48
139.85	139.85	0
	372.71	

(50) + 154 = 294

Limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. ✓

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{129.16 - 114.80}{18} \left(.75 - \frac{50}{25} \right) = + 1.54$

If limited on account of midship superstructure. ✓

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

<p>Correction for Tropical Freeboard.</p> <p>Correction for Winter and Winter North Atlantic Freeboard.</p>	<p>Deduction for Fresh Water.</p> <p>Displacement in salt water at summer load water line</p> <p>Tons per inch immersion at summer load water line</p> <p>T =</p>	<p>TABULAR FREEBOARD corrected for Fresh Deck (if required)</p> <p>Correction for coefficient</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"> $\frac{745 + 68}{1.36} = \frac{1.425}{1.36}$ </td> <td style="width: 50%; text-align: center;"> $\frac{129.31}{1.3549}$ </td> </tr> <tr> <td style="width: 50%; text-align: center;"> <p>Depth Correction</p> <p>Deduction for superstructures</p> <p>Sheer correction</p> <p>Round of Beam correction</p> <p>Correction for Thickness of Deck amidships</p> <p>Other corrections, scantlings, etc.</p> </td> <td style="width: 50%; text-align: center;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"> <p>+</p> <p>10.38</p> <p>1.39</p> <p>2.23</p> <p>-</p> <p>7.40</p> <p>12.20</p> </td> <td style="width: 50%; text-align: center;"> <p>-</p> <p>35.44</p> <p>-</p> <p>-</p> <p>-</p> <p>35.44</p> <p>- 23.24</p> </td> </tr> </table> </td> </tr> </table>	$\frac{745 + 68}{1.36} = \frac{1.425}{1.36}$	$\frac{129.31}{1.3549}$	<p>Depth Correction</p> <p>Deduction for superstructures</p> <p>Sheer correction</p> <p>Round of Beam correction</p> <p>Correction for Thickness of Deck amidships</p> <p>Other corrections, scantlings, etc.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"> <p>+</p> <p>10.38</p> <p>1.39</p> <p>2.23</p> <p>-</p> <p>7.40</p> <p>12.20</p> </td> <td style="width: 50%; text-align: center;"> <p>-</p> <p>35.44</p> <p>-</p> <p>-</p> <p>-</p> <p>35.44</p> <p>- 23.24</p> </td> </tr> </table>	<p>+</p> <p>10.38</p> <p>1.39</p> <p>2.23</p> <p>-</p> <p>7.40</p> <p>12.20</p>	<p>-</p> <p>35.44</p> <p>-</p> <p>-</p> <p>-</p> <p>35.44</p> <p>- 23.24</p>
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<p>Depth to Freeboard Deck = 43.41</p> <p>Summer freeboard = 9.55</p> <p>Moulded draught (d) = 34.06</p>	<p>$\Delta =$</p> <p>$\Delta / 4 = 8.52$</p> <p>$\Delta / 4 = 8 \frac{1}{2}$</p>	<p>Correction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 8.52</p> <p>Correction for Winter North Atlantic Freeboard (if required) = \checkmark</p>						

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~wood~~, Steel, Deck:—

TROPICAL FRESH WATER LINE		TROPICAL FRESH WATER FREEBOARD	
Tropical Fresh Water Line above Centre of Disc	...	17 1/2"	Tropical Fresh Water Freeboard
Fresh Water Line	...	8 1/2"	Fresh Water
Tropical Line	...	8 1/2"	Tropical
Winter Line	...	8 1/2"	Winter
Winter North Atlantic Line	...	✓	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.

Forecastle. $\frac{L}{10} = 59.93.$

Enclosed $\frac{28.00}{31.93}$

Allowed $31.93 \times .8974 = 28.65.$

Dear Sir,

returning
the s.s.
thank you

James Fre

Trade of ship

Names of sister ships

Builder's name and yard number

Owners

Fee £



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Lloyd's Register
Foundation