

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>Panamian</i>	Official Number	Nationality and Port of Registry <i>Panama</i>	Gross Tonnage	Date of Build <i>1904-1</i>	Port of Survey <i>New York</i>
Moulded Dimensions: Length <i>599.25</i> Breadth <i>65.00</i> Depth <i>51.33</i>					Date of Survey <i>Feb. 6 March 1940</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth					Surveyor's Signature <i>W. Boylan</i>
Coefficient of fineness for use with Tables <i>.754 (estimated)</i>					Particulars of Classification <i>100% with (p) bars (Contingent)</i>

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... <i>51.33</i>	(a) Where D is greater than Table depth (D - Table depth) R = <i>(51.60 - 39.95) x 3 = + 34.95</i>	Moulded Breadth (B) <i>65'</i>
Freeboard plate ... <i>.08</i>	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 15.60$
Correction on exposed deck $\left(\frac{L-S}{L}\right) = .29 \times .6542 = .19$	If restricted by superstructures	Ship's Round of Beam = <i>8.50</i>
Depth for Freeboard (D) = <i>51.60</i>		Difference = <i>7.10</i>
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{7.10}{4} \times .6556 = + 1.16$

DEDUCTION FOR SUPERSTRUCTURES.					
Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Enclosed ...					
Overhang ...					
D. enclosed ...					
Overhang ...					
Ge enclosed ...	<i>204.25</i>	<i>204.25</i>	<i>8.0</i>	-	<i>204.25</i>
Overhang aft ...	<i>2.50</i>	<i>1.88</i>	-		<i>1.88</i>
Overhang forward ...	<i>.50</i>	<i>.25</i>	-		<i>.25</i>
Enclosed ...					
Overhang ...					
Deck aft ...					
Forward ...					
Page opening aft ...					
Forward ...					
Total ...	<i>207.25</i>	<i>206.38</i>			<i>206.38</i>

Standard Height of Superstructure	<i>7.5'</i>
" " R.Q.D.	
Deduction for complete superstructure	<i>42'</i>
Percentage covered $\frac{S}{L} =$	<i>34.58</i>
" " $\frac{S_1}{L} =$	<i>34.44</i>
" " $\frac{E}{L} =$	<i>34.44</i>
Percentage from Table, Line A.	
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B. <i>22.77 - 5.0</i>	<i>= 17.77</i>
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than 2L (if required)	
Deduction = <i>42 x .1777 = -7.46</i>	

SHEER CORRECTION.									
Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
...	<i>69.93</i>	1		<i>69.93</i>	<i>45</i>	<i>45</i>	1		<i>45</i>
From A.P. ...	<i>31.12</i>	4		<i>124.48</i>	<i>6</i>	<i>6</i>	4		<i>24</i>
" "	<i>7.69</i>	2		<i>15.38</i>	-	-	2		-
Ships ...	-	4		-	-	-	4		-
From F.P. ...	<i>15.38</i>	2		<i>30.76</i>	<i>11</i>	<i>11</i>	2		<i>22</i>
" "	<i>62.24</i>	4		<i>248.96</i>	<i>45</i>	<i>45</i>	4		<i>180</i>
" "	<i>139.85</i>	1		<i>139.85</i>	<i>117</i>	<i>117</i>	1		<i>117</i>
Total ...				<i>629.36</i>					<i>388</i>

Mean actual sheer aft =
Mean standard sheer aft = } *Definit*

Mean actual sheer forward =
Mean standard sheer forward = }

Length of enclosed superstructure forward of amidships =
" " aft of " = } *Sheer Definit*

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{241.36}{18} \left(\frac{.75 - .1729}{.5771} \right) = + 7.74$
If limited on account of midship superstructure.

Correction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)	<i>129.31</i>
Correction for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.754 + .68}{1.36} = \frac{1.434}{1.36} =$	<i>136.33</i>
Depth to Freeboard Deck = <i>51.70</i>	$\Delta =$	Depth Correction ...	<i>34.95</i>
Summer freeboard = <i>16.70</i>	Tons per inch immersion at summer load water line	Deduction for superstructures ...	<i>- 7.46</i>
Moulded draught (d) = <i>35.00</i>	T =	Sheer correction ...	<i>7.74</i>
Correction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>8.75</i>	Deduction = $\frac{\Delta}{40 T}$ inches	Round of Beam correction ...	<i>1.16</i>
Correction for Winter North Atlantic Freeboard (if required) =	$d/4 = 222 \frac{1}{4}$	Correction for Thickness of Deck amidships ...	<i>1.22</i>
		Other corrections, scantlings, etc. <i>26.46</i>	<i>-</i>
		On summer mould draught of <i>35 feet</i>	<i>71.53</i>
		Summer Freeboard = <i>200.40</i>	<i>+ 64.07</i>

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Deck:—			
Tropical Fresh Water Line above Centre of Disc ...	<i>444 1/2</i>	Tropical Fresh Water Freeboard ...	<i>4546</i>
Fresh Water Line " " ...	<i>222</i>	Fresh Water " " ...	<i>4868</i>
Tropical Line " " ...	<i>222</i>	Tropical " " ...	<i>4868</i>
Winter Line below " " ...	<i>222</i>	Winter " " ...	<i>5312</i>
Winter North Atlantic Line " " ...	-	Winter North Atlantic " " ...	-

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