

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name PLAVNIK	Official Number -	Nationality and Port of Registry Yugoslav Susak	Gross Tonnage 2762	Date of Build 1922	Port of Survey New York
Moulded Dimensions: Length 329.3' Breadth 45' Depth 20.5'					Date of Survey Jan. 15 and 16, 1943
Moulded displacement at moulded draught = 85 per cent. of moulded depth particulars not available tons					Surveyor's Signature <i>M. Bradt</i>
Coefficient of fineness for use with Tables .78 (assumed)					Particulars of Classification 100A-1

Depth for Freeboard (D). Moulded depth ... 20.5' Stringer plate7106 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = 20.56	Depth correction. (a) Where D is greater than Table depth (D—Table depth) R = \checkmark (b) Where D is less than Table depth (if allowed) (Table depth—D) R = $(21.95 - 20.56) 2.533 = -3.52$ $\frac{1.39}{1.39}$ If restricted by superstructures	Round of Beam correction. Moulded Breadth (B) 45.00 Standard Round of Beam = $\frac{B \times 12}{50} = 10.80$ Ship's Round of Beam = 10.83 Difference .03 Restricted to Correction = $\frac{\text{Diff}^a}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.03}{4} \times 1.423 = .0107$
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	18.5'	18.50	7'		18.50
" overhang ...					
R.Q.D. enclosed ...	46.0'	46.00	3.5'	4.29' x 35% / 505	31.84
" overhang ...		178.20			
Bridge enclosed ...	198.0'	198	7.67'		178.20
" overhang aft ...					
" overhang forward	2.0'	1.00	7.67'		1.00
Fore enclosed ...	38.8'	38.80	7.0		38.80
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward					
Total ...	303.30	282.50			268.34

Standard Height of Superstructure **6.793'**
 " " R.Q.D. **5.057**
 Deduction for complete superstructure **37.29**
 Percentage covered $\frac{S}{L} = 92.10$
 " " $\frac{S_1}{L} = 85.78$
 " " $\frac{E}{L} = 81.49$
 Percentage from Table, Line A. **77.15**
 (corrected for absence of forecastle (if required)) \checkmark
 Percentage from Table, Line B. \checkmark
 (corrected for absence of forecastle (if required)) \checkmark
 Interpolation for bridge less than .2L (if required) \checkmark
 Deduction = **37.29 x 77.15 = -28.77**

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	42.93	1	42.93	51.0	51.0	1	51.0
%L from A.P. ...	19.10	4	76.40	17.5	17.5	4	70.0
%L " ...	4.72	2	9.44	2.0	2.0	2	4.0
Amidships ...	-	4	-	-	-	4	-
%L from F.P. ...	9.44	2	18.88	16.0	16.0	2	32.0
%L " ...	38.20	4	152.80	51.0	51.0	4	204.0
F.P. ...	85.86	1	85.86	103.0	103.0	1	103.0
Total ...			386.31				464.0

Mean actual sheer aft = **.957**
 Mean standard sheer aft

Mean actual sheer forward = **Excess**
 Mean standard sheer forward

Length of enclosed superstructure forward of amidships = **7.1**
 " " aft of " = **7.1**

8' sheer aft	42.93	51.0	51.0
42.93	3	57.30	52.5
19.10	3	14.16	6.0
4.72	3		
		114.39	109.5

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{77.69}{18} (.75 - .4605) = -1.25$
 If limited on account of midship superstructure. \checkmark

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

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 20.56 Summer freeboard = 1.75 Moulded draught (d) = 18.81 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 4.70 = 4 3/4" Addition for Winter North Atlantic Freeboard (if required) = 169 mm $6 3/4" = 172 \text{ mm}$	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 $d/4 = 119 \text{ mm}$ $4 3/4" = 121 \text{ mm}$	TABULAR FREEBOARD corrected for Fresh Water (if required) Correction for coefficient. $\frac{784.68}{1.36} = \frac{1.46}{1.36}$ <table border="1"> <tr> <th></th><th>+</th><th>-</th></tr> <tr> <td>Depth Correction ...</td><td>-</td><td>3.52</td></tr> <tr> <td>Deduction for superstructures ...</td><td>-</td><td>28.77</td></tr> <tr> <td>Sheer correction ...</td><td>-</td><td>1.25</td></tr> <tr> <td>Round of Beam correction ...</td><td>-</td><td>-</td></tr> <tr> <td>Correction for Thickness of Deck amidships ...</td><td>-</td><td>-</td></tr> <tr> <td>Other corrections, scantlings, etc. ...</td><td>-</td><td>-</td></tr> <tr> <td></td><td>-</td><td>33.54</td></tr> </table> Summer Freeboard = 21.01		+	-	Depth Correction ...	-	3.52	Deduction for superstructures ...	-	28.77	Sheer correction ...	-	1.25	Round of Beam correction ...	-	-	Correction for Thickness of Deck amidships ...	-	-	Other corrections, scantlings, etc. ...	-	-		-	33.54
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, **Wood, Steel, Deck** **534 mm**

Tropical Fresh Water Line above Centre of Disc 24.2 mm 238 mm	Tropical Fresh Water Freeboard 29.6 mm 292 mm
Fresh Water Line " 12.1 mm 119 mm	Fresh Water " 41.5 mm 413 mm
Tropical Line " 12.1 mm 119 mm	Tropical " 41.5 mm 413 mm
Winter Line below " 12.1 mm 119 mm	Winter " 65.3 mm 655 mm
Winter North Atlantic Line " 67 mm 169 mm	Winter North Atlantic " 70.3 mm 706 mm

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.

Trade of ship..... Foreign

Names of sister ships..... Not known

Builder's name and yard number..... Schiffsw (v. J&Sch.) A.G.

Owners Brodarsko Akcionarsko Drustvo

Fee £..... \$50.00



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Foundation