

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name KARLOVAC <i>BRODGRADILISTE "SPLIT"</i> YARD NO. 126	Official Number	Nationality and Port of Registry YUGOSLAV RIJEKA	Gross Tonnage 300	Date of Build 1954	Port of Survey <i>SPLIT</i>
Moulded Dimensions: Length <i>34.520m</i> Breadth <i>7.000m</i> Depth <i>3.354m</i> <i>CENTRE RUDDER STOCK</i> <i>113'-3"</i> <i>22'-11 1/2"</i> <i>11'-0"</i>					Date of Survey <i>14th SEPTEMBER, 1954</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>163 METRE. tons</i> <i>306 Tons (approx)</i>					Surveyor's Signature <i>Gmajin</i>
Coefficient of fineness for use with Tables <i>.68 (.44 Actual)</i>					Particulars of Classification <i>+100A1</i> <i>FOR SERVICE IN THE ADRIATIC</i> <i>CONTEMPLATED</i>

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth <i>3.354m</i> ... <i>11.00</i>	(a) Where D is greater than Table depth (D-Table depth) R = <i>3.17"</i> <i>(11.19-7.55) 0.871 = + 3.17"</i>	Moulded Breadth (B) <i>22.96</i>
Stringer plate <i>6 7/8"</i> ... <i>.02</i>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = <i>✓</i>	Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>5.51"</i>
Sheathing on exposed deck <i>65 7/8"</i> ... <i>.17</i>		Ship's Round of Beam <i>140 7/8"</i> = <i>5.50"</i>
$T \left(\frac{L-S}{L} \right) = .22 \times 7.487$	If restricted by superstructures	Difference <i>.01"</i>
Depth for Freeboard (D) = <i>11.19</i>		Restricted to
		Correction = $\frac{\text{Diff}^c}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.01}{4} \times 7.487 = \text{NIL}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	<i>28.46</i>	<i>28.46</i>	<i>3.19</i>	<i>3.19 + .05/60</i>	<i>15.37</i>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	<i>28.46</i>	<i>28.46</i>			<i>15.37</i>

Standard Height of Superstructure <i>6.0</i> ✓
" " R.Q.D. <i>✓</i>
Deduction for complete superstructure <i>17.33</i> ✓
Percentage covered $\frac{S}{L} =$ <i>25.13</i> ✓
" " $\frac{S_1}{L} =$ <i>13.57</i>
Percentage from Table, Line A. <i>6.79</i>
(corrected for absence of forecastle (if required)) ✓
Percentage from Table, Line B. <i>✓</i>
(corrected for absence of forecastle (if required)) ✓
Interpolation for bridge less than .2L (if required) ✓
Deduction = <i>17.33</i> × <i>.0679</i> = <i>-1.18"</i>

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	21.325	1	21.33	^{9.46} + 2.40	9.46	1	9.46		
$\frac{1}{2}$ L from A.P. ...	9.49	4	37.96	^{.63} + 16	.63	4	2.52		
$\frac{3}{8}$ L " ...	2.35	2	4.70	^{- 2.08} - 53	- 2.08	2	- 4.16		
Amidships ...		4		0		4			
$\frac{3}{8}$ L from F.P. ...	4.69	2	9.38	^{5.75} + 14.6	4.69	2	9.38		
$\frac{1}{2}$ L " ...	18.98	4	75.92	^{24.79} + 6.30	18.98	4	75.92		
F.P. ...	42.65	1	42.65	^{63.18} + 13.51	42.65	1	42.65		
Total ...			191.94				135.77		

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{56.17}{18} \left(.75 - \frac{1257}{2 \times 11.19} \right) = +1.95$

If limited on account of midship superstructure.

Mean actual sheer aft = *Deficient < .5*

Mean actual sheer forward = *Excess*

Length of enclosed superstructure forward of amidships = *NIL*

" " aft of " = *NIL*

Sheer aft.									
Stand.	<i>21.325</i>	<i>1</i>	<i>21.33</i>	<i>Actual</i>	<i>9.46</i>	<i>1</i>	<i>9.46</i>		
	<i>9.49</i>	<i>3</i>	<i>28.47</i>		<i>.63</i>	<i>3</i>	<i>1.89</i>		
	<i>2.35</i>	<i>3</i>	<i>7.05</i>		<i>-2.08</i>	<i>3</i>	<i>6.24</i>		
			<i>56.85</i>				<i>5.11</i>		

If limited to maximum allowance of 1 1/2 ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck =	<i>11.24</i>
Summer freeboard =	<i>3.09</i>
Moulded draught (d) =	<i>7.55</i>

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = *1.89" = 2"*

Addition for Winter North Atlantic Freeboard (if required)=

Deduction for Fresh Water.

Displacement in salt water at summer load water line

$\Delta =$ *218*

Tons per inch immersion at summer load water line

T = *4.13*

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

= *1.32"*

= *1 1/4"*

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction ...	<i>3.17</i>	<i>-</i>
Deduction for superstructures ...	<i>-</i>	<i>1.18</i>
Sheer correction ...	<i>1.95</i>	<i>-</i>
Round of Beam correction ...	<i>.60</i>	<i>-</i>
Correction for Thickness of Deck amidships ...	<i>28.38</i>	<i>-</i>
Other corrections, scantlings, etc. <i>consequently</i>	<i>34.10</i>	<i>-</i>
<i>is a S.M. draught of 7'-6 5/8"</i>	<i>11.18</i>	<i>-</i>
<i>(Actual 7'-6 5/8")</i>	<i>32.92</i>	<i>-</i>

Summer Freeboard = *44.25*

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

Tropical Fresh Water Line above Centre of Disc *Not amight*

Fresh Water Line " " *1 1/4" 32m*

Tropical Line " " *Not amight*

Winter Line below " " *2" 51m*

Winter North Atlantic Line " " *Not amight*

Tropical Fresh Water Freeboard *Not amight*

Fresh Water " " *3'-7" 1092m*

Tropical " " *Not amight*

Winter " " *Not amight*

Winter North Atlantic " " *Not amight*

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

Names of sister ships

Builder's name and yard number

Owners

Fee £



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Foundation