

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index No. 41857
(For London Office only).

26 OCT 1953

Ship's Name <i>"Illustrious"</i> (ex. Frontenac '51)	Official Number -	Nationality and Port of Registry <i>Panamanian</i> <i>Panama.</i>	Gross Tonnage <i>7350</i>	Date of Build <i>1928.</i>	Port of Survey <i>New York.</i>
Moulded Dimensions: Length <i>440.25'</i> Breadth <i>58.25</i> Depth <i>33.75</i>					Date of Survey <i>12th March 1953</i> <i>and subsequently.</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth: <i>16,652</i> tons					Surveyor's Signature <i>J. Dodd.</i>
Coefficient of fineness for use with Tables: <i>.792</i>					Particulars of Classification <i>+ 100 A1</i> <i>Carrying petroleum in bulk.</i>

Depth for Freeboard (D). Moulded depth ... <i>33.75</i> Stringer plate <i>.65</i> ... <i>.054</i> Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <i>33.804</i>	Depth correction. (a) Where D is greater than Table depth (D—Table depth) R= <i>(33.80 - 29.35) 3.00 = + 13.35</i> (b) Where D is less than Table depth (if allowed) (Table depth—D) R= If restricted by superstructures	Round of Beam correction. Moulded Breadth (B) <i>58.25</i> Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>13.98</i> Ship's Round of Beam = <i>14 1/2</i> Difference <i>.52</i> Restricted to <i>.52</i> Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <i>-.08</i>
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DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<i>105.0</i>	<i>105.00</i>	<i>7.5</i>	—	<i>105.00</i>
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	<i>30.0</i>	<i>30.00</i>	<i>7.5</i>	—	<i>30.00</i>
" overhang aft ...					
" overhang forward ...					
F'cle enclosed ...	<i>40.0</i>	<i>40.00</i>	<i>7.5</i>	—	<i>40.00</i>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward ...					
Total ...	<i>175.00</i>	<i>175.00</i>			<i>175.00</i>

Standard Height of Superstructure *7.5'*
 " " R.Q.D. —
 Deduction for complete superstructure *42*
 Percentage covered $\frac{S}{L} =$ *39.77*
 " " $\frac{S_1}{L} =$ *39.77*
 " " $\frac{E}{L} =$ *39.77*
 Percentage from Table, Line A. *Tanker 30.77*
 (corrected for absence of forecastle (if required))
 Percentage from Table, Line B.
 (corrected for absence of forecastle (if required))
 Interpolation for bridge less than .2L (if required)
 Deduction = *42 + 30.77% = - 12.92*

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	<i>54.025</i>	1	<i>54.025</i>	<i>54.84</i>	<i>54.84</i>	1	<i>54.84</i>
%L from A.P. ...	<i>24.03</i>	4	<i>96.12</i>	<i>25.08</i>	<i>25.08</i>	4	<i>100.32</i>
%L " ...	<i>5.94</i>	2	<i>11.88</i>	<i>7.44</i>	<i>7.44</i>	2	<i>14.88</i>
Amidships ...	—	4	—	—	—	4	—
%L from F.P. ...	<i>11.88</i>	2	<i>23.76</i>	<i>12.84</i>	<i>12.84</i>	2	<i>25.68</i>
%L " ...	<i>48.06</i>	4	<i>192.24</i>	<i>48.24</i>	<i>48.24</i>	4	<i>192.96</i>
F.P. ...	<i>108.05</i>	1	<i>108.05</i>	<i>108.00</i>	<i>108.00</i>	1	<i>108.00</i>
Total ...			<i>486.075</i>				<i>496.88</i>

Mean actual sheer aft = *Excess*
 Mean standard sheer aft
 Mean actual sheer forward = *Excess*
 Mean standard sheer forward
 Length of enclosed superstructure forward of amidships =
 " " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{10.805}{18} (.75 - .1988) = -.3309$
 If limited on account of midship superstructure.

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. Ft. Depth to Freeboard Deck = <i>33.80</i> Summer freeboard = <i>6.54</i> Moulded draught (d) = <i>27.26</i> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>7"</i> previously assigned Addition for Winter North Atlantic Freeboard (if required) = <i>1 1/2"</i> previously assigned	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 = <i>7 1/2"</i> previously assigned	TABULAR FREEBOARD corrected for Tanker Correction for coefficient. <i>.792 + .68 = 1.472</i> <table border="1"> <tr> <th></th><th>+</th><th>-</th></tr> <tr> <td>Depth Correction ...</td><td><i>13.35</i></td><td>—</td></tr> <tr> <td>Deduction for superstructures ...</td><td>—</td><td><i>12.92</i></td></tr> <tr> <td>Sheer correction ...</td><td>—</td><td><i>.33</i></td></tr> <tr> <td>Round of Beam correction ...</td><td>—</td><td><i>.08</i></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><i>.06</i></td></tr> <tr> <td></td><td><i>13.35</i></td><td><i>13.39</i></td></tr> </table> Summer Freeboard = <i>78.50</i>		+	-	Depth Correction ...	<i>13.35</i>	—	Deduction for superstructures ...	—	<i>12.92</i>	Sheer correction ...	—	<i>.33</i>	Round of Beam correction ...	—	<i>.08</i>	Correction for Thickness of Deck amidships ...	—	—	Other corrections, scantlings, etc. ...	—	<i>.06</i>		<i>13.35</i>	<i>13.39</i>
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:—

Tropical Fresh Water Line above Centre of Disc ...	<i>14 1/2"</i>	<i>369 mm</i>	Tropical Fresh Water Freeboard ...	<i>5'-4"</i>	<i>1625 mm</i>
Fresh Water Line " " ...	<i>7 1/2"</i>	<i>191 mm</i>	Fresh Water " " ...	<i>5'-11"</i>	<i>1802 mm</i>
Tropical Line " " ...	<i>7"</i>	<i>178 mm</i>	Tropical " " ...	<i>5'-11 1/2"</i>	<i>1816 mm</i>
Winter Line below " " ...	<i>7"</i>	<i>178 mm</i>	Winter " " ...	<i>7'-1 1/2"</i>	<i>2172 mm</i>
Winter North Atlantic Line " " ...	<i>11 1/2"</i>	<i>292 mm</i>	Winter North Atlantic " " ...	<i>7'-5"</i>	<i>2285 mm</i>

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

International.

Names of sister ships

Builder's name and yard number

Swan Hunter & Wigham Richardson, Wallsend.

Owners

Soc. de Carga Antilla SA.

Fee £



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Foundation