

Lloyd's Register of Shipping.  
SURVEYS FOR FREEBOARD.

NICOYA ex (COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <i>ex. "Ponro"</i> <i>"Empire Inawddach"</i>	Official Number	Nationality and Port of Registry <i>British.</i> <i>London.</i>	Gross Tonnage	Date of Build <i>1935</i>	Port of Survey
Moulded Dimensions: Length <i>363.94</i> Breadth <i>44.62</i> Depth <i>28.71</i> <i>to H. deck.</i> <i>to centre of rudder stock.</i>					Date of Survey <i>25. 8. 47.</i>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <i>7505</i> tons					Surveyor's Signature
Coefficient of fineness for use with Tables <i>.68 (.663 actual)</i>					Particulars of Classification <i>100 A.1.</i> <i>with freeboard.</i>

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth ... <i>28.71</i>	(a) Where D is greater than Table depth (D-Table depth) R = <i>(28.74 - 24.27) 2.8 = +12.52"</i>	Moulded Breadth (B) <i>44.62'</i>
Stringer plate <i>.35"</i> ... <i>.03</i>	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = <i>4.47</i>	Standard Round of Beam = $\frac{B \times 12}{50}$ = <i>10.71"</i>
Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures <i>✓</i>	Ship's Round of Beam = <i>10.63</i>
Depth for Freeboard (D) = <i>28.74</i>		Difference <i>✓</i> <i>.08</i>
		Restricted to
		Correction = $\frac{\text{Diff}^\circ}{4} \times \left( 1 - \frac{S_1}{L} \right)$ = $\frac{.08}{4} \times \frac{.6116}{.6116}$ = <i>+.01"</i>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	<i>55.65</i>	<i>55.65</i>	<i>7-3 3/4"</i>	<i>✓</i>	<i>55.65</i>
" overhang ...	<i>.33</i>	<i>.16</i>			<i>.16</i>
R.Q.D. enclosed ...	<i>✓</i>				
" overhang ...	<i>✓</i>				
Bridge enclosed ...	<i>✓</i>				
" overhang aft ...	<i>✓</i>				
" overhang forward ...	<i>✓</i>				
F'cle enclosed ...	<i>85.53</i>	<i>85.53</i>	<i>7-3 3/4"</i>	<i>✓</i>	<i>85.53</i>
" overhang ...	<i>✓</i>				
Trunk aft ...	<i>✓</i>				
" forward ...	<i>✓</i>				
Tonnage opening aft ...	<i>✓</i>				
" " forward ...	<i>✓</i>				
Total ...	<i>141.51</i>	<i>141.34</i>			<i>141.34</i>

Standard Height of Superstructure *7.14'*

" " R.Q.D. *✓*

Deduction for complete superstructure *39.60"*

Percentage covered  $\frac{S}{L} =$  *38.88*

" "  $\frac{S_1}{L} =$  *38.84*

" "  $\frac{E}{L} =$  *38.84*

Percentage from Table, Line A. *32.51* *✓*  
(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 = *39.60* x *.2251* = *- 8.91"*

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ...	<i>46.894</i>	1	<i>46.89</i>	<i>27.44</i>	<i>27.44</i>	1	<i>27.44</i>
$\frac{1}{2}$ L from A.P. ...	<i>20.645</i>	4	<i>82.58</i>	<i>.875</i>	<i>.875</i>	4	<i>3.50</i>
$\frac{2}{3}$ L " ...	<i>5.10</i>	2	<i>10.20</i>	<i>✓</i>	<i>✓</i>	2	<i>✓</i>
Amidships ...	<i>✓</i>	4	<i>✓</i>	<i>✓</i>	<i>✓</i>	4	<i>✓</i>
$\frac{2}{3}$ L from F.P. ...	<i>10.28</i>	2	<i>20.42</i>	<i>✓</i>	<i>✓</i>	2	<i>✓</i>
$\frac{1}{2}$ L " ...	<i>41.29</i>	4	<i>165.16</i>	<i>11.875</i>	<i>11.875</i>	4	<i>47.50</i>
F.P. ...	<i>92.788</i>	1	<i>92.79</i>	<i>59.75</i>	<i>59.75</i>	1	<i>59.75</i>
Total ...			<i>417.54</i>				<i>138.19</i>

Mean actual sheer aft = *Sufficient.*

Mean standard sheer aft = *Sufficient.*

Mean actual sheer forward = *Sufficient.*

Mean standard sheer forward = *Sufficient.*

Length of enclosed superstructure forward of amidships = *< 1*

" " aft of " = *< 1*

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{279.35}{18} \times .5556 = + 8.62"$

If limited on account of midship superstructure. *✓*

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

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = <i>28.74</i> Ft. Summer freeboard = <i>8.73</i> Moulded draught (d) = <i>20.01</i> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>5"</i> Addition for Winter North Atlantic Freeboard (if required) = <i>✓</i>	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta =$ <i>5822 Tons.</i> Tons per inch immersion at summer load water line $T =$ <i>32.3</i> Deduction = $\frac{\Delta}{40 T}$ inches = <i>4.51</i> = <i>4 1/2"</i>	<b>TABULAR FREEBOARD corrected for Flush Deck (if required)</b> Correction for coefficient <i>Int.</i> Depth Correction ... <i>12.52</i> Deduction for superstructures ... <i>8.91</i> Sheer correction ... <i>8.62</i> Round of Beam correction ... <i>.01</i> Correction for Thickness of Deck amidships ... Other corrections, scantlings, etc. <i>31.93</i> <i>to a summer mld. draught of 20'-0 1/8" (actual)</i> Summer Freeboard = <i>104.75"</i>	<i>60.58"</i> <i>60.58"</i> <i>50.8</i> <i>27.8.47</i> <i>+ 44.17"</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>9 1/2"</i>	Tropical Fresh Water Freeboard ... <i>7.14'</i>
Fresh Water Line " " ... <i>4 1/2"</i>	Fresh Water " " ... <i>8.1'</i>
Tropical Line " " ... <i>5"</i>	Tropical " " ... <i>8.1'</i>
Winter Line below " " ... <i>5"</i>	Winter " " ... <i>9.1'</i>
Winter North Atlantic Line " " ... <i>not assigned.</i>	Winter North Atlantic " " ... <i>not assigned.</i>



Nicoya.

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.

The Bridge space, plated in at sides, has not been treated as an open bridge, & consequently no allowance for same has been made in the computation, as in similar vessel "Pacuare" ex "Bumpire Alder" 39052.

Trade of ship .....

Names of sister ships .....

Builder's name and yard number .....

Owners .....

Fee £ ..... : ..... : .....



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