

# LLOYD'S REGISTER OF SHIPPING

## SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, ~~SAILING SHIP~~, TANKER)

Received .....

Index No. ....

Govt. Copy .....

Owners C11 .....

Ship's Name <b>AKAMAS (EX STANFIRTH).</b>	Official Number	Nationality and Port of Registry <b>PANAMA.</b>	Gross Tonnage <b>7285</b>	Date of Build <b>1945.</b>	Port of Survey .....
Moulded Dimensions: Length <b>425.0</b> Breadth <b>56.0</b> Depth <b>38.06</b> Freeboard Length <b>425.83 TO CR OF RUDDER STOCK.</b> Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>17.175</b> tons (excluding bossing) Coefficient of fineness for use with Tables <b>.779.</b>					Date of Survey <b>21/6/61</b> Surveyor's Signature .....
					Particulars of Classification <b>+ 100 A1</b>

<b>DEPTH FOR FREEBOARD (D).</b> Moulded depth ... .. <b>38.06</b> Stringer plate ... .. <b>.06</b> Wood Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) = \frac{2.5}{12} \times .8366$ Depth for Freeboard (D) = <b>38.29</b>	<b>DEPTH CORRECTION.</b> (a) Where D is greater than Table depth (D—Table depth) R = $(38.29 - 28.39) 3 = \oplus 29.7''$ $9.90$ (b) Where D is less than Table depth (if allowed) (Table depth—D) R = If restricted by superstructures	<b>ROUND OF BEAM CORRECTION.</b> Moulded Breadth (B) <b>56.0"</b> Standard Round of Beam = $\frac{B \times 12}{50} = 13.44$ Ship's Round of Beam = $14.25$ Difference = $+ 0.81$ Restricted to Correction = $\frac{\text{Diff.}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.81 \times .8366}{4} = \oplus .17''$
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## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ... ..	<b>35.33</b>	<b>35.33</b>	<b>3.21</b>	<b>3.09</b>	<b>17.90</b>
" overhang ... ..			<b>-.17</b>		
R.Q.D. enclosed ... ..					
" overhang ... ..					
Bridge enclosed ... ..					
" overhang aft ... ..					
" overhang forward ... ..					
Fore enclosed ... ..	<b>34.25</b>	<b>34.25</b>	<b>6.75</b>	<b>6.58</b>	<b>30.05</b>
" overhang ... ..			<b>-.17</b>	<b>7.50</b>	
Trunk aft ... ..					
" forward ... ..					
Tonnage opening aft ... ..					
" " forward ... ..					
Total ... ..	<b>69.58</b>	<b>69.58</b>			<b>47.95</b>

Standard Height of Superstructure **7.50**

" " R.Q.D. **6.00**

Deduction for complete superstructure **42.00**

Percentage covered  $\frac{S}{L} = 16.34$

" "  $\frac{S_1}{L} = 11.26$

Percentage from Table, Line A. **5.63**  
 (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 =  $42.0 \times .0563 \times 2.36 =$

## SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P. ... ..	<b>52.58</b>	1	<b>52.58</b>	—	—	1	—
$\frac{1}{2}$ L from A.P. ... ..	<b>23.40</b>	4	<b>93.60</b>	—	—	4	—
$\frac{3}{4}$ L " ... ..	<b>5.785</b>	2	<b>11.57</b>	—	—	2	—
Amidships ... ..	0	4	0	0	0	4	0
$\frac{3}{4}$ L from F.P. ... ..	<b>11.57</b>	2	<b>23.14</b>	—	—	2	—
$\frac{1}{2}$ L " ... ..	<b>46.80</b>	4	<b>187.20</b>	<b>5.31</b>	<b>5.31</b>	4	<b>21.24</b>
F.P. ... ..	<b>105.17</b>	1	<b>105.17</b>	<b>79.50</b>	<b>79.50</b>	1	<b>79.50</b>
Total ... ..			<b>473.26</b>				<b>100.74</b>

Mean actual sheer aft = **DEFICIENT**  
 Mean standard sheer aft =

Mean actual sheer forward = **DEFICIENT.**  
 Mean standard sheer forward =

Length of enclosed superstructure forward of amidships = **NIL.**  
 " " aft of " =

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - S}{2L} \right) = \frac{372.52}{18} \left( \frac{.75 - .0817}{.6683} \right) = \oplus 13.83$   
 If limited on account of midship superstructure.

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

## Deduction for Tropical Freeboard.

## Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **11.684**  
 Summer freeboard = **3.223**  
 Moulded draught (d) = **8.461**  
 Keel allowance =  
 Extreme draught =

Deduction for Tropical freeboard and addition for =

Winter freeboard =  $\frac{d}{48}$  inches = **176** mm

Addition for Winter North Atlantic Freeboard (if required) =

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

**183** mm

## TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient  $\frac{.779 + .68}{1.36} = \frac{1.459}{1.36}$

	+	-
Depth Correction ... ..	<b>29.70</b>	—
Deduction for superstructures ... ..	—	<b>2.36</b>
Sheer correction ... ..	<b>13.83</b>	—
Round of Beam correction ... ..	—	<b>.17</b>
Correction for Thickness of Deck amidships ... ..	<b>.48</b>	—
Other corrections, scantlings, etc. ... ..	—	—
	<b>44.01</b>	<b>2.53</b>

**41.48**

Summer Freeboard = **126.88** = **3223** mm

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

Tropical Fresh Water Line above Centre of Disc **359** mm  
 Fresh Water Line " " **183** mm  
 Tropical Line " " **176** mm  
 Winter Line below " " **176** mm  
 Winter North Atlantic Line " " **NOT ASSIGNED**

Tropical Fresh Water Freeboard **286.4**  
 Fresh Water " **304.0**  
 Tropical " **304.7**  
 Winter " **339.9**  
 Winter North Atlantic " **NOT ASSIGNED**

26 JUN 1961