

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name **"PORT ALMA"** Official Number **160615** Nationality and Port of Registry **BRITISH LONDON** Gross Tonnage **1928** Date of Build **1928**

Port of Survey **11-6-41**

Date of Survey **11-6-41**

Surveyor's Signature \_\_\_\_\_

Particulars of Classification **+100 A.I. with freeboard.**

Moulded Dimensions: Length **475.3** Breadth **63.0** Depth **43.37**

Moulded displacement at moulded draught = 85 per cent. of moulded depth \_\_\_\_\_ tons

Coefficient of fineness for use with Tables **.74 (estimated)**

Depth for Freeboard (D).

Moulded depth ... **43.37**

Stringer plate ... **.06**

Sheathing on exposed deck  $T \left( \frac{L-S}{L} \right) = (3') \cdot 25 \times .8916 = .25$

Depth for Freeboard (D) = **43.68**

Depth correction.

(a) Where D is greater than Table depth  $(D - \text{Table depth}) R = \frac{.25}{11.996} = +.021$

(b) Where D is less than Table depth (if allowed)  $(\text{Table depth} - D) R = \dots$

If restricted by superstructures ☒

Round of Beam correction.

Moulded Breadth (B) **63.00'**

Standard Round of Beam =  $\frac{B \times 12}{50} = 15.12''$

Ship's Round of Beam = **17.75''**

Difference **.63''**

Restricted to ☒

Correction =  $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.63}{4} \times .9028 = -.14''$

### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...					
" overhang ...					
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...					
" overhang aft ...					
" overhang forward ...					
Fore enclosed ...	<b>51.5</b>	<b>46.20</b>	<b>7.5</b>	<input checked="" type="checkbox"/>	<b>46.20</b>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	<b>51.5</b>	<b>46.20</b>			<b>46.20</b>

Standard Height of Superstructure **7.5'**

" " R.Q.D. ☒

Deduction for complete superstructure **42.00''**

Percentage covered  $\frac{S}{L} = 10.84$

" "  $\frac{S_1}{L} = 9.72$

" "  $\frac{E}{L} = 9.72$

Percentage from Table, Line A. **4.86**

(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 X .0486 = -2.04''**

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<b>57.53</b>	<b>1</b>		<b>57.53</b>	<b>55.50</b>	<b>55.50</b>	<b>1</b>		<b>55.50</b>
$\frac{1}{2}$ L from A.P. ...	<b>25.60</b>	<b>4</b>		<b>102.40</b>	<b>24.69</b>	<b>24.69</b>	<b>4</b>		<b>98.76</b>
$\frac{2}{3}$ L " ...	<b>6.33</b>	<b>2</b>		<b>12.66</b>	<b>6.17</b>	<b>6.17</b>	<b>2</b>		<b>12.34</b>
Amidships ...		<b>4</b>					<b>4</b>		
$\frac{2}{3}$ L from F.P. ...	<b>12.66</b>	<b>2</b>		<b>25.32</b>	<b>11.85</b>	<b>11.85</b>	<b>2</b>		<b>23.70</b>
$\frac{1}{2}$ L " ...	<b>57.20</b>	<b>4</b>		<b>204.80</b>	<b>47.40</b>	<b>47.40</b>	<b>4</b>		<b>189.60</b>
F.P. ...	<b>115.06</b>	<b>1</b>		<b>115.06</b>	<b>107.50</b>	<b>107.50</b>	<b>1</b>		<b>107.50</b>
Total ...				<b>517.77</b>					<b>487.40</b>

Mean actual sheer aft = \_\_\_\_\_

Mean standard sheer aft = \_\_\_\_\_

Mean actual sheer forward = \_\_\_\_\_

Mean standard sheer forward = \_\_\_\_\_

Length of enclosed superstructure forward of amidships = \_\_\_\_\_

12.66  $\frac{3}{4}$  37.98 " 11.85  $\frac{3}{4}$  35.55

57.20  $\frac{3}{4}$  153.60 47.40  $\frac{3}{4}$  142.20

115.06  $\frac{1}{4}$  115.06 107.50  $\frac{1}{4}$  107.50

306.64

1285.25 = .93 standard

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

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **43.68**

Summer freeboard = **13.23**

Moulded draught (d) = **30.45**

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

**$7\frac{3}{4}$**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient **94.89 + .20 = 95.09**

**99.29**

	+	-
Depth Correction ...	<b>35.88</b>	
Deduction for superstructures ...		<b>2.04</b>
Sheer correction ...	<b>1.17</b>	
Round of Beam correction ...		<b>.14</b>
Correction for Thickness of Deck amidships ...	<b>.36</b>	
Other corrections, scantlings, etc. to conform with a summer moulded draught of 30.5	<b>24.83</b>	
	<b>61.64</b>	<b>2.18</b>
Summer Freeboard =	<b>158.75</b>	

SUMME

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Deck: **13.23**

Tropical Fresh Water Line above Centre of Disc	<b>15.1</b>
Fresh Water Line	<b>7.2</b>
Tropical Line	<b>7.2</b>
Winter Line below	<b>7.2</b>
Winter North Atlantic Line	<b>7.2</b>

Tropical Fresh Water Freeboard	<b>11.11</b>
Fresh Water	<b>12.7</b>
Tropical	<b>12.7</b>
Winter	<b>13.10</b>
Winter North Atlantic	<b>13.10</b>

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