

Rpt. C.11  
33604

# Lloyd's Register of Shipping. SURVEYS FOR FREEBOARD.

3 OCT 1932

Index. No. 33092  
(For London Office only.)

having *one deck (steel)*  
Poop Bridge and Forecastle

Ship's Name  
**PORTFIELD**

(Type of Superstructures.)

Nationality and Port of Registry  
*British*  
*Cardiff*

Official Number  
*148310*

Gross Tonnage  
*4423*

Date of Build  
*1929-10*

Port of Survey  
*Newcastle N.S.W.*

Date of Survey  
*21<sup>st</sup> August 1932*

Name of Surveyor  
*Geo. E. Hughes*

Particulars of Classification  
*# 100 A1*

Moulded Dimensions: Length *380.3*

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

Coefficient of fineness for use with Tables *796*

Breadth *51.70*

Depth *27.67*

tons

Depth for Freeboard (D)

Moulded depth ... *27.67*  
Stringer plate ... *0.05*  
Sheathing on exposed deck  
 $T = \frac{L-S}{L} =$

Depth for Freeboard (D) = *27.72*

Depth correction

(a) Where D is greater than Table depth  
(D - Table depth) R =

(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) *51.7*  
Standard Round of Beam =  $\frac{B \times 12}{50} = \frac{12.41}{12.41}$   
Ship's Round of Beam *12.41*  
Difference = *13*  
Restricted to = *13*  
Correction =  $\frac{\text{Diff}^2}{4} \times (1 - \frac{S_1}{L}) = \frac{169}{4} \times (1 - \frac{29}{12.41}) = 0.02$

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	60.50	60.50	8.0		60.50
" overhang ...	61				61
R.Q.D. enclosed ...					
" overhang ...					
Bridge enclosed ...	227.25	227.25	8.0		227.25
" overhang aft ...					
" overhang forward ...					
Fore enclosed ...	29.25	29.25	8.0		29.25
" overhang ...	2.80	1.98	8.0		1.98
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" forward ...					
Total ...	00	98			98

Standard Height of Superstructure *7.58*  
" " R.Q.D. *7.58*  
Deduction for complete superstructure *40.67*  
Percentage covered  $\frac{S}{L} = \frac{83.95}{83.94} = 1.00$   
" "  $\frac{S_1}{L} = \frac{83.94}{83.94} = 1.00$   
" "  $\frac{E}{L} = \frac{83.94}{83.94} = 1.00$   
Percentage from Table, Line A.  
(corrected for absence of forecastle (if required))  
Percentage from Table, Line B.  
(corrected for absence of forecastle (if required)) *80.18*  
Interpolation for bridge less than 2L (if required) *19.53*  
Deduction =  $40.67 \times 80.18 = 32.62$

## SHEER CORRECTION.

Station	Standard Ordinate	Actual Ordinate	Effective Ordinate	S	M	Product
P.P. ...		52	48.00	1		48.00
L from A.P. ...		22.32	21.36	4		85.44
		5.58	5.28	2		10.56
		46	40.46	4		158.30
		16	41.86	2		83.72
		96.00		1		96.00
						283.56

Mean actual sheer aft =  $\frac{139.8}{144.07} = 0.968$   
Mean standard sheer aft =  $\frac{139.8}{144.07} = 0.968$   
Mean actual sheer forward =  $\frac{284}{285.14} = 0.985$   
Mean standard sheer forward =  $\frac{284}{285.14} = 0.985$   
Length of enclosed superstructure forward of amidships = *33*  
" " aft of " = *23*  
If limited to maximum allowance of  $1\frac{1}{2}$  ins. per 100 ft.  
 $\frac{75-S}{2L} = \frac{432-423}{18} = 0.5$   
 $(.45 - .497) = -.047$   
 $\frac{252.96}{252.96} = .989$

## Deduction for Fresh Water.

placement in salt water at summer load water line  
 $\Delta = 1076.4$   
ins per inch immersion at summer load water line  
 $T = 41$   
Reduction =  $\frac{\Delta}{40 T} = \frac{1076.4}{1640} = 6.53 = 6\frac{1}{2}$

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

Correction for coefficient	796.68	1.476	65.40
Depth Correction			70.98
Deduction for superstructures			
Sheer correction			
Round of Beam correction			
Correction for Thickness of Deck amidships			
Other corrections, scantlings, etc.			
	7.08	32.28	25.20
Summer Freeboard =	45.38		

Ships from Centre of Disc to top of Deck Line, Wood, Steel, Deck	
Line above Centre of Disc ...	12.5
" " ...	6.2
" " ...	6.2
below " " ...	6.2
" " ...	6.2