

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

19972.

Ship's Name OCEANIC GEN DAN-Y-BRYN	Official Number ✓	Nationality and Port of Registry BRITISH HONG KONG LONDON	Gross Tonnage 517 1/2 5160 5164	Date of Build 1939	Port of Survey LEITH
Moulded Dimensions: Length 412.0 Breadth 57.66 Depth 28.75 to Freeboard Deck 37.83 to Upper Deck.					Date of Survey WHILE BUILDING
Moulded displacement at moulded draught = 85 per cent. of moulded depth 12415 tons (0 28' 9")					Surveyor's Signature G. Pratt
Coefficient of fineness for use with Tables .7448					Particulars of Classification 8100 A.1. with freeboard

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth 28.75	(a) Where D is greater than Table depth (D - Table depth) R = (28.75 - 27.47) 3 = +3.93"	Moulded Breadth (B) 57.666
Stringer plate035	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50}$ = 13.84
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	✓	Ship's Round of Beam = 13.875
Depth for Freeboard (D) = 28.78	If restricted by superstructures	Difference
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) =$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)
Poop enclosed	25.3"	7.6"	7.6"		25.25
.. overhang		25.25			
R.Q.D. enclosed					
.. overhang		381.75			
Bridge enclosed... ..	381.9"	9.0"	9.0"		381.75
.. overhang aft					
.. overhang forward					
F'cle enclosed					
.. overhang					
Trunk aft					
.. forward		DIFF. 4.38			
Tonnage opening aft	5.0	2.19			2.19
.. forward					
Total	412.0	409.19			409.19

Standard Height of Superstructure **7.5'**
" " R.Q.D. **7.5'**
Deduction for complete superstructure **42.00"**
Percentage covered $\frac{S}{L} = 100.00$
" " $\frac{S_1}{L} = 99.31$
" " $\frac{E}{L} = 99.31$
Percentage from Table, Line A. **99.15**
(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 = **42.00 x .9915 = 41.65**

SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	51.20	1		51.20	78"	96.00	1		96.00
1/4 L from A.P.	22.785	4		91.14	34 3/4"	42.72	4		170.88
1/2 L "	5.63	2		11.26	8 3/8"	10.56	2		21.12
Amidships		4					4		
3/4 L from F.P.	11.26	2		22.52	11 1/2"	15.53	2		27.06
1/4 L "	45.57	4		182.28	46 3/4"	54.73	4		218.92
F.P.	102.40	1		102.40	105"	123.00	1		123.00
Total				460.80	+18"				656.98

Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{75-S}{2L} \right) = \frac{196.18}{18} \times .25 = -2.72"$
If limited on account of midship superstructure.

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

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.

Ft.
Depth to Freeboard Deck = **28.78**
Summer freeboard = **3.21**
Moulded draught (d) = **25.57**

Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = **6.39 = 6 1/2"**
Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line **25.944**
 $\Delta = 13151$
Tons per inch immersion at summer load water line
 $T = 47.24$
Deduction = $\frac{\Delta}{40T}$ inches = **6.96**
= 7"

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient $\frac{748+.68}{1.36} = \frac{1.428}{1.36}$
Depth Correction **3.93**
Deduction for superstructures **41.65**
Sheer correction **2.72**
Round of Beam correction **-**
Correction for Thickness of Deck amidships **-**
Other corrections, scantlings, etc. **-**

3.93 44.37 - 40.44
Summer Freeboard = **38.56**

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

Tropical Fresh Water Line above Centre of Disc ... **13 1/2"**
Fresh Water Line " " ... **7"**
Tropical Line " " ... **6 1/2"**
Winter Line below " " ... **6 1/2"**
Winter North Atlantic Line " " ... **..**

Tropical Fresh Water Freeboard ... **2-1 1/2"**
Fresh Water " " ... **2-7 1/2"**
Tropical " " ... **2-8"**
Winter " " ... **3-9"**
Winter North Atlantic " " ... **..**

Dan-Y-Bryn.

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.

width of tonnage hatchway = 25'-0"

" " Superstructure deck at mid length of hatchway = 44'-6"

$$\text{Correction} = \frac{B-b}{B} = \frac{44.5-25.0}{44.5} = .438$$

Trade of ship

General cargo

Names of sister ships

CEFH-Y-BRYN

Builder's name and yard number

The Burntisland S.B. Co. Ltd. - H^o 239

Owners

The Brynmor S.S. Coy. Ltd.

Fee £

Charged with 1st entry.



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Foundation