Rpt. C.11 (Comp.).

Equivalent depth estimate

Lloyd's Register of Shipping.
SURVEYS FOR FREEBOARD.
(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Index No. *38489*
(For London Office only.)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
Van der Steng Walton Fynesords Yard No 715.				

Port of Survey ....

Date of ~~Survey~~ *1·4·46*

Surveyor's Signature ....

Particulars of Classification ....

Moulded Dimensions : Length *12598* Breadth *22·31* Depth *10·79 actual*
96% L.W.L

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

Coefficient of fineness for use with Tables *·68 (Actual less than ·68)*

DEPTH FOR FREEBOARD (D).

Moulded depth ... ... *7·16*
Stringer plate *7m/m* *·275"* ... ... *·02'*
Sheathing on exposed deck
$T\left(\dfrac{L-S}{L}\right) =$

Depth for Freeboard (D) = *7·18*

DEPTH CORRECTION.

(a) Where D is greater than Table depth
(D—Table depth) R =
~ 8·40) ·969

(b) Where D is less than Table depth (if allowed)
(Table depth—D) R =
(8·40−7·18) × ·969' = −1·18"

If restricted by *27* superstructures

ROUND OF BEAM CORRECTION.

Moulded Breadth (B)
Standard Round of Beam = $\dfrac{B \times 12}{50}$ =
Ship's Round of Beam = *Standard*
Difference
Restricted to
Correction = $\dfrac{\text{Diff}^{o}}{4} \times \left(1 - \dfrac{S_1}{L}\right)$ = *Nil*

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
„ overhang					
R.Q.D. enclosed					
„ overhang					
Bridge enclosed ...	*20·08*	*Flush deck*			
„ overhang aft ...	*1·64*				
„ overhang forward ...					
F'cle enclosed	*35·76'*				
„ overhang					
Trunk aft					
„ forward					
Tonnage opening aft ...					
„ „ forward...					
Total					

Standard Height of Superstructure ....
„ „ R.Q.D. ....
Deduction for complete superstructure ....
Percentage covered $\dfrac{S}{L} =$
„ „ $\dfrac{S_1}{L} =$ *Taken as flush*
„ „ $\dfrac{E}{L} =$
Percentage from Table, Line A.
(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 = *Nil*

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.		1				1	
⅙L from A.P. ...		4		*Standard*		4	
⅔L „ ...		2				2	
Amidships ...		4				4	
⅔L from F.P. ...		2				2	
⅙L „ ...		4				4	
F.P.		1				1	
Total ...							

Correction = $\dfrac{\text{Difference between sums of products}}{18} \left(\cdot 75 - \dfrac{S}{2L}\right) =$ *Nil*
If limited on account of midship superstructure.

Mean actual sheer aft / Mean standard sheer aft =
Mean actual sheer forward / Mean standard sheer forward =
$\dfrac{\text{Length of enclosed superstructure}}{L}$ forward of amidships =
„ „ aft of „ =

If limited to maximum allowance of 1½ ins. per 100 ft.

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

Ft.
Depth to Freeboard Deck = *7·18*
Summer freeboard = *0·95*
Moulded draught (d) = *6·23*

Deduction for Tropical freeboard and addition for
Winter freeboard = $\dfrac{d}{4}$ inches =

Addition for Winter North Atlantic Freeboard (if required)=

Deduction for Fresh Water.

Displacement in salt water at summer load water line
$\triangle$ =
Tons per inch immersion at summer load water line
T =

Deduction = $\dfrac{\triangle}{40\,T}$ inches

TABULAR FREEBOARD corrected for Flush Deck (if required) *(No F'DK anxiety)*

	+	−
Correction for coefficient *1·00*		*12·60* *12·60*
Depth Correction		*1·18*
Deduction for superstructures ...		
Sheer correction		
Round of Beam correction ...		
Correction for Thickness of Deck amidships ...		
Other corrections, scantlings, etc. ...		
	1·18	*−1·18*

Summer Freeboard = *11·42*

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

0·95'

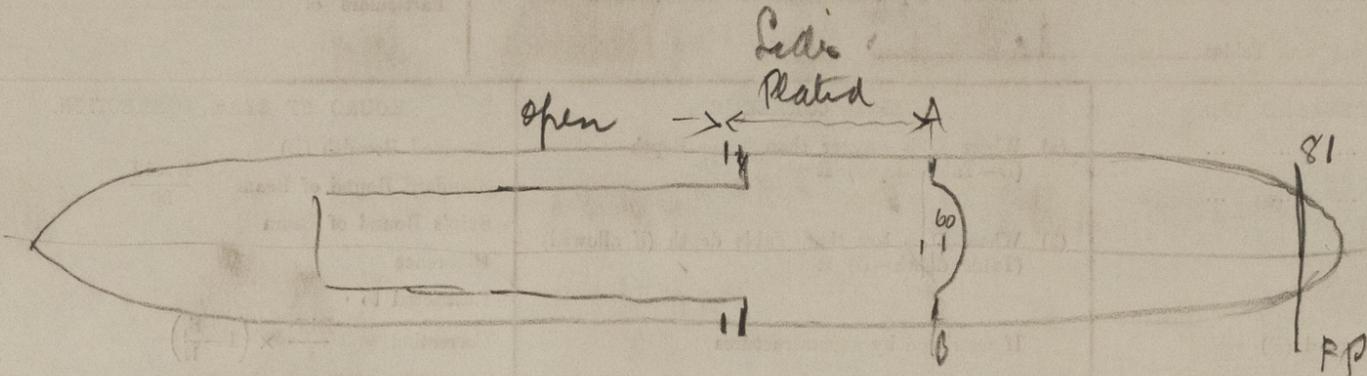|								
Tropical Fresh Water Line above Centre of Disc	...	...		Tropical Fresh Water Freeboard				
Fresh Water Line „ „	...	...	...	Fresh Water	„			
Tropical Line „ „	...	...	...	Tropical	„			
Winter Line below „	...	...	...	Winter	„			
Winter North Atlantic Line „	...	...	...	Winter North Atlantic	„			

5m T 11/41. McC.

010727·010733·0090

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.

Length in LWL 1-81 = 80 × 500 = 40 ms =

96% = 40 × .96 = 38.4 m

Length to ½ rudder stock = 7-81 64 × 500 = 32 ms. less than 96%
∴ use 96%

38.4 m = 125.98 ft.

Open → | ← Side Plated A | 81

60

FP

No allowance for raised front of bridge (include in forecastle).

Length of forecastle 60-81 21 × 500 = 10.5 m
AB-60   + .4
u   10.9 m = 35.76'

Length of raised part bridge 47-60 13×500 = 6.5 m
AB-60   - .4
                         6.1 m = 20.01.
Open.   3?
                    .5 m = 1.64.