

LLOYD'S REGISTER OF SHIPPING

UNITED WITH THE BRITISH CORPORATION REGISTER

SURVEYS FOR FREEBOARD

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER)

Received
Index No.
Govt. Copy
Owners C11

Ship's Name APEXITY	Official Number	Nationality and Port of Registry BRITISH	Gross Tonnage	Date of Build	Port of Survey
Moulded Dimensions: Length 99'-7" Breadth 19'-8" Depth 8'-0"					Date of Survey 14.7.53
Freeboard Length					Surveyor's Signature
Moulded displacement at moulded draught = 85 per cent. of moulded depth (excluding bossing) 274.28 tons					Particulars of Classification 100A1 C.P.13 <i>Service South and</i>
Coefficient of fineness for use with Tables 729					

DEPTH FOR FREEBOARD (D).		DEPTH CORRECTION.		ROUND OF BEAM CORRECTION.	
Moulded depth	8.00	(a) Where D is greater than Table depth (D-Table depth) R = $(8.03 - 6.64) \cdot 766 = 1.06$		Moulded Breadth (B)	19.67
Stringer plate	.03	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =		Standard Round of Beam = $\frac{B \times 12}{50}$	4.72
Wood Sheathing on exposed deck				Ship's Round of Beam	2.25
$T \left(\frac{L-S}{L} \right) =$		If restricted by superstructures		Difference	2.47
Depth for Freeboard (D) =	8.03			Restricted to	
				Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right)$	$\frac{2.47}{4} \cdot 5357 = +.33$

DEDUCTION FOR SUPERSTRUCTURES.					
Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poep enclosed					
" overhang					
R.Q.D. enclosed	36.25	3.0	✓	36.25	
" overhang					
Bridge enclosed					
" overhang aft					
" overhang forward					
F'cle enclosed	14.13	3.5	35/60	9.99	
" overhang					
Trunk aft					
" forward					
Tonnage opening aft					
" " forward					
Total	53.38	53.38		46.24	

Standard Height of Superstructure	6.00'
" " R.Q.D.	3.00'
Deduction for complete superstructure	15.96"
Percentage covered $\frac{S}{L} =$	53.60
" " $\frac{S_1}{L} =$	
" " $\frac{E}{L} =$	
Percentage from Table, Line A.	28.97
(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 =	$28.97 \times 15.96 = 4.62$

SHEER CORRECTION.							
Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	19.96	1	19.96	0		1	
$\frac{1}{8}L$ from A.P.	8.88	4	35.52	0		4	
$\frac{2}{8}L$ "	2.20	2	4.40	0		2	
Amidships	0	4	0	0	0	4	0
$\frac{3}{8}L$ from F.P.	4.39	2	8.78	0		2	
$\frac{4}{8}L$ "	14.76	4	71.04	0		4	
F.P.	39.92	1	39.92	0		1	
Total			149.62				NIL

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 = $\frac{\text{Difference between sums of products}}{18} \left(\frac{.75 - S}{2L} \right) = \frac{149.62}{18} \cdot \left(\frac{.75 - .268}{.482} \right) = +4.81$
If limited on account of midship superstructure.

Deduction for Tropical Freeboard.		Deduction for Fresh Water.		TABULAR FREEBOARD corrected for Flush Deck (if required)		
Addition for Winter and Winter North Atlantic Freeboard.		Displacement in salt water at summer load water line		Correction for coefficient $\frac{729 + .68}{1.36} = 1.407$		9.96
Depth to Freeboard Deck =	8.03	$\Delta = 288.75$				10.32
Summer freeboard =	1.00	Tons per inch immersion at summer load water line				
Moulded draught (d) =	7.03	T = 4.15		Depth Correction	1.06	
Keel allowance =		Deduction = $\frac{\Delta}{40 T}$ inches		Deduction for superstructures	-	4.62
Extreme draught =		= 1.74		Sheer correction	4.81	
Deduction for Tropical freeboard and addition for =		1 3/4		Round of Beam correction	.33	
Winter freeboard = $\frac{d}{4}$ inches = 1.76 = 1 3/4				Correction for Thickness of Deck amidships	-	
Addition for Winter North Atlantic Freeboard (if required) =				Other corrections, scantlings, etc.	-	
					6.20	4.62 + 1.58
					Summer Freeboard = 11.90"	

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

Tropical Fresh Water Line above Centre of Disc	Not Assigned	Tropical Fresh Water Freeboard	Not Assigned
Fresh Water Line	1 3/4	Fresh Water	Not Assigned
Tropical Line	Not Assigned	Tropical	Not Assigned
Winter Line below	1 3/4	Winter	Not Assigned
Winter North Atlantic Line	Not Assigned	Winter North Atlantic	Not Assigned