

Lloyd's Register of Shipping

SURVEYS FOR FREEBOARD - STEAMERS

(Under the Provisions of the U. S. A. Load Line Act of March 2, 1929)

New York Office Index No. 237
 Port of Survey NEW YORK
 Date of Survey 23rd Jan. 1936
 Name of Surveyor H. G. House

Ship's Name. "AMERICAN CARDINAL"	Port of Registry and Nationality. NEW YORK U.S.A.	Official Number. 232352	Gross Tonnage. 3804	Date of Build. 1917-7	Particulars of Classification. +100 A1
Owner. American Cardinal S.S. Corp.		Builder. Union Iron Works		Hull No. 17	
Moulded dimensions 341 × 48 × 27.25 (85% =)					
Moulded displacement at a moulded draught of 85 per cent. of moulded depth Tonnage Coeff. = .81 - 4,015 = .825 8795					
Coefficient of fineness for use with tables .825					

DEPTH FOR FREEBOARD.		CORRECTION FOR DEPTH.		CAMBER	
Moulded depth	27.25	(a) When D is greater than $\frac{L}{15} = 22.73$		Standard	$\frac{48}{50} \times 12 = 11.52$
Stringer plate	1/2	$(D - \frac{L}{15}) \times R = (27.25 - 22.73) \times \frac{341}{130} = +11.96$		Ship	12.00
Sheathing in wells		(b) When D is less than $\frac{L}{15}$ (if allowed)		Difference	.48
$T(\frac{L-S}{L}) =$		$(\frac{L}{15} - D) \times R =$		Restricted to	
Depth D =	27.29	If restricted by height of superstructures		Allowance = $\frac{\text{Difference}}{4} \times (1 - \frac{S}{L}) =$	-.07

SUPERSTRUCTURES.					
	Mean Covered Length S.	Effective Length S. (Uncorrected for Height)	Height.	Correction for Height.	Effective Length.
Poop enclosed	2942		7'6"		2942
" overhang					
R.Q.D. enclosed					
" overhang					
Bridge enclosed	7292		7'6"		7292
" overhang aft					
" overhang forward					
F'cle enclosed	3550		7'6"		3550
" overhang					
Trunks forward					
" aft					
Tonnage opening					
Total =	137.84	137.84			137.84
Length of ship (L) =	341.00	341.00			341.00
% Covered... =	40.42	40.42			40.42
Corresponding %, corrected for absence of forecastle if required A =		B = Timber 63.26		Correction for Bridge less than 2' if required = 24.08	
Allowance ... =	38.07	×	63.26	=	24.08

SHEER.									
Station.	Actual Sheer.	Standard Sheer.	Allowed Sheer.	S. M.	Products.				
A.P. 1	5400	4410	5400	1	5400				
2	2212	1962	2212	4	8848				
3	553	485	553	2	1106				
4	1204	970	1204	4	4816				
5	4819	3924	4819	2	9638				
6	2300	8820	2300	4	9200				
F.P. 7	12300	8820	12300	1	12300				
Mean effective sheer ...					18) 493.38				
Standard sheer .05 L + 5 =					27.41				
Difference (Df) ...					22.05				
Allowance = Df × (.75 - $\frac{S}{L}$) =					5.36				
If limited on account of amidship superstructure ...					2.94				
If limited on account of excess sheer (1 1/2 in. per 100 ft.) ...									

DRAFTS.		F. W. ALLOWANCE	TABULAR FREEBOARD (corrected for flush deck if required)
Moulded Depth D =	27' 3"	Displacement =	53.98
Stringer Plate = (or Wood Deck)	27' 3 1/2"	Tons per inch =	59.73
Freeboard TIMBER	3' 8 1/2"		
Moulded draught	23' 7"		
Addition for keel below base line	1"		
Extreme draught	23' 8 1/2"		
3.58 = 7.86 = 7 1/2"			

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel,		Deck:—	
Tropical Fresh Water Line (above center of Disc)		L.S.	3' 8 1/2"
Fresh Water Line		LTF	2' 8 1/2" - 12 1/2" above L.S.
Tropical Line		LF	3' 2 1/2" - 6 1/2" " "
Winter Line (below " ")		LW	3' 2 1/2" - 6 " " "
Winter North Atlantic Line		LWNA	4' 4 1/2" - 7 1/2" below " "
			5' 3 1/2" - 19 " " "