

AMENDED

Rpt. C.11 (Comp.).

Index No. 41784
(For London Office only.)

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name CANBERRA	Official Number	Nationality and Port of Registry PANAMAN PANAMA	Gross Tonnage 7710	Date of Build 1913 3	Port of Survey
Moulded Dimensions: Length 410.00' Breadth 57.00' Depth 41.58'					Date of Survey 1-7-49
Moulded displacement at moulded draught = 85 per cent. of moulded depth 17130 tons					Surveyor's Signature E.J.
Coefficient of fineness for use with Tables .726					Particulars of Classification +100 A1 Shelter deck with freeboard

DEPTH FOR FREEBOARD (D). Moulded depth 41.58 Stringer plate04 Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$.25 Depth for Freeboard (D) = 41.87	DEPTH CORRECTION. (a) Where D is greater than Table depth (D-Table depth) R = $(41.87 - 27.33) 3 = + 43.62"$ 14.54 (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) 57.00' Standard Round of Beam = $\frac{B \times 12}{50} =$ 13.68" Ship's Round of Beam = 12.00" Difference + 1.68 Restricted to Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{1.68}{4} = + .42"$
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DEDUCTION FOR SUPERSTRUCTURES.				
	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Effective Length (E)
Poop enclosed				
" overhang				
R.Q.D. enclosed				
" overhang				
Bridge enclosed				
" overhang aft				
" overhang forward				
Fore enclosed				
" overhang				
Trunk aft				
" forward				
Tonnage opening aft				
" " forward				
Total				

Standard Height of Superstructure _____
 " " R.Q.D. _____
 Deduction for complete superstructure _____
 Percentage covered $\frac{S}{L} =$ } **NIL**
 " " $\frac{S_1}{L} =$ }
 " " $\frac{E}{L} =$ }
 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
A.P.	51.00	1		51.00	24.25	24.25	1
$\frac{1}{2}$ L from A.P.	22.695	4		90.78	11.25	11.25	4
$\frac{3}{4}$ L "	5.61	2		11.22	2.75	2.75	2
Amidships	-	4		-	-	-	4
$\frac{3}{4}$ L from F.P.	11.22	2		22.44	9.00	9.00	2
$\frac{1}{2}$ L "	45.39	4		181.56	35.50	35.50	4
F.P.	102.00	1		102.00	84.50	84.50	1
Total							319.25

Mean actual sheer aft =
 Mean standard sheer aft = } **deficient**
 Mean actual sheer forward =
 Mean standard sheer forward =
 Length of enclosed superstructure forward of amidships = } **flush deck.**
 " " aft of " = }
 Correction = $\frac{\text{Difference between sums of products}}{18} \left(\frac{S}{2L} \right) = \frac{139.75}{18} \times .75 = + 5.82"$
 If limited on account of midship superstructure. ✓
 If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft. ✓

Deduction for Tropical Freeboard. Addition for Winter and Winter North Atlantic Freeboard. Depth to Freeboard Deck = 41.87 Summer freeboard = 19.37 Moulded draught (d) = 22.50 Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = ✓ Addition for Winter North Atlantic Freeboard (if required) = not assigned	Deduction for Fresh Water. Displacement in salt water at summer load water line $\Delta =$ Tons per inch immersion at summer load water line $T =$ Deduction = $\frac{\Delta}{40 T}$ inches $\frac{d}{4} = 5.625$ $= 5\frac{1}{2}"$	TABULAR FREEBOARD corrected for Flush Deck (if required) $\frac{74.60 + 6.15}{1.36} = 1.406/1.36$ Correction for coefficient Depth Correction 43.62 Deduction for superstructures 5.82 Sheer correction42 Round of Beam correction42 Correction for Thickness of Deck amidships 99.16 Other corrections, scantlings, etc. corresponding to subdivision moulded draught of 22'-6" 149.02 Summer Freeboard = 232.50
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SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck :-			
Tropical Fresh Water Line above Centre of Disc	5 1/2" = 140 mm	Tropical Fresh Water Freeboard	13' 4 1/2" = 5905 mm
Fresh Water Line	5 1/2" = 140 mm	Fresh Water	13' 1 1/2" = 5765 mm
Tropical Line	NIL	Tropical	13' 4 1/2" = 5905 mm
Winter Line	below	Winter	13' 1 1/2" = 5765 mm
Winter North Atlantic Line	not assigned	Winter North Atlantic	13' 1 1/2" = 5765 mm