

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name SANTA DESPO	Official Number	Nationality and Port of Registry PANAMA	Gross Tonnage	Date of Build 1943	Port of Survey
Moulded Dimensions: Length 417.35 Breadth 56.90 Depth 37.33					Date of Survey 22.9.50
Moulded displacement at moulded draught = 85 per cent. of moulded depth 16600 tons					Surveyor's Signature
Coefficient of fineness for use with Tables .771					Particulars of Classification

DEPTH FOR FREEBOARD (D).	DEPTH CORRECTION.	ROUND OF BEAM CORRECTION.
Moulded depth 37.33	(a) Where D is greater than Table depth (D-Table depth) R = (37.33-27.82) 3 = +28.71	Moulded Breadth (B) 56.90
Stringer plate06	(b) Where D is less than Table depth (if allowed) (Table depth-D) R = 9.57	Standard Round of Beam = $\frac{B \times 12}{50} = \mathbf{13.66}$
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures ✓	Ship's Round of Beam = 14.00
Depth for Freeboard (D) = 37.39		Difference .34
		Restricted to
		Correction = $\frac{\text{Diff}^c}{4} \times \left(1 - \frac{S_1}{L} \right) = \frac{.34}{4} = \mathbf{-.09}$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed						Standard Height of Superstructure
" overhang						" " R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure
" overhang						Percentage covered $\frac{S}{L} =$
Bridge enclosed						" " $\frac{S_1}{L} =$
" overhang aft						" " $\frac{E}{L} =$
" overhang forward						Percentage from Table, Line A.
Fore enclosed						(corrected for absence of forecastle (if required))
" overhang						Percentage from Table, Line B.
Trunk aft						(corrected for absence of forecastle (if required))
" forward						Interpolation for bridge less than .2L (if required)
Tonnage opening aft						Deduction = N.L.
" " forward						
Total						

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
A.P.	51.73	1	51.73	55.00	55.00	1	55.00
$\frac{1}{6}$ L from A.P.	23.02	4	92.08	23.25	23.25	4	93.00
$\frac{2}{6}$ L "	5.69	2	11.38	6.50	6.50	2	13.00
Amidships	✓	4	✓	✓	✓	4	✓
$\frac{3}{6}$ L from F.P.	11.38	2	22.76	11.63	11.63	2	23.26
$\frac{4}{6}$ L "	46.04	4	184.16	46.75	46.75	4	187.00
F.P.	103.47	1	103.47	105.00	105.00	1	105.00
Total			465.58				476.26

Mean actual sheer aft =
Mean standard sheer aft =

Mean actual sheer forward =
Mean standard sheer forward =

Length of enclosed superstructure forward of amidships =
L

" " aft of " =

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{10.68}{18} \times .75 = \mathbf{-.45}$

If limited on account of midship superstructure. No. F/D.

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

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = **37.39**
Summer freeboard = **9.79**
Moulded draught (d) = **27.60**

Deduction for Tropical freeboard and addition for

Winter freeboard = $\frac{d}{4}$ inches = **6.90 = 7**

Addition for Winter North Atlantic Freeboard (if required)=

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
= **7 1/4**

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

Depth Correction
Deduction for superstructures
Sheer correction
Round of Beam correction
Correction for Thickness of Deck amidships
Other corrections, scantlings, etc. to summer moulded draught of

	+	-
28.71	✓	
✓	✓	
✓	.45	
✓	.09	
✓	✓	
0.55	✓	
29.26	.54	

83.21
88.78

22.9.50

+28.72

Summer Freeboard = **117.50**

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

Tropical Fresh Water Line above Centre of Disc	14 1/4	362	Tropical Fresh Water Freeboard	2984
Fresh Water Line	7 1/4	184	Fresh Water	2622
Tropical Line	7	178	Tropical	2800
Winter Line below	7	178	Winter	2806
Winter North Atlantic Line	7	178	Winter North Atlantic	362