

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

Ship's Name "ANALOCK" ex "ANACONDA"	Official Number 171165	Nationality and Port of Registry BRITISH SHANGHAI	Gross Tonnage 6638.24	Date of Build 1919	Port of Survey SHANGHAI
Moulded Dimensions: Length 395.16' Breadth 55.00' Depth 34.92'					Date of Survey 16 TH. NOVEMBER, 1938
Moulded displacement at moulded draught = 85 per cent. of moulded depth tons					Surveyor's Signature G. Ruxton
Coefficient of fineness for use with Tables .82 (estimated)					Particulars of Classification +100A.1. Shelter Deck with freeboard

Depth for Freeboard (D).	Depth correction.	Round of Beam correction.
Moulded depth ... 34.92'	(a) Where D is greater than Table depth (D-Table depth) R = (34.96-26.34) 3 = +25.86"	Moulded Breadth (B) 55.00'
Stringer plate ... .04'	(b) Where D is less than Table depth (if allowed) (Table depth-D) R =	Standard Round of Beam = $\frac{B \times 12}{50} = 13.20"$
Heating on exposed deck $T \left( \frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = 12.00"
Depth for Freeboard (D) = 34.96		Difference equivalent deficient 2.31
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{2.31}{4} \times .5575 = +.32"$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed ...	44.75	44.75	7.92		44.75
.. overhang ...					
R.Q.D. enclosed ...					
.. overhang ...					
Bridge enclosed...	109.50	109.50	7.92		109.50
.. overhang aft ...					
.. overhang forward ...					
.. enclosed ...	38.00	20.63	7.92		20.63
.. overhang ...					
Trunk aft ...					
.. forward ...					
Tonnage opening aft ...					
.. forward ...					
Total ...	192.25	174.88			174.88

Standard Height of Superstructure 7.45'

" " R.Q.D. ✓

Deduction for complete superstructure 41.68'

Percentage covered  $\frac{S}{L} = 48.65\%$  ✓

" "  $\frac{S_1}{L} = 44.25\%$  ✓

" "  $\frac{E}{L} = 44.25\%$  ✓

Percentage from Table, Line A. ✓

(corrected for absence of forecastle (if required)) ✓

Percentage from Table, Line B. 31.11% ✓

(corrected for absence of forecastle (if required))

Interpolation for bridge less than .2L (if required) ✓

Deduction =  $41.68' \times .3111 = 12.97'$  ✓

SHEER CORRECTION.

Station	Standard Ordinate	S M	Product	Actual Ordinate	Effective Ordinate	S M	Product
..	49.52	1	49.52	37.75	37.75	1	37.75
from A.P. ...	22.04	4	88.16	7.75	7.75	4	31.00
" ...	5.45	2	10.90	-	-	2	-
amidships ...	-	4	-	-	-	4	-
from F.P. ...	10.89	2	21.78	-	-	2	-
" ...	44.07	4	176.28	17.75	17.75	4	71.00
" ...	99.03	1	99.03	90.00	90.00	1	90.00
Total ...			445.67				229.75

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{215.92}{18} \left( .75 - \frac{24.33}{2 \times 395.16} \right) = +6.08'$  ✓

If limited on account of midship superstructure. ✓

If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓

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 = } Deficient sheers

" " aft of " = }

Sheers Forward

Standard Actual

10.89 3 32.67 17.75 3 53.25

44.07 3 132.21 90.00 1 90.00

99.03 1 99.03 263.91 90.00 1 90.00

Actual 54.28

Standard 143.25

Deduction for Tropical Freeboard.	Deduction for Fresh Water.	TABULAR FREEBOARD corrected for Flush Deck (if required)
Condition for Winter and Winter North Atlantic Freeboard.	Displacement in salt water at summer load water line	Correction for coefficient $\frac{.82 + .68}{1.36} = \frac{1.50}{1.36}$
Depth to Freeboard Deck = 34.96	Δ =	+
Summer freeboard = 8.04	Tons per inch immersion at summer load water line	-
Moulded draught (d) = 26.92	T =	25.86
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = 6.73 = 6 3/4	Deduction = $\frac{\Delta}{40 T}$ inches	- 12.97
Condition for Winter North Atlantic Freeboard (if required) = ✓	$\frac{d}{4} = 6 3/4$	6.08
		Round of Beam correction ... .32
		Correction for Thickness of Deck amidships ... -
		Other corrections, scantlings, etc. ... -
		✓ 32.25 12.97 + 19.29 ✓
		Summer Freeboard = 96.50 ✓

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

Tropical Fresh Water Line above Centre of Disc ...	13 1/2 ✓	Tropical Fresh Water Freeboard ...	8' 0 1/2" ✓
Fresh Water Line " " ...	6 3/4 ✓	Fresh Water " " ...	6' 11" ✓
Tropical Line " " ...	6 3/4 ✓	Tropical " " ...	7' 5 3/4" ✓
Winter Line below " " ...	6 3/4 ✓	Winter " " ...	7' 5 3/4" ✓
Winter North Atlantic Line " " ...	✓	Winter North Atlantic " " ...	8' 7 1/4" ✓

13 JAN 1939



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.

Names of sister ships.

Owners G. F. Harder. Shapley.

Fee ~~2~~ \$ 257.00

Analog.

Lloyd's Register  
Foundation