Rpt. C.11 (Comp.).

OCEAN VANGUARD
36857 ea.

B.T. COPY.

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

Index. No. 37097
(For London Office only)

Ship's Name	Official Number	Nationality and Port of Registry	Gross Tonnage	Date of Build
"OCEAN STRANGER"	169063	BRITISH Manchester	7178.42	1942

Port of Survey So. Portland, Maine, U.S.A.

Date of Survey September, 1942

Surveyor's Signature H.R. Gibbs J.S. Ormiston

Particulars of Classification ✠ 100A1 with
Freeboard (contemplated).

Moulded Dimensions: Length 417.35' ✓ Breadth 56.9 ✓ Depth 37.33 to upper deck. 28.48 to 2nd deck.
TO CR OF RUDDER STOCK

Moulded displacement at moulded draught = 85 per cent. of moulded depth 16556 ✓ tons

Coefficient of fineness for use with Tables .769 ✓

Depth for Freeboard (D).

Moulded depth	37.33
Stringer plate	.05
Sheathing on exposed deck $T\left(\frac{L-S}{L}\right)=$	
Depth for Freeboard (D) =	37.38 ✓

Depth correction.
(a) Where D is greater than Table depth
(D—Table depth) R=
$$(37.38 - 27.82) \, 3 = +28.68 \checkmark$$
(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) 56.90
Standard Round of Beam $= \frac{B \times 12}{50} =$ 13.66 ✓
Ship's Round of Beam = 14.00
Difference .34
Restricted to
Correction $= \frac{Diff^e}{4} \times \left(1 - \frac{S_1}{L}\right) = \frac{.34}{4} = -.09''$

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S₁)	Height	Height Correction	Effective Length (E)
Poop enclosed					
" overhang... ...					
R.Q.D. enclosed ...					
" overhang			FLUSH DECK		
Bridge enclosed... ...					
" overhang aft ...					
" overhang forward					
F'cle enclosed					
" overhang					
Trunk aft					
" forward					
Tonnage opening aft ...					
" " forward					
Total					

Standard Height of Superstructure 7'6"
" " R.Q.D.
Deduction for complete superstructure 42 inches.
Percentage covered $\frac{S}{L}=$
" " $\frac{S_1}{L}=$
" " $\frac{E}{L}=$
Percentage form 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 M	Product
A.P. ...	51.75 / 53	1	51.75 / 53	53.70	53.70	1	53.70
⅙L from A.P. ...	23.03 / 02	4	92.12 / .08	23.40	23.40	4	93.60
⅔L "	5.69	2	11.38	4.9	4.9	2	9.80
Amidships ...	x	4	x	x	x	4	x
⅔L from F.P. ...	11.39 / 38	2	22.78 / b	11.60	11.60	2	23.20
⅙L "	46.06 / 64	4	184.24 / .16	47.40	47.40	4	189.60
F.P. ...	103.50 / .47	1	103.50 / .47	10550	105.50	1	105.50
Total ...			465.77 / 58				475.40

Mean actual sheer aft / Mean standard sheer aft = } EXCESS

Mean actual sheer forward / Mean standard sheer forward = } EXCESS

Length of enclosed superstructure / L forward of amidships = } FLUSH

" " aft of " = } DECK

Correction $= \frac{\text{Difference between sums of products}}{18}\left(\cdot75 - \frac{S}{2L}\right) = \frac{9.63 / .82}{18} \times .75 = -.40 \, / -.41''$

If limited on account of midship superstructure. No. FLUSH DECK

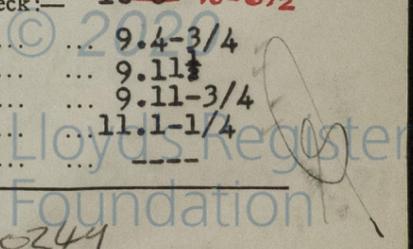If limited to maximum allowance of 1½ ins. per 100 ft. ✓

Deduction for Tropical Freeboard.
Addition for Winter and Winter North Atlantic Freeboard.

	Ft.
Depth to Freeboard Deck	37.38
Summer freeboard	10.54
Moulded draught (d)	26.84

Deduction for Tropical freeboard and addition for
Winter freeboard $= \frac{d}{4}$ inches = 6-3/4"

Addition for Winter North Atlantic Freeboard (if required) = x ✓

Deduction for Fresh Water.
Displacement in salt water at summer load water line
$\triangle = 13758$
Tons per inch immersion at summer load water line
$T = 48.5$
Deduction $= \frac{\triangle}{40T}$ inches
= 7" ✓

TABULAR FREEBOARD corrected for Flush Deck (if required)
76.95 + 6.26 83.21
Correction for coefficient. $\frac{.769 + .68 = 1.449 = 1.065}{1.36}$ 88.62 / 6

		+	−
Depth Correction		28.68	
Deduction for superstructures			.41 / .40
Sheer correction			.40
Round of Beam correction			.09
Correction for Thickness of Deck amidships ...		9.69 / 6	
Other corrections, scantlings, etc. ... and corresponding with approved summer draught.		38.37	.50 / .49 / .34 37.88 / 4

Summer Freeboard = 126.50"

82.R.
15.12.42

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~, Steel, Deck:— 1016" 10-6½"

18 DEC 1942

Tropical Fresh Water Line above Centre of Disc ...	13-3/4	Tropical Fresh Water Freeboard ...	9.4-3/4
Fresh Water Line " "	7	Fresh Water "	9.11½
Tropical Line " "	6-3/4	Tropical "	9.11-3/4
Winter Line below " "	6-3/4	Winter "	11.1-1/4
Winter North Atlantic Line " "	---	Winter North Atlantic "	---

1M-6-41 PRINTED IN U.S.A.

01757-01765-0249

A 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.

omit.

Trade of ship .... **Dry & Perishable Cargoes.**

Names of sister ships .... **"OCEAN VANGUARD", "OCEAN LIBERTY", etc.**

Builder's name and yard number .... **Todd-Bath Iron Shipbuilding Corporation, Hull No.20**

Owners .... **British Ministry of War Transport.**

Fee £ **$100.00**