

STEEL STEAMER ~~OR MOTORSHIP~~

Received at London Office... 13 AUG 1942

State if Report has been sent on the Freeboard of the Vessel **YES**

State if Report is sent on the Machinery of the Vessel **YES**

Date of completion of report **May 16th, 1942**

Port of **RICHMOND, CALIFORNIA**

No. **20**

Survey held at **RICHMOND, CALIFORNIA**

Date First Survey **Feb. 17th, 1942**

Last Survey **May 15th**

1942

On the (State if Machinery fitted Aft and of Single, Twin or Triple Screw) **Steel Single Screw Steamer "OCEAN VOLGA"**

State Type (For Scantling, Complete Superstructure) **Complete Superstructure, with T.O. closed**

State Type of Erections **--**

TONNAGE under 6734.64
Tonnage Deck...)

CLASS **+100 A1** (State if with freeboard) **Yes**
With freeboard, corresponding to a summer mld. draft of **26' 10"** FEET.

Built at **RICHMOND, CALIFORNIA**

Do. of space or spaces between Tonnage Dk. and Upper Dk. **--**

Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a) **L 416.00**

Launched **April 21, 1942** Yard No. **20**

Total **--**

Breadth (greatest moulded) **B 56.90**

Builders **TODD-CALIFORNIA SHIPBUILDING DIVISION OF THE PERMANENTE METALS CORPORATION**

Gross Tonnage **7174.44**

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 2 (1c) **D 37.33**

Owners **H. M. GOVERNMENT IN THE UNITED KINGDOM**

Register Tonnage **4272.08**

Depth to 2nd Deck = **28.58'**

Managers **--**

(Where necessary to be entered in Reg. Book.)

REGISTERED DIMENSIONS. FEET.

Length **425.1**

Framing Depth "d," at middle of length. See Sec. 3 (1d) **24.96**

Residence **--**

Breadth **57.0**

Proportions—Depth to Length—Uppermost continuous deck to top of keel **11.14**

Port of Registry **LONDON**

Depth **34.85**

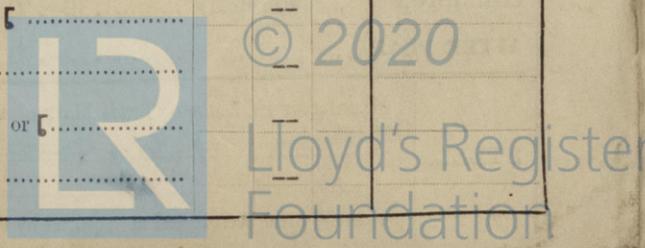
1st Longitudinal Number (L x D) = **15529**

If surveyed while building, afloat, or in dry dock

on stocks, afloat and in dry dock

FRAMES, DOUBLE BOTTOM AND BEAMS.

	INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.	INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships	30	✓		Bracket Floors, Frame inv. angle	6 3/2 .38	✓
" " from 3/8 length amidships to Collision bulkhead.....)	27	✓		" " Reversed Frame inv. angle	6 3/2 .38	✓
" " in peaks.....)	24	✓		" " Vertical Struts	8x3 1/2 x 3 1/2 .42/50	
SIDE FRAMING.				Centre Girder, depth and thickness amidships	43.5 x .54	✓
Frame Amidships, Angle, [or]	12x4x4x.59/.69	✓		" " xxxxxx Welded top....	--	
" " Extends up to	2nd deck	✓		" " xxxxxx & bottom....	--	
Reversed Frame Amidships, Angle	--			Side Girders, No. each side and thickness	one .38	✓
" " Extends up to...	--			Margin Plate horizontal width	68 x .54	✓
Depth of Framing Girder	12	✓		" " depth (incl. of bulge) and thickness	Welded to tank side brackets ✓	
Frames in Uppermost Continuous 'tween Decks, Angle, [or]	6x3 1/2 x 3 1/2 x.34/.38	✓		" " Vertical Angle to Tank side Bracket abaft 1/2 len. from stem	✓	
" " Second 'tween Decks, Angle, [or]	--			" " Vertical Angle to Tank side Bracket from forward 1/2 len. from stem to Panting Area	✓	
" " Third				" " Gussets, spacing and scantling abaft 1/2 len. from stem	12 x .44 continuous	
" " No. 1 Hold (frs. "13-38") ✓ [15x3.37x3.37x.52/.62 ✓				" " No. 1 Hold Gussets, spacing and scantling from forward 1/2 len. from stem to Panting Area. No. 1. Hold continuous	15 x .44	
" " from 1/2 len. for'd. to 15% len. from Stem)				Tank Side Brackets, height above base line at toe of Frame and thickness	85.5 x .44	✓
" " No. 2 Hold, as amidships in Peaks, Angle, [or]	8 3 1/2 .34	✓		INNER BOTTOM PLATING.		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	7/8 @ 6 1/2 dias. ✓			Breadth and thickness of Middle Line Strake ...	60 x .52	✓
State if Frame Joggled	No	✓		Thickness of remainder in Holds44	
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	Yes	✓		Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room?.....)	Yes	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	Yes	✓		BEAMS.		
SINGLE BOTTOM.				Uppermost Continuous Deck, amidships	7 4 .38	✓
Floors, Depth and thickness at mid-line in Holds	--			Inv. Angle ✓ xxxxxx [or]	--	
Height of Brackets at side above base line at toe of frame	--			" " in way of Bridge, Angle, [or]	--	
Middle Line Keelson, on Floors, Angles, [or]	--			Spacing	ev. fr.	
" " Through Plate or Intercostal Plate....)	--			Second Deck, amidships inv. Angle, xxxxxx [or]	8 4 .43	✓
" " Foundation Plate on Floors	--			Spacing.....)	7 4 .38	✓
" " Flat Plate Keel Angles	--			Third Deck, amidships, Angle, [or]	--	
Side Keelsons, No. each side	--			Spacing.....)	--	
" " thickness of Intercostal Plate....)	--			Fourth Deck, amidships, Angle, [or]	--	
" " Angles	--			Spacing.....)	--	
DOUBLE BOTTOM.				Poop Deck, Angle, [or]	--	
Solid Floors, thickness and spacing38 @ 10' ✓			Spacing.....)	--	
" " Are Frame and Reversed Frame joggled?.....)	No	✓		Bridge Deck, Angle, [or]	--	
Bracket Floors, breadth and thickness at middle line)	36 x .38	✓		Spacing.....)	--	
" " breadth and thickness at margin plate.....)	36 x .38	✓		Forecastle Deck, Angle, [or]	--	
				Spacing	--	



PILLARS AND DECKS.

INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.		Any Departure from Approved Plans to be Noted.	
Reinforced hatch side girders & strong hatch end beams, in accordance with approved plans							
PILLARS, No. of Rows... One, in tw. decks only							
(6 6 .38 angle)				Stringer Plate, breadth and thickness in way of Bridge			
(5 5 .38 ")				Thickness of Plating abreast Deck openings)		.40	
alt. frs.		plan not available		Thickness of Plating abreast Deck openings) in way of Bridge			
				Thickness of Plating within line of openings...		.40	
				If Sheathed, material and thickness			
(9x7 1/2 x .36 / .57 inv. T)				Third Deck.			
(7x4 x .38 inv. angle)				Stringer Plate, breadth and thickness...			
on alt. frames				If Plated, state thickness...			
Plating, thickness of		.30		Fourth Deck.			
Stringer Plate, breadth and thickness		65 x .62		Stringer Plate, breadth and thickness...			
" " " " " " " "				If Plated, state thickness			
" " " " " " " "				Poop Deck.			
" " " " " " " "				Stringer Plate, breadth and thickness			
" " " " " " " "				Plating, Sheathing, material and thickness			
Thickness of Plating abreast Deck openings)		.62		Bridge Deck.			
Thickness of Plating abreast Deck openings) in way of Bridge				Stringer Plate, breadth and thickness...			
Thickness of Plating within line of openings...		.40		Plating, Sheathing, material and thickness			
If Sheathed, material and thickness				Forecastle Deck.			
Second Deck.				Stringer Plate, breadth and thickness...			
Stringer Plate, breadth and thickness		108 x .40		Plating, Sheathing, material and thickness			

SHELL PLATING.

STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.		BUTTS.			
	AMIDSHIPS.		AFT.			State if Joggled?	RIVETS.	No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.					SINGLE OR DOUBLE.	Diam.	
FLAT PLATE KEEL	60	.88	.68	.81		Butt welded		Butt welded			
" DBLG. (if any)	--		.62 @ F.P.			" "		" "			
BOTTOM PLATING, No. of Strakes .. Two ..	--	.64	.67	.54		" "		" "			
BILGE PLATING, No. of Strakes .. One ..	--	.64	.58	.54		" "		" "			
SIDE PLATING, No. of Strakes .. Three ..	--	.64	.58	.46		" "		" "			
UPPER DECK, Sheer-strake in Wells ..	91	.72	.58	.46		" "		" "			
UPPER DECK, Sheer-strake in Bridge ...	--					" "		" "			
STRAKE BELOW Sheer-strake in Wells ..	--					" "		" "			
STRAKE BELOW Sheer-strake in Bridge ...	--					" "		" "			
POOP SIDE PLATING	--					" "		" "			
BRIDGE SIDE PLATING	--					" "		" "			
FORECASTLE SIDE PLATING	--					" "		" "			

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel	ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.
Extending to Upper Deck (Sec. 3 c) ONE (Coll. BHD.)	6 Divisional W.T. Bhd. in tw. decks
" Deck next below SEVEN (Inc. D.T. Aft BHD.)	7 W.T. Bhd. in tw. decks
As per Rule SEVEN	14 W.T. Bhd. in tw. decks

FORGINGS and CASTINGS.

Part	Material	Dimensions	Notes
KEEL, Bar	Steel	10" x 2 1/2"	
STEM	Rolled Bar	10" x 2 1/2"	
STERN FRAME	Propeller Post	As per approved plan	
Speed of Vessel	C.S., Columbia Steel Co. Pittsburgh, California	Not exceeding 12 knots	
RUBBER-Type	Goldschmidt Patent Streamline	constructed by Bethlehem Steel Co., Leetsdale, Pa.	
"	A x D	299	
"	Diam. of head	F.S. 9 1/2"	Newport News S.E. & D.D.
"	Mainpiece at top	12 3/4"	
"	heel	10"	
"	how constructed	All welded seamless steel tube with horizontal plate diaphragms	
"	double coupling	horizontal	

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) S. M. Open Hearth Bethlehem Steel Co., Columbia Steel Co., Republic Steel Corp. By-Products Steel Corp.

Has the Steel been tested as required by the Rules? YES

EQUIPMENT No 39770

LETTER A + a +

ANCHORS.

Number of Certificate.	Anchor.	Weight of Stockless	Weight of Stock	Test, per Certificate.	Weight Required by Table 53.	Description of Anchor.	Makers.	Where and when tested and Superintendent.
786	1st Bower	7665 lbs		118580 lbs.	7616	Baldt Stockless	Columbia Steel Co. Pittsburg Calif.	Pittsburg, Calif. Jan. 3/42 H.N. Clegg
787	2nd "	7665 "		" "	7616	" "	" "	" "
	3rd "	15330 "		" "	194 1/2	" "	" "	" "
	Collective weight.	2740 "		54460 "	23 3/4	" "	" "	Pittsburg, Calif. Dec. 23/41 H.N. Clegg

CHAIN CABLES.

HAWSERS AND WARPS.

Number of Certificate.	Length and size supplied.	Test per Certificate.	WEIGHT OF CHAIN CABLE.		Length and size per Table 53.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and size supplied.		Breaking Test of Steel Wire.	Length and size per Table 53.	
			Supplied.	Per Rule.						Length.	Diam.		Length.	Clr.
1425A	225 2 1/8	303320 lbs.	70822 lbs.	720 3/4	270 2 1/8	Cast Steel	National Malleable & Steel Castings Co. Sharon, Pa. Dec 1/41	A.T. Grimes	TOWLINE	120	5 3/8	160,000	120	4 3/4 (6x24)
8284A	3 1/4	215600 "	519 lbs.	3 End shackles		Baldt Anchor Chain & Forge	Chester Apr 17/42 O. Narbeth		HAWSERS & WARPS	2@90	2 1/4	34,048	2@90	2 1/2 (6x12)
		301840 "								2@90	2 1/2	29560	2@90	2 1/2 (6x12)

The above 15 lengths of chain connected by NACO JOINING LINKS mfd. by Nat'l Malleable Steel Casting Co., and tested at Sharon, Pa. The details of the separate Certificates issued for each link are as given overleaf. (Continued on Page 4)

Steering Gear, Type (Power or hand) Steam, Sumner Iron Works Everett, Wash. Alternative Means of Steering Efficient arrangement of blocks and tackles led to after warping winch

Steering Chains (Size and Test) -- Windlass Steam, Sumner Iron Works Everett, Wash. Boats 2 @ 20 x 6.75 x 2.6 1 @ 26 x 8 x 3.25 1 @ 27 x 8.25 x 3.4 - Motor

Ceiling in Holds, thickness and material 2 1/2" Pine Cargo Battens, thickness, material and spacing 1 3/4" Pine, 9" Clear

Cargo Hatchways.-(Upper Deck) Strong steel plate coamings Thickness of Hatches 2 3/4" Pine

Size of Hatchways No. 1 (Fwd.) 33'9" x 20' No. 2 35' x 20' No. 3 15' x 20' No. 4 29'9" x 20' No. 5 35' x 20' X.Bkr. 7'6" x 20'

Number of Shifting Beams No. 1 - 5 No. 2 - 5 No. 3 - 2 No. 4 - 5 No. 5 - 5 X.Bkr. - 1

Builder's Signature TODD-CALIFORNIA SHIPBUILDING DIVISION of THE PERMANENTE METALS CORPORATION

GENERAL DECLARATION. It should be stated (a) whether the vessel (if not a motorship) is fitted for the carriage and burning of oil used as fuel NO (b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo NO The positions in which oil is carried as fuel or cargo should be indicated, together with the flash point (where required to be inserted in the Notation).

This vessel has been constructed in accordance with the approved plans, the Secretary's letters of various dates, and in compliance with the Rules and Regulations for the class contemplated.

The workmanship and materials are good.

The double bottom, peak, deep and fresh water tanks, bulkheads, tunnels, W.T. door, steering gear and windlass have been tested and found satisfactory.

The freeboards assigned by the Committee have been marked on the vessel's sides and verified, the vessel being of the shelter deck type, with the tonnage opening permanently closed by riveted plate, and the bulkheads being carried watertight to the upper deck. An endorsement has been issued with the Provisional Load Line Certificate, relating to emergency deeper loading in accordance with Circular No. 1784. The openings in Tween Deck bulkheads have been closed, in accordance with M.S. Circular 1835.

The equipment of anchors and chain cables is in accordance with the War Emergency Reduction of Equipment Requirements, and it is recommended that a suitable notation be entered on the First Entry Certificate.

The vessel is fitted with Direction Finding Wireless equipment; also with Echo Sounding Device, which does not pierce the shell plating.

The vessel has also been surveyed during construction on behalf of the British Purchasing Commission, in accordance with the requirements of the hull specification, and the specification requirements have been completed to our satisfaction.

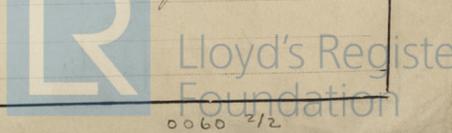
The amount of Entry Fee \$50.00 To Be charged Fees applied for, 19. Received by me, 19. Special Survey Fee... \$ in London \$2872.50 Travelling Expenses, if any £

I am of opinion the Vessel should be Classed + 100 A1 With Freeboard corresponding to a summer mld. draft of 26' 10"

Signature J. B. Books & J. Rannice Surveyors to Lloyd's Register of Shipping.

Certificate sent to ADMIRALTY Date of issue 6/10/42 Duplicates NEW YORK Committee's Minute NEW YORK JUL 25 1942

Character assigned +100A1 with freeboard +LMC-5,42. NOTE - ELEC. WELD. CRUISER STERN - LLOYD'S A. & P. EQUIPT. LTR. AT - D.F., E.S.D. F.S.B. (Ckt) 220 lbs. CL - Elec. Dept. 2020



GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

The vessel is the twentieth of thirty sister ships, Nos. 1 to 30, to be built by the Todd-California Shipbuilding Division of The Permanente Metals Corporation, to the order of H. M. Government in the United Kingdom. The approved plans have been retained for dealing with the sister vessels. Forwarded herewith:

MIDSHIP SECTION AS BUILT
COPY OF INTERIM CERTIFICATE B
THREE CASTINGS AND FORGING REPORTS

SISTER SHIPS:

Yard No. 1	"OCEAN VANGUARD", Richmond, Calif., Report No. 1	Yard No. 11	"OCEAN VALOUR", Richmond, Calif., Report No. 11
2	" VIGIL " " "	12	" VENUS " " "
3	" VOICE " " "	13	" VIGOUR " " "
4	" VENTURE " " "	14	" VANITY " " "
5	" VIKING " " "	15	" VINTAGE " " "
8	" VESTAL " " "	16	" VOLUNTEER " " "
6	" VESPER " " "	17	" VETERAN " " "
7	" VALLEY " " "	18	" VOYAGER " " "
9	" VISION " " "	19	" VISTA " " "
10	" VULCAN " " "		

(continued from Page 3)

NUMBER OF CERTIFICATE	DIAMETER	JOINING LINKS TEST PER CERT.		WEIGHT	DATE TESTED	SUPERINTENDENT
		TENSILE	STATUTORY			
471,473,477	2 5/16	303320 ✓	424630 ✓	162 lbs.	Apr. 28, 1941	F. Osborne
637,8,9 640,1,4,6,9 651,2,5	"	"	"	594 lbs.	June 9, 1941	"
656	"	"	"	54 lbs.	June 12, 1941	"
509,512,3,4 515,6,9,520	2 3/8	319050 ✓	446660 ✓	432 lbs.	Apr. 28, 1941	"
959,961,2,3	"	"	"	216 lbs.	Sept. 18, 1941	A. T. Grimes

Nos. 471, 473, 477, 509, 514, 516, 520, 638, 639, 651, 655, 656, 959, and 963 are spares.

PARTICULARS OF ELECTRIC WELDING (if employed) The vessel is of entirely welded construction, with the exception of the connections of side framing to shell, and rider plates to hatch side girders, and end beams which are riveted. Electrodes, complying with Section 4, paras. 1-9, of the Rules, have been employed for manual welding. Machine welding by the approved "Unionmelt" Process has also been used. The form and location of the various welded joints employed are in accordance with welding details approved by the Committee. The Rules for the application of Electric Arc Welding to Ship Construction have been complied with where applicable.

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book

Cruiser Stern; Lloyds A & CP;; D.F., E.S.D.
Electric Welding Notation to be decided by the Committee

Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	Weight of head	5800 lbs.	H. C. 786	January 3rd, 1942
	2nd "	"	5820 "	H. C. 787	" " "
	Stream	"	2080 "	H. C. 794	December 23, 1941

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop -- ft., R.Q.D. -- ft., Bridge -- ft., Forecastle -- ft. (in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated --

Official No. Not yet issued Signal Letters Not yet issued Extreme Breadth over Belting No belting (Circ. 1611) Over-all Length 441.5 (Circ. 1703)

No. and Material of Decks Two--Steel
Parts of Bottom of Vessel coated with cement or approved composition D. B. tanks under machinery spaces coated with 1 1/2" solid cement on bottom, with bitumastic on other surfaces. Remainder of D. B. tanks cement washed only; peaks cemented.

Particulars of composition (if fitted) and of approval Bitumastic enamel and solution.

PARTICULARS OF WATER BALLAST:—(Comprising all tanks which may be used for Water Ballast. (Circ. 1284) Wells are not to be included in the lengths of the tanks, but Cofferdams and Dry Tanks (if tested) are to be included.)

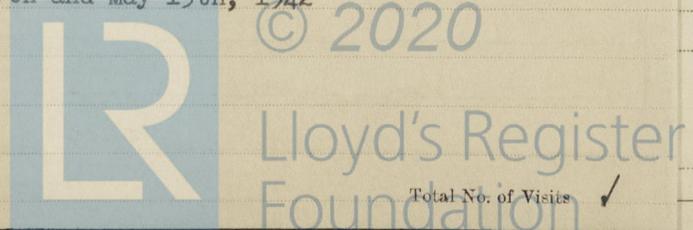
Where Fitted.	Length.	Water Capacity.	Where Fitted.	Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft,	135	361	Fore peak tank,	22.8	124 ✓
Double bottom, under Engines and Boilers,	45	212	After peak tank,	24.9	166 ✓
Double bottom, if under Engines only,	--	--	Deep tank, aft,	20.0	734 ✓
Double bottom, if under Boilers only,	--	--	Deep tank, forward,	--	--
Double bottom, forward,	188.2	735	Other tanks, if fitted,	--	--
Total length (if continuous) and Capacity	368.2 ✓	1308 ✓	(If necessary, furnish further information by sketch.)		

Continuous attendance between February 17th and May 15th, 1942

Order for Special Survey No. ✓

Date ✓

Dates of Surveys held while building



Total No. of Visits ✓