

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 8 SEP 1942

Date of writing Report August 3rd 1942 When handed in at Local Office August 3rd 1942 Port of RICHMOND, CALIFORNIA

No. in Survey held at RICHMOND, CALIFORNIA Date, First Survey May 25th, 1942 Last Survey July 7th, 1942 19

Reg. Book. (Number of Visits 47)

on the S. S. "OCEAN VANQUISHER" Tons Gross 7174 Net 4272

Built at RICHMOND, CALIFORNIA By whom built TODD-CALIFORNIA SHIPBUILDING DIVISION Yard No. 28 When built 1942 of The Permanente Metals Corporation

Engines made at HAMILTON, OHIO By whom made GENERAL MACHINERY CORP. Engine No. 6735 When made 1942

Boilers made at LOS ANGELES, CALIFORNIA By whom made WESTERN PIPE & STEEL CO. 55

SEATTLE, WASHINGTON By whom made PUGET SOUND MACHINERY DEPOT Boiler No. 23, 24 When made 1942

Registered Horse Power --- Owners BRITISH GOVERNMENT Port belonging to LONDON

Nom. Horse Power as per Rule 505 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES

Trade for which Vessel is intended FOREIGN---CARRYING DRY & PERISHABLE CARGOES

ENGINES, &c.—Description of Engines TRIPLE EXPANSION Revs. per minute 76

Dia of Cylinders 24 1/2" x 37" x 70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 13.97" Crank pin dia. 14.25" Crank webs Mid. length breadth --- Thickness parallel to axis 9" as fitted 14.25" Mid. length thickness 9" shrunk Thickness around eye-hole 7.625"

Intermediate Shafts, diameter as per Rule 13.32" Thrust shaft, diameter at collars as per Rule 13.97" as fitted 13.5" as fitted 14.25"

Tube Shafts, diameter as per Rule --- Screw Shaft, diameter as per Rule 14.86" Is the screw shaft fitted with a continuous liner YES as fitted NONE as fitted 15.25"

Bronze Liners, thickness in way of bushes as per Rule 0.75" Thickness between bushes as per Rule 0.5625" Is the after end of the liner made watertight in the propeller boss YES If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner CONTINUOUS the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive TIGHT FIT two liners are fitted, is the shaft lapped or protected between the liners --- Is an approved Oil Gland or other appliance fitted at the after end of the tube aft. NO If so, state type --- Length of Bearing in Stern Bush next to and supporting propeller 5' 1" propeller, dia. 18' 6" Pitch 16' 6" No. of Blades 4 Material BRONZE whether Moveable NO Total Developed Surface 117 sq. ft.

Feed Pumps worked from the Main Engines, No. NONE Diameter --- Stroke --- Can one be overhauled while the other is at work YES

Bilge Pumps worked from the Main Engines, No. TWO Diameter 4 1/2" Stroke 26" Can one be overhauled while the other is at work YES

Feed Pumps (No. and size TWO SIMPLEX 12" x 8" x 24" Pumps connected to the Main Bilge Line (No. and size 1 Indpt. 10" x 11" x 12", 2 attached How driven STEAM How driven STEAM—MAIN ENGINE NONE

Ballast Pumps, No. and size One 10" x 11" x 12" Lubricating Oil Pumps, including Spare Pump, No. and size ---

Are two independent means arranged for circulating water through the Oil Cooler NONE Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 5 @ 3", 1 PORTABLE HOSE CONNECTION, 2 1/2" In Holds, &c. 2 @ 3" in each hold, 1 @ 5" in each deep tank (Size of Main Bilge Line)

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 10" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 5" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes NO; STRAINERS IN BILGE WELLS

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YES

Are all Sea Connections fitted direct on the skin of the ship YES Are they fitted with Valves or Cocks YES

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates YES Are the Overboard Discharges above or below the deep water line YES

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel YES Are the Blow Off Cocks fitted with a spigot and brass covering plate AS APPR'D

What Pipes pass through the bunkers BILGE PIPES TO FORWARD HOLDS How are they protected THROUGH TANK TOP BRACKETS & STEEL COVERS

What pipes pass through the deep tanks NONE Have they been tested as per Rule ---

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times YES

Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another YES Is the Shaft Tunnel watertight YES Is it fitted with a watertight door NO worked from ENTRANCE FROM DECK

MAIN BOILERS, &c.—(Letter for record S ---) Total Heating Surface of Boilers 7140 sq. ft.

Which Boilers are fitted with Forced Draft 3 MAIN BOILERS Which Boilers are fitted with Superheaters 3 MAIN BOILERS

No. and Description of Boilers 3 MULTITUBULAR SCOTCH MARINE Working Pressure 220 lbs. per sq. inch

IS A REPORT ON MAIN BOILERS NOW FORWARDED? YES

IS A DONKEY BOILER FITTED? NO If so, is a report now forwarded? ---

Can the donkey boiler be used for domestic purposes only ---

PLANS. Are approved plans forwarded herewith for Shafting 8/4/41 Main Boilers 28/4/41 Auxiliary Boilers --- Donkey Boilers --- (If not state date of approval) 22/8/41

Superheaters 5/11/41 General Pumping Arrangements 5 & 22/9/41 & Oil fuel Burning Piping Arrangements COAL FIRED 1/10/41

SPARE GEAR.

Is the spare gear required by the Rules been supplied YES

Is the principal additional spare gear supplied 1 MAIN BEARING---2 HALVES

The foregoing is a correct description

D. J. Day

GENERAL SUPERINTENDENT & ASSISTANT SECRETARY

Manufacturer.



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W255-0135

Dates of Survey while building

During progress of work in shops - - APRIL 10th, 1942 CONTINUOUS ATTENDANCE UNTIL SHIPMENT

During erection on board vessel - - MAY 25th, 1942 CONTINUOUS ATTENDANCE DURING INSTALLATION ON VESSEL

LAST VISIT, JULY 7th, 1942

Total No. of visits 47

Dates of Examination of principal parts - Cylinders JUNE 3rd, 1942 Slides JUNE 3rd, 1942 Covers JUNE 3rd, 1942

Pistons JUNE 4th, 1942 Piston Rods JUNE 4th, 1942 Connecting rods JUNE 4th, 1942

Crank shaft MAY 29th, 1942 Thrust shaft JUNE 27th, 1942 Intermediate shafts MAY 14th, 1942 & JUNE 15th-18th 1942

Tube shaft Screw shaft MAY 14th, 1942 Propeller DECEMBER 26th, 1941; MAY 14th, 1942

Stern tube JUNE 10th, 1942 Engine and boiler seatings JUNE 2nd, 1942 Engines holding down bolts JUNE 18th to 20th, 1942

Completion of fitting sea connections JUNE 10th

Completion of pumping arrangements JULY 2nd, 1942 Boilers fixed JUNE 18th, 1942 Engines tried under steam JUNE 27th, 1942

Main boiler safety valves adjusted JUNE 27th, 1942 Thickness of adjusting washers NO WASHERS---LOCK NUTS

Crank shaft material O.H. STEEL Identification Mark 142, 12-4-41, A (52) B Thrust shaft material O.H. STEEL Identification Mark ALCO 99, A (80) B

Intermediate shafts, material O.H. STEEL Identification Marks May 14-42 LLOYD'S R-111-121-122-123-124, 130 F.G.A. Tube shaft, material Identification Mark

Screw shaft, material O.H. STEEL Identification Mark May 14-42 LLOYD'S R-126 F.G.A. Steam Pipes, material STEEL Test pressure 660 lbs. Date of Test JUNE 24

Is an installation fitted for burning oil fuel NO Is the flash point of the oil to be used over 150°F. --

Have the requirements of the Rules for the use of oil as fuel been complied with --

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo NO If so, have the requirements of the Rules been complied with --

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with --

Is this machinery duplicate of a previous case YES If so, state name of vessel "OCEAN VANGUARD", "OCEAN VIGIL", "OCEAN VOICE", etc., Richmond Rpts. 1 through 27.

General Remarks (State quality of workmanship, opinions as to class, &c.)

The main engines of this vessel have not been built under our Special Survey. They have been built under the Special Survey of the American Bureau of Shipping, as per copies of certificate herewith, Puget Sound Boiler Reports Nos. 3491, 3492, and Los Angeles Boiler Report No. 55. They have been opened up and examined and found to comply with the Rules, and the workmanship and material appear to be good. The machinery has been tried at full power and found satisfactory, and is now in good and safe working condition and eligible in our opinion to receive the notation L.M.C. 7-42, Tail Shaft seen C. L., with notations 3 S. B. (Spt.), H. S. 7140, G. S. 172, 220 lbs., F.D. 9

Certificate to be sent to

The amount of Entry Fee ... \$30.00 Inclusive fee

Special \$260.68 per vessel to be charged in

Donkey Boiler Fee £ London

Travelling Expenses (if any) £

When applied for, 19

When received, 19

For J. Findlay and self:

John Findlay

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK AUG 26 1942

Assigned L.M.C. (R) - 7, 42



NOTE - CL
3 S. B. (Spt) 220 lbs.