

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

19 AUG 1942

Date of writing Report January 25<sup>th</sup> 1942. When handed in at Local Office 19 Port of New York  
 No. in Survey held at Hamilton, Ohio. Date, First Survey March 17<sup>th</sup> 1941 Last Survey January 21<sup>st</sup> 1942  
 Reg. Book. on the Todd-California Shipbuilding Corporation Hull. 5/5 "Ocean Volga" (Number of Visits) Tons { Gross 7174  
 { Net 4272  
 Built at Richmond, Calif. By whom built Todd-California Shipbuilding Corpn. Yard No. 20 When built 1942  
 Engines made at Hamilton, Ohio. By whom made General Machinery Corp. Engine No. 6565 When made 1942  
 Boilers made at Seattle Washington By whom made Puget Sound Machinery Dept Boiler No. 8, 10, 12 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 British Freighter.

**ENGINES, &c.**—Description of Engines Triple Expansion Revs. per minute \_\_\_\_\_  
 Dia. of Cylinders 24 1/2", 37", 70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule 13.97" as fitted 14 1/2" Crank pin dia. 14 1/2" Crank webs Mid. length breadth 29 1/2" Thickness parallel to axis 9"  
 Mid. length thickness 9" shrunk Thickness around eye-hole 7 1/2"  
 Intermediate Shafts, diameter as per Rule \_\_\_\_\_ as fitted Fitted at Shipyard Thrust shaft, diameter at collars as per Rule 13.97" as fitted 14 1/2"  
 Tube Shafts, diameter as per Rule None. Screw Shaft, diameter as per Rule \_\_\_\_\_ as fitted \_\_\_\_\_ Is the { tube } shaft fitted with a continuous liner { screw } Yes.  
 Bronze Liners, thickness in way of bushes as per Rule \_\_\_\_\_ Thickness between bushes as per Rule \_\_\_\_\_ Is the after end of the liner made watertight in the propeller boss \_\_\_\_\_  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner \_\_\_\_\_  
 If 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 \_\_\_\_\_  
 If 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 shaft \_\_\_\_\_ If so, state type \_\_\_\_\_ Length of Bearing in Stern Bush next to and supporting propeller \_\_\_\_\_  
 Propeller, dia. \_\_\_\_\_ Pitch \_\_\_\_\_ No. of Blades \_\_\_\_\_ Material \_\_\_\_\_ whether Moveable \_\_\_\_\_ Total Developed Surface \_\_\_\_\_ sq. feet  
 Feed Pumps worked from the Main Engines, No. None Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4 1/2" Stroke 26" Can one be overhauled while the other is at work yes.  
 Feed Pumps { No. and size Fitted at Shipyard. Pumps connected to the { No. and size Fitted at Shipyard.  
 { How driven \_\_\_\_\_ Main Bilge Line { How driven \_\_\_\_\_  
 Ballast Pumps, No. and size Fitted at Shipyard. Lubricating Oil Pumps, including Spare Pump, No. and size \_\_\_\_\_  
 Are two independent means arranged for circulating water through the Oil Cooler \_\_\_\_\_ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room \_\_\_\_\_  
 In Pump Room \_\_\_\_\_ In Holds, &c. \_\_\_\_\_

**Main Water Circulating Pump Direct Bilge Suctions, No. and size \_\_\_\_\_ Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size \_\_\_\_\_**  
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes \_\_\_\_\_  
 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 \_\_\_\_\_  
 Are all Sea Connections fitted direct on the skin of the ship \_\_\_\_\_ Are they fitted with Valves or Cocks \_\_\_\_\_  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates \_\_\_\_\_ Are the Overboard Discharges above or below the deep water line \_\_\_\_\_  
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel \_\_\_\_\_ Are the Blow Off Cocks fitted with a spigot and brass covering plate \_\_\_\_\_  
 What Pipes pass through the bunkers \_\_\_\_\_ How are they protected \_\_\_\_\_  
 What pipes pass through the deep tanks \_\_\_\_\_ 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 \_\_\_\_\_  
 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 \_\_\_\_\_ Is the Shaft Tunnel watertight \_\_\_\_\_ Is it fitted with a watertight door \_\_\_\_\_ worked from \_\_\_\_\_

**MAIN BOILERS, &c.**—(Letter for record \_\_\_\_\_) Total Heating Surface of Boilers \_\_\_\_\_  
 Is Forced Draft fitted \_\_\_\_\_ No. and Description of Boilers \_\_\_\_\_ Working Pressure \_\_\_\_\_  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? No.  
 IS A DONKEY BOILER FITTED? \_\_\_\_\_ If so, is a report now forwarded? \_\_\_\_\_  
 Is the donkey boiler intended to be used for domestic purposes only \_\_\_\_\_  
 PLANS. Are approved plans forwarded herewith for Shafting Crankshaft. Main Boilers \_\_\_\_\_ Auxiliary Boilers \_\_\_\_\_ Donkey Boilers \_\_\_\_\_  
 (If not state date of approval) April 21<sup>st</sup> 1941  
 Superheaters \_\_\_\_\_ General Pumping Arrangements \_\_\_\_\_ Oil fuel Burning Piping Arrangements \_\_\_\_\_

### SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes.  
 State the principal additional spare gear supplied 1 Main Bearing (2 halves.)

The foregoing is a correct description,

General Machinery Corp. Manufacturer.

Walter A. Pentable



© 2020

Lloyd's Register Foundation

March 17th. 1941. Continuous attendance until shipment.

Dates of Survey while building  
During progress of work in shops --  
During erection on board vessel --  
Total No. of visits

Dates of Examination of principal parts—Cylinders January 21st. 1942 Slides January 21st. 1942 Covers January 21st. 1942  
Pistons January 21st. 1942 Piston Rods January 21st. 1942 Connecting rods January 21st. 1942  
Crank shaft January 21st. 1942 Thrust shaft January 7th. 1942 Intermediate shafts Fitted at Shipyard.  
Tube shaft None Screw shaft Fitted at Shipyard Propeller Fitted at Shipyard.  
Stern tube Fitted at Shipyard Engine and boiler seatings Fitted at Shipyard Engines holding down bolts Fitted at Shipyard.  
Completion of fitting sea connections Shipyard.  
Completion of pumping arrangements Shipyard Boilers fixed Shipyard. Engines tried under steam Shipyard.  
Main boiler safety valves adjusted Shipyard Thickness of adjusting washers Shipyard.  
Crank shaft material O.H. Steel Identification Mark JAN. 21. 42 Thrust shaft material O.H. Steel Identification Mark JAN. 7. 42  
Intermediate shafts, material - Identification Marks - Tube shaft, material - Identification Mark -  
Screw shaft, material - Identification Mark - Steam Pipes, material - Test pressure - Date of Test -  
Is an installation fitted for burning oil fuel - 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 - 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 Todd-California S. B. Corp. No. 1.  
General Remarks (State quality of workmanship, opinions as to class, &c.)

This engine has been built under Special Survey in accordance with the Rules and approved plans, the workmanship and materials are good. The forgings and steel castings have been tested in accordance with the Rules.

The engine has been shipped to Richmond, Calif. to be fitted on board the vessel, and when this has been done to the satisfaction of the Surveyor in accordance with the Rules, it will be eligible in my opinion, to receive the notation + L.M.C. with date in the Register Book.

The amount of Entry Fee ... \$325.83 :  
Special ... £ :  
Donkey Boiler Fee ... £ :  
Travelling Expenses (if any) £ :  
When applied for, 19.  
When received, 19.

Alex. James  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK JUL 29 1942  
Assigned See Richmond Rpt. No. 20.



© 2020

Lloyd's Register Foundation