

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

20 JUL 1942

Received at London Office

Date of writing Report January 6th. 1942 When handed in at Local Office 19 Port of New York  
 No. in Survey held at Hamilton, Ohio. Date, First Survey March 17th. 1941 Last Survey January 5th. 1942  
 Reg. Book. on the Todd-California Shipbuilding Corp. Hull. S/S Ocean Volunteer (Number of Visits) Tons {Gross 7174  
 Built at Richmond, Calif. By whom built Todd-California Shipbuilding Corp. Yard No. 16. When built 1942  
 Engines made at Hamilton, Ohio. By whom made General Machinery Corporation Engine No. 6558 When made 1942  
 Boilers made at Seattle Washington By whom made Puget Sound Machinery Depot Boiler No. 4516 When made 1943  
 Registered Horse Power 505 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 Freighter.

**ENGINES, &c.**—Description of Engines Triple Expansion. Revs. per minute 3.  
 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 Crank pin dia. 14 1/2 Crank webs shrunk Mid. length breadth 20 Thickness parallel to axis 9  
 as fitted 14 1/2 Mid. length thickness 9 Thickness around eye-hole SOLID CRANK SHAFT.  
 Intermediate Shafts, diameter as per Rule Fitted at Shipyard. Thrust shaft, diameter at collars as per Rule 13.97  
 as fitted 14 1/2 as fitted 14 1/2  
 Tube Shafts, diameter as per Rule None. Screw Shaft, diameter as per Rule Fitted at Shipyard Is the tube shaft fitted with a continuous liner Yes.  
 as fitted None. as fitted Fitted at Shipyard Is the screw shaft fitted with a continuous liner Yes.  
 Bronze Liners, thickness in way of bushes as per Rule None. Thickness between bushes as per Rule None. Is the after end of the liner made watertight in the propeller boss None.  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner None.  
 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 None.  
 If two liners are fitted, is the shaft lapped or protected between the liners None. Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft None.  
 If so, state type None. Length of Bearing in Stern Bush next to and supporting propeller None.  
 Propeller, dia. None. Pitch None. No. of Blades None. Material None. whether Moveable None. Total Developed Surface None. sq. ft.  
 Feed Pumps worked from the Main Engines, No. None. Diameter None. Stroke None. Can one be overhauled while the other is at work None.  
 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 Main Bilge Line {No. and size Fitted at Shipyard.  
 How driven None. How driven Fitted at Shipyard.  
 Ballast Pumps, No. and size Fitted at Shipyard. Lubricating Oil Pumps, including Spare Pump, No. and size None.  
 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 None.  
 In Pump Room None. In Holds, &c. None.

Main Water Circulating Pump Direct Bilge Suctions, No. and size None. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size None.  
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes None.  
 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 None.  
 Are all Sea Connections fitted direct on the skin of the ship None. Are they fitted with Valves or Cocks None.  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates None. Are the Overboard Discharges above or below the deep water line None.  
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel None. Are the Blow Off Cocks fitted with a spigot and brass covering plate None.  
 What Pipes pass through the bunkers None. How are they protected None.  
 What pipes pass through the deep tanks None. Have they been tested as per Rule None.  
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times None.  
 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 None. Is the Shaft Tunnel watertight None. Is it fitted with a watertight door None. worked from None.

**MAIN BOILERS, &c.**—(Letter for record None.) Total Heating Surface of Boilers None.  
 Which Boilers are fitted with Forced Draft None. Which Boilers are fitted with Superheaters None.  
 No. and Description of Boilers None. Working Pressure None.  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? No.  
 IS A DONKEY BOILER FITTED? None. If so, is a report now forwarded? None.  
 Can the donkey boiler be used for domestic purposes only None.  
 PLANS. Are approved plans forwarded herewith for Shafting Crankshaft Main Boilers None. Auxiliary Boilers None. Donkey Boilers None.  
 (If not state date of approval) April 8th. 1941

Superheaters None. General Pumping Arrangements None. Oil fuel Burning Piping Arrangements None.  
**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

Manufacturer.

*Ben Mack Corp*  
 Lloyd's Register Foundation  
 003421-003428-0087

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 5th. 1942 Slides January 5th. 1942 Covers January 5th. 1942  
 Pistons January 5th. 1942 Piston Rods January 5th. 1942 Connecting rods January 5th. 1942  
 Crank shaft January 5th. 1942 Thrust shaft October 29th. 1941 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 LLOYDS 3717.6.18.91.00 Thrust shaft material O. H. Steel Identification Mark LLOYDS 5 A. J. OCT. 29. 1941  
 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 it 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  $\star$  L.M.C. with date in the Register Book.*

The Surveyors are requested not to write on or below the space for Committee's Minute.

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

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

Committee's Minute NEW YORK JUL 1 1942  
 Assigned See Richmond Rpt. No. 16

