

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office. **25 MAY 1954**

Writing Report **2 APR 1954** When handed in at Local Office **2 APR 1954** Port of **London**
 Survey held at **Hewbury Berks** Date, First Survey **28.5.53** Last Survey **14.10.1953**
 Book **PATFINDER** (Number of Visits **14**) Tons (Gross **140** Net **140**)
 on the **By whom built** **Turns J. S. White & Co Ltd** Yard No. **1975** When built **1953**
 at **Hewbury** By whom made **Turns Plenty & Sons** Engine No. **2895** When made **1953**
 es made at By whom made Boiler No. When made
 s made at Port belonging to
 700 (350 each engine) Owners
 7 N. Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
 for which vessel is intended

ES, &c.—Description of Engines **Twin triple inverted surface condensing** Revs. per minute **150**
 of Cylinders **10 1/2** Length of Stroke **18"** No. of Cylinders **3 per set** No. of Cranks **3 per set**
 shaft, dia. of journals **5 1/2"** Crank pin dia. **5 1/2"** Crank webs Mid. length breadth **10 1/2"** Thickness parallel to axis **3 1/2"**
 as per Rule as fitted **5 1/2"** Mid. length thickness **3 1/2"** shrunk Thickness around eye-hole **2 1/2"**

719 Intermediate Shafts, diameter **5 1/4"** Thrust shaft, diameter at collars **5 1/2"**
 719 as per Rule as fitted
 Shafts, diameter **Screw Shaft, diameter 6 1/4"** Is the tube screw shaft fitted with a continuous liner

12 Liners, thickness in way of bushes **5"** Thickness between bushes **5"** Is the after end of the liner made watertight in the
 as per Rule as fitted
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

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
 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
 If so, state type **Hewbury No. 1** Length of Bearing in Stern Bush next to and supporting propeller **2' 2"**
 7' 3" Pitch **9' 3"** No. of Blades **4** Material **Brass** whether Moveable **Solid** Total Developed Surface **165** sq. feet

Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work
 Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work
 No. and size Pumps connected to the Main Bilge Line No. and size How driven

Lubricating Oil Pumps, including Spare Pump, No. and size
 independent means arranged for circulating water through the Oil Cooler Suctions, connected both to Main Bilge Pumps and Auxiliary
 Pumps:—In Engine and Boiler Room
 In Holds, &c.

62 Water Circulating Pump Direct Bilge Suctions, No. and size **5"** Independent Power Pump Direct Suctions to the Engine and/or Boiler Room Bilges,
 size Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes
 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

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

Pipes pass through the bunkers How are they protected
 pipes pass through the deep tanks Have they been tested as per Rule
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

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
 department to another Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record) Total Heating Surface of Boilers
 Boilers are fitted with Forced Draft Which Boilers are fitted with Superheaters
 and Description of Boilers Working Pressure **200 lb/sq. in.**

REPORT ON MAIN BOILERS NOW FORWARDED?
 DONKEY BOILER FITTED? If so, is a report now forwarded?

donkey boiler be used for other than domestic purposes
 NS. Are approved plans forwarded herewith for Shafting **8' 10' 5 1/2"** Main Boilers Auxiliary Boilers Donkey Boilers
 (If not state date of approval)
 heaters General Pumping Arrangements Oil fuel Burning Piping Arrangements

SPARE GEAR.
 spare gear required by the Rules been supplied
 the principal additional spare gear supplied

Shipp

The foregoing is a correct description.

James S. Miller Manufacturer.
 Director & Secretary

010289 - 010243 - 0182

Dates of Survey while building

During progress of work in shops --
During erection on board vessel ---
Total No. of visits

1953. 28 MAY. 11. 25 JUNE 9. 16. 23. 28 JULY. 13. 20. 27. AUG. 10. 24 SE
1. 14 OCT.

Dates of Examination of principal parts—Cylinders 25/6 9/7. 28/7 13/8 Slides
Pistons 16/7. Piston Rods 10/9. Connecting rods 23/7. 14/10
Crank shaft 24/9. Thrust shaft
Tube shaft Screw shaft 20/8. Propeller
Stern tube 12/3. 26/3. Engine and boiler seatings Engines holding down bolts

Completion of fitting sea connections.
Completion of pumping arrangements. Boilers fixed Engines tried under steam.

Main boiler safety valves adjusted. Thickness of adjusting washers.
Crank shaft material S. M. Steel Identification Mark S 7022 G H 14. 4. 53 Thrust shaft material Identification Mark
Intermediate shafts, material S. M. Steel Identification Marks 7293/4 28. 5. 53 Tube shaft, material Identification Mark
Screw shaft, material S. M. Steel Identification Mark 7292 26. 6. 53 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. No. If so, state name of vessel.

General Remarks (State quality of workmanship, opinions as to class, &c.) This pair of handed engines has been built under survey from plans approved by the Society and in accordance with the Requirements of the Rules & the Secretanyp letters. Steel used in its construction has been at works approved by the Committee & under the supervision of their surveyors. The workmanship is good & the engines are in our opinion eligible for the notation L.M.C (with date) when satisfactorily installed & listed in the vessel intended

Certificate to be sent to
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee ... £ 24 : 0. 0
Special ... £ : :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ 7 : 11. 6
When applied for, 15 APR 1954
When received, 19

Date THURSDAY 17 JUN 1954

Committee's Minute See Rpt. 4.

For. No L. Puthurst
R. Donald Barlane R. C. Wedgway
Engineer Surveyor to Lloyd's Register of Shipping.