

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 23 SEP. 1938 When handed in at Local Office 23 SEP. 1938 Port of SUNDERLAND
 No. in Survey held at SUNDERLAND Date, First Survey 27 Apr. Last Survey 9 Sep 1938
 Reg. Book. on the 8/s Joseph Swan (Number of Visits 48)
 Built at Sunderland By whom built A.P. Austin & Son, Ltd Yard No. 350 Tons { Gross 1571
 Engines made at do By whom made A.S. Marine Eng. Co. (1918) Ltd Engine No. 2917 When built 1938
 Boilers made at do By whom made do Boiler No. 2917 When made 1938
 Registered Horse Power 193 Owners London Power & Light Co. Ltd Port belonging to London
 Nom. Horse Power as per Rule 193 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
 Trade for which Vessel is intended Coal

ENGINES, &c.—Description of Engines

Triple Expansion Revs. per minute
 Dia. of Cylinders 4 1/2", 27 1/2", 46" Length of Stroke 33" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule Crank pin dia. 9 1/2" Crank webs as per Rule Thickness parallel to axis 5 3/4"
 Intermediate Shafts, diameter as per Rule Thrust shaft, diameter at collars as per Rule Thickness around eye-hole 4 3/4" pin
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule Is the tube shaft fitted with a continuous liner 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 yes
 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 no
 If so, state type as per Rule Length of Bearing in Stern Bush next to and supporting propeller 31.5"
 Propeller, dia 13'-3" Pitch 11'-4 3/4" No. of Blades 4 Material Brass whether Moveable fixed Total Developed Surface 58 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 2 3/4" Stroke 1'-4 1/2" Can one be overhauled while the other is at work yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 3/4" Stroke 1'-4 1/2" Can one be overhauled while the other is at work yes
 Feed Pumps { No. and size 1. 6" x 4 1/4" x 6" Pumps connected to the { No. and size 1. 9" x 11" x 10"
 How driven Steam Main Bilge Line How driven —
 Ballast Pumps, No. and size 1. 9" x 11" x 10" 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 Eng. Rm. 1 at 2 1/2" dia. Bilge Rm. 1 at 2 1/2" dia.
 In Pump Room — In Holds, &c. 2 at 2 1/2" dia. in fore hold. 2 at 3" dia. in after hold.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1. 5" dia. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1. 3 1/2" dia.
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes yes
 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 above
 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 yes
 What Pipes pass through the bunkers hold suction How are they protected heavy timber
 What pipes pass through the deep tanks not hold suction Have they been tested as per Rule yes
 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 — Is it fitted with a watertight door — worked from —

MAIN BOILERS, &c.—(Letter for record S)

Which Boilers are fitted with Forced Draft Main Which Boilers are fitted with Superheaters none
 No. and Description of Boilers 1. Cylindrical Horizontal Working Pressure 200 lbs.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes
 IS A DONKEY BOILER FITTED? yes If so, is a report now forwarded? yes
 Can the donkey boiler be used for domestic purposes only —

PLANS. Are approved plans forwarded herewith for Shafting 20/8/37 Main Boilers yes Auxiliary Boilers — Donkey Boilers yes
 (If not state date of approval)
 Superheaters — General Pumping Arrangements yes 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 6 condenser tubes & 50 journals.

The foregoing is a correct description.

THE NORTH EASTERN MARINE ENGINEERING CO. (1938) LTD.

G. L. Hubert.

Manufacturer.

RESIDENT MANAGER.



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Lloyd's Register
Foundation

18758

pt. 5a.

1938. Apr. 27, 29. May 5, 6, 10, 17, 18, 19, 23, 30, 31. June 1, 2, 8, 10, 14, 15, 16, 17, 20, 21, 23, 24, 25, 27, 29, 30. July 1, 4, 5, 6, 14, 15, 19, 20, 22, 23. Aug. 11, 12, 15, 16, 19, 23, 24, 25, 26. Sep. 9.

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - - -

Total No. of visits 48

Dates of Examination of principal parts—Cylinders 14, 21, 23/6/38 Slides 15/7/38 Covers 15/7/38

Pistons 20/6/38 Piston Rods 4/7/38 Connecting rods 30/6/38

Crank shaft 29/6/38 Thrust shaft 22/7/38 Intermediate shafts —

Tube shaft — Screw shaft 22/7/38 Propeller 23/7/38

Stern tube 22/7/38 Engine and boiler seatings 22/7/38 Engines holding down bolts 23/8/38

Completion of fitting sea connections 22/7/38

Completion of pumping arrangements 9/9/38 Boilers fixed 23/8/38 Engines tried under steam 26/8/38

Main boiler safety valves adjusted 26/8/38 Thickness of adjusting washers 4/6"

Crank shaft material steel Identification Mark 391 Thrust shaft material steel Identification Mark 389

Intermediate shafts, material — Identification Marks — Tube shaft, material — Identification Mark —

Screw shaft, material steel Identification Mark 390 Steam Pipes, material steel Test pressure 600 lbs Date of Test 25/8/38

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. not required

Is this machinery duplicate of a previous case yes If so, state name of vessel "Leonard Pierce"

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

The machinery of this vessel has been constructed under special survey in accordance with the approved plans, Secretary's letters and the requirements of the Rules. Workmanship and materials are good.

The machinery has been efficiently fitted on board and tried under working conditions with satisfactory results and is eligible, in my opinion, for

NOTATION + L.M.C. 9.38.

SUNDERLAND.

The amount of Entry Fee ... £ 3 : : When applied for,

Special ... £ 48 : 5 : 13 SEP. 1938

Donkey Boiler Fee ... £ : : When received,

Travelling Expenses (if any) £ : : 28/9/38

Committee's Minute

FRI 30 SEP 1938

Assigned

+ L.M.C. 9.38

F.D. C.L.

Engineer Surveyor to Lloyd's Register of Shipping.



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