

REPORT ON OIL ENGINE MACHINERY

No. 85504

Date of writing Report 8. 7. 1956. When handed in at Local Office 10. 7. 1956. Port of Glasgow. Received at London Office 18-AUG 1956

No. in Survey held at Glasgow. Date, First Survey 6. 1. 56. Last Survey 21. 6. 1956. Reg. Book. Number of Visits 30.

36493. on the Twin Paddle Quarrier Wheel vessel "PAPAMYA". Tons Gross 200. Net

Built at Glasgow. By whom built Messrs James & Co. Ltd. Yard No. 2107. When built 6. 56.

Engines made at Aulston - under - Clyde. By whom made National Gas & Oil Eng. Co. Ltd. Engine No. 80646. When made 6. 56.

Donkey Boilers made at - By whom made - Boiler No. - When made -

Brake Horse Power Maximum 440. Service 388. Owners The Burma Inland Water Transport Organisation. Port belonging to Rangoon.

M.N. as per Rule 98. Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.

Trade for which vessel is intended Service on the River Irrawaddy, Burma.

OIL ENGINES, &c. - Type of Engines National R & AM 8. 2 or 4 stroke cycle Single or double acting.

Maximum pressure in cylinders. Diameter of cylinders. Length of stroke. No. of cylinders. No. of cranks.

Mean Indicated Pressure. Span of bearings (i.e., distance between inner edges of bearings in way of a crank). Is there a bearing between each crank. Revolutions per minute (Maximum, Service).

Flywheel dia. Weight. Moment of inertia of flywheel (lbs. in² ft. cm²). Means of ignition. Kind of fuel used.

Crank Shaft, Solid forged, Semi built, All built. dia. of journals as per Rule, as fitted. Crank pin dia. Crank webs. Mid. length breadth. Thickness parallel to axis. Mid. length thickness. shrunk. Thickness around eye-hole.

Flywheel Shaft, diameter as per Rule, as fitted. Intermediate Shafts, diameter as per Rule, as fitted. Thrust Shaft, diameter at collars as per Rule, as fitted.

Tube Shaft, diameter as per Rule, as fitted. Paddle Shaft, diameter as per Rule, as fitted. Is the tube screw shaft fitted with a continuous liner.

Bronze Liners, thickness in way of bushes as per Rule, as fitted. Thickness between bushes as per Rule, as fitted. 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 fitted at the after end of stern tube. If so, state type.

Length of bearing in Stern Bush next to and supporting propeller. PADDLE dia. 11'-6" Pitch. No. of floats 7. Material TEAK. whether moveable Yes. Total developed surface 9'-2 1/2" sq feet.

Moment of inertia of propeller including entrained water (lbs. in² or Kg. cm²). Kind of damper, if fitted.

Method of reversing Engines. Is a governor or other arrangement fitted to prevent racing of the engine. Means of lubrication. Thickness of cylinder liners. Are the pistons fitted with safety valves. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material.

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine. Cooling Water Pumps, No. and how driven. 4. 2 @ Main Eng. Driven. Working F.W. One. S.W. One. Spare F.W. One. S.W. One.

Is the sea suction provided with an efficient strainer which can be cleared within the vessel. Yes. Bilge Pumps worked from the Main Engines, No. and capacity. One - 800 gals. per hour. Can one be overhauled while the other is at work.

Pumps connected to the Main Bilge Line. (No. and capacity of each. 1 @ 800 G.P.H. 2 @ 20 Tons per hour (Heavy Duty Pumps). How driven. Main Engine. Auxiliary Engine.

Is the cooling water led to the bilges. No. If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements.

Ballast Pumps, No. and capacity. 2 @ 20 Tons per hour. Power Driven Lubricating Oil Pumps, including spare pump, No. and size. Hand Operated Report No. 17081.

Are two independent means arranged for circulating water through the Oil Cooler. Yes. Branch Bilge Suctions. No. and size: - In machinery spaces. 3 @ 2". In pump room.

In holds, &c. No. 1 hold 2 @ 2", No. 2 hold 2 @ 2", No. 3 hold 2 @ 2", No. 4 hold 2 @ 2". Direct Bilge Suctions to the engine room bilges, No. and size. 2 @ 2 1/2".

Are all the bilge suction pipes in holds and tunnels fitted with strum-boxes. Yes. Are the bilge suction in the machinery spaces 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. Yes. Are they fixed sufficiently high on the ship's side to be seen without lifting the platform 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. None. How are they protected. 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. 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. If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork.

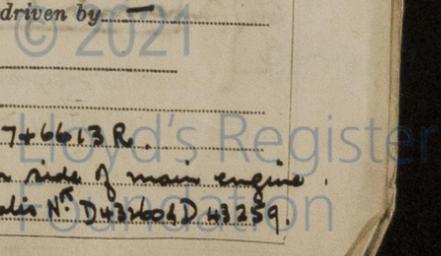
Main Air Compressors, No. 2. stroke. driven by. Auxiliary Air Compressors, No. 2. No. of stages. 2. diameters. 4 1/2". stroke. 3 1/4". driven by Petter's Engine.

Small Auxiliary Air Compressors, No. No. of stages. diameters. stroke. driven by. What provision is made for first charging the air receivers. Each auxiliary engine can be started by hand.

Scavenging Air Pumps or Blowers, No. How driven. Auxiliary Engines. Have they been made under survey. Yes. Engine Nos. 746612 R. and 746613 R.

Makers name. Petter's Ltd. Position of each in engine room. One on each side of main engine. Engine No. 746612 R. on port side and engine No. 746613 R. on starboard side. Report No. London Certificate No. D421604D 43259.

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AIR RECEIVERS:—Have they been made under survey..... State No. of report or certificate.....

State full details of safety devices.....

Can the internal surfaces of the receivers be examined and cleaned.....

Injection Air Receivers, No..... Cubic capacity of each..... Internal diameter..... thickness.....

Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....

Starting Air Receivers, No..... Total cubic capacity..... Internal diameter..... thickness.....

Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....

IS A DONKEY BOILER FITTED no. 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..... Receivers..... Separate fuel tanks.....

Donkey boilers..... General pumping arrangements..... Pumping arrangements in machinery space.....

Oil fuel burning arrangements.....

Have Torsional Vibration characteristics been approved..... Date and particulars of approval.....

SPARE GEAR.

Has the spare gear required by the Rules been supplied..... State if for "short voyages" only.....

State the principal additional spare gear supplied.....



The foregoing is a correct description,

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..... Covers..... Pistons..... Rods..... Connecting rods.....

Crank shaft..... Flywheel shaft..... Thrust shaft..... Intermediate shafts..... Tube shaft.....

Paddle shafts..... Stern tube..... Engine seatings..... Engine holding down bolts.....

Completion of fitting sea connections..... Completion of pumping arrangements..... Engines tried under working conditions.....

Crank shaft, material..... Identification mark..... Flywheel shaft, material..... Identification mark.....

Thrust shaft, material..... Identification mark..... Intermediate shafts, material..... Identification marks.....

Tube shaft, material..... Identification mark..... Paddle shaft, material..... Identification mark.....

Identification marks on air receivers.....

Welded receivers, state Makers' Name.....

Is the flash point of the oil to be used over 150°F.....

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with.....

Full description of fire extinguishing apparatus fitted in machinery spaces.....

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo.....

What is the special notation desired.....

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.....

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

The above machinery has been efficiently installed on board the vessel, in accordance with the requirements of the Rules and the approved plans. The materials and workmanship have been found good. On completion the installation has been examined under full working conditions, at sea, and found satisfactory.

This machinery is eligible, in my opinion, to be classed in the Register with the notation + LMC G. 56, Oil Engine.

The machinery has been constructed, installed and tested in accordance with the terms of the Owner's specification.

Construction of.....

The amount of Entry Fee.....

Special Installation.....

Supervision of Specification.....

Donkey Boiler Fee.....

Travelling Expenses (if any).....

Committee's Minute.....

Assigned.....

Vertical text on the left margin: (The Surveyor is requested not to write on or below the space for Committee's Minute.)

