

REPORT ON OIL ENGINE MACHINERY.

No. 85505.

Received at London Office 8-AUG-1956

Date of writing Report 8.7.1956 When handed in at Local Office 10.7.1956 Port of Glasgow.
No. in Survey held at Glasgow Date, First Survey 6.1.56 Last Survey 21.6.1956
Reg. Book. Number of Visits 26

Single PADDLE on the Twin Screw vessel Quarter Wheel Pencil "PADAPYAN"
Tons Gross 200 Net -

Built at Glasgow By whom built Messrs James W. & Co. Yard No. 2108 When built 6.56.

Engines made at Ashington - under - Lyne By whom made The National Gas & Oil Engine Co. Ltd Engine No. 80660 When made 6.56

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

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

N. as per Rule 88. 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.

MAIN ENGINES, &c. - Type of Engines. Horizontal 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

of a crank) Is there a bearing between each crank. Revolutions per minute { Maximum Service.

Flywheel dia. Weight. Moment of inertia of flywheel (lbs. ft. or kg. m.²) Means of ignition. Kind of fuel used.

Crank shaft, dia. of journals as per Rule. as fitted. Crank pin dia. Crank webs Mid. length breadth. Thickness parallel to axis.

as per Rule. as fitted. Thrust Shaft, diameter at collars as per Rule. as fitted.

Propeller Shaft, diameter as per Rule. as fitted. Is the (tube screw) shaft fitted with a continuous liner {

Propeller 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.

Propeller, dia. 11'-6" Pitch No. of blades 7 Material TEAK. whether moveable Yes. Total developed surface 9'-6" x 2'-6" 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 cylinders fitted with safety valves. Are the exhaust pipes and silencers water cooled

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 off Main Engine driven 2 off Aux. Engine driven Working F.W. One

V. 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 gallons 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 (Bridge & Ballast Pumps) How driven Main Engine Auxiliary Engines.

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.

Oil Pumps, No. and capacity. 2 @ 20 Tons per hour Power Driven Lubricating Oil Pumps, including spare pump, No. and size. as Manchester Report No. 17212.

Are two independent means arranged for circulating water through the Oil Cooler. Yes. Branch Bilge Suctions.

and size: - In machinery spaces 3 @ 2" In pump room.

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 tanks fitted with strum-boxes. Yes. Are the bilge suction pipes 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 or cocks. 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.

Do all pipes pass through the bunks. No. How are they protected.

Do all pipes pass through the deep tanks. No. Have they been tested as per Rule.

Are all pipes, cocks, valves and pumps in connection with the machinery and 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.

On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork.

Air Compressors, No. as Manchester Report No. 17212 stroke driven by

Auxiliary Air Compressors, No. Two No. of stages Two diameters 4 1/2" HP 1 5/8" stroke 3 1/4" driven by Petter Eng.

Are all Auxiliary Air Compressors, No. No. of stages diameters stroke driven by

Is provision made for first charging the air receivers. Each auxiliary engine can be started by hand.

Engines Air Pumps or Blowers, No. How driven

Have they been made under survey. Yes. Engine Nos. 746655R and 746656R.

Makers name Petter Ltd. Position of each in engine room One on each side of main Engine.

Line No. 746655R on port side and engine No. 746656R on starboard side. Reports Nos. London Certificate No. D43702 & D43710.

012598-012605-0045

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..... Is a drain fitted at the lowest part of each receiver.....
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.....
(If not, state date of approval).....
Donkey boilers..... General pumping arrangements..... 8.12.55..... Pumping arrangements in machinery space.....
Oil fuel burning arrangements.....
Have Torsional Vibration characteristics been approved..... Yes..... Date and particulars of approval..... 28.7.55.....
SPARE GEAR.
Has the spare gear required by the Rules been supplied..... Yes..... 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 - - 1956 Jan 6. 16. 24. 26. 31. Feb 3. 13. 14. 16. 27. Mar 2. 13. 15. 30. Apr 6. 9. 13. 20. 23. May 2. 8. 14. 22. 25. 29. June 21.
Total No. of visits 26.
Dates of examination of principal parts—Cylinders..... Covers..... Pistons..... Rods..... Connecting rods.....
Crank shaft..... Flywheel shaft..... Thrust shaft..... Intermediate shafts..... 14.5.56..... Tube shaft.....
PADDLE..... PADDLES..... 8.5.56..... Stern tube..... Engine seatings..... 8.5.56..... Engine holding down bolts..... 22.5.56.....
Screw shafts..... 14.5.56..... Propeller..... 8.5.56..... Completion of fitting sea connections..... 20.4.56..... Completion of pumping arrangements..... 25.5.56..... Engines tried under working conditions..... 29.5.56.....
Crank shaft, material..... Identification mark..... Flywheel shaft, material..... Identification mark.....
Thrust shaft, material..... Identification mark..... Intermediate shafts, material..... 31/35 Steel..... Identification marks..... 9.11.56-5-6-7-8.....
Tube shaft, material..... Identification mark..... PADDLE..... 31/35 Steel..... Identification marks..... 9.11.56-7-8.....
Identification marks on air receivers..... 5/1935 (see Manchester Report No 17081) and 5/1744 (see Manchester Report No 17212).

Welded receivers, state Makers' Name..... J. H. The Green Co., Leeds.
Is the flash point of the oil to be used over 150°F..... Yes.
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with..... Yes.
Full description of fire extinguishing apparatus fitted in machinery spaces..... 2-2 gallon Foam Extinguisher..... 1-30 length 1/2" line canvas hose with 2" N2S. laynet joint coupling for fixing to Gen. Serv. Pump.
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.....
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..... Yes..... If so, state names of vessels..... "Pondang", "Ponny", "Paderin", "Padam".

General Remarks (State quality of workmanship, opinions as to class, Speed restrictions, &c.)
The above machinery has been efficiently installed aboard 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 6.56, Oil Engine.
The machinery has been constructed, installed and tested in accordance with the terms of the Owner's Specification.

The amount of Entry Fee .. £ 31 : 0 : 0 + £ 1-15-0 expenses to Manchester.
Special Installation .. £ 20 : 0 : 0 When applied for 22 JUN 1956
Supervision & Specification .. £ 15 : 0 : 0 When received 19
Travelling Expenses (if any) £ 1 : 10 : 0
Committee's Minute
Assigned Devoord

Abraham
Engineer Surveyor to Lloyd's Register of Shipping.
Lloyd's Register Foundation