

# REPORT ON OIL ENGINE MACHINERY.

No. 85057

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No. in Survey held at Glasgow. Date, First Survey 14. 9. 55. Last Survey 28. 2. 1956. Reg. Book. Number of Visits 30.

15576 on the <sup>Single</sup> ~~Twin~~ ~~Triple~~ ~~Quadruple~~ <sup>Snow vessel</sup> Quarter Wheel Vessel - "PONDAUNG". Tons Gross 800 Net -

Built at Glasgow. By whom built Messrs James Co. Ltd. Yard No. 2104. When built 1956-2.

Engines made at Ashton-under-Lyne. By whom made The National Gas & Oil Eng. Co. Ltd. Engine No. 80641. When made 1956-2.

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 - Is Electric Light fitted Yes.

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

ENGINES, &c. - Type of Engines Horizontal R & AM B. 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.

Indicated Pressure. Span of bearings (i.e., distance between inner edges of bearings in line of a crank). Is there a bearing between each crank? Report No. 16938. Revolutions per minute. Maximum. Service.

Wheel dia. Weight. Moment of inertia of flywheel (lbs. in<sup>2</sup> or Kg. cm<sup>2</sup>). Means of ignition. Kind of fuel used. " " " " balance wts. ( " " " " )

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

Propeller Shaft, diameter as per Rule. Intermediate Shafts, diameter as per Rule. Thrust Shaft, diameter at collars as per Rule. as fitted. as fitted. as fitted. 4.5" as fitted.

Shaft, diameter as per Rule. Propeller Shaft, diameter as per Rule. Is the tube shaft fitted with a continuous liner. as fitted. as fitted. as fitted. 9.5" as fitted.

Liner 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. If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner.

Does the liner do 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-toxic. 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. Dia. 11.6" Pitch - No. of blades 7. Material TEAK. whether moveable YES. Total developed surface 9'0" x 2'6" = 24 sq feet.

Moment of inertia of propeller including entrained water (lbs. in<sup>2</sup> or Kg. cm<sup>2</sup>). Kind of damper, if fitted.

Method of reversing Engines. Is a governor or other arrangement fitted to prevent racing of the engine. Means of starting. Thickness of cylinder liners. Are they 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 to the engine.

Cooling Water Pumps, No. and how driven. 4 - 2 1/2 H.B. driven. 2 1/2 Aux. Eng. driven. Working F.W. 1. Spare F.W. 1. S.W. 1. Is the sea suction provided with an efficient strainer which can be cleared within the vessel. Yes.

Pumps worked from the Main Engines, No. and capacity. One - 800 G.P.H. Can one be overhauled while the other is at work.

Pumps connected to the Main Bilge Line. No. and capacity of each. 1 @ 900 G.P.H. 2 @ 20 Ton/hr. How driven. Both driven from Main Eng. Driven by Auxiliary Engines.

Is 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 Ton/hr. Power Driven Lubricating Oil Pumps, including spare pump, No. and size. Manchester Report No. 16938. Two independent means arranged for circulating water through the Oil Cooler. Yes. Branch Bilge Suctions.

Oil Cooler. In machinery spaces. 3 @ 2". In pump room.

Oil Cooler. No. 1 4" x 2", No. 2 4" x 2", No. 3 4" x 2", No. 4 4" x 2".

Bilge Suctions to the engine room bilges, No. and size. 2 @ 2 1/2".

Are the bilge suction pipes in holds and tunnel well 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 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.

Are pipes pass through the bunkers. None. How are they protected.

Are pipes pass through the deep tanks. None. Have they been tested as per Rule.

Are pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times. Yes.

Are arrangements 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.

Are arrangements provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork. Wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork.

Air Compressors, No. No. of stages. Manchester Report No. 16938. stroke driven by. Auxiliary Air Compressors, No. 2. No. of stages 2. diameters 4 1/2" stroke 3 1/4" driven by Petrol Oil Engine.

Auxiliary Air Compressors, No. No. of stages. diameters. stroke driven by. provision is made for first charging the air receivers. Auxiliary engines which prime compressors can be started by hand.

Operating Air Pumps or Blowers, No. How driven. Auxiliary Engines. Have they been made under survey. Yes. Engine Nos. 746150R & 740637R. Makers name Petrol. Position of each in engine room One on each side of main engine. 150R on port side and No. 740637R on starboard side. Report No. Southampton 8152 & 8156. 011636-011645-0300

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..... 28.7.55..... Receivers..... Separate fuel to  
(If not, state date of approval)

Donkey boilers..... General pumping arrangements..... 9.12.55..... Pumping arrangements in machinery space..... 7.2.56

Oil fuel burning arrangements..... \* Plans retained for use on sister vessels.

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 - - - - - 1955. Sept 14-16-21-27. Oct. 4-14-18-24-27. Nov. 1-4-10-18-24. Dec. 1-6-9-20. 1956. Jan 6-16-24-26-31.  
Feb. 3-13-14-16-23-27-28.  
Total No. of visits..... 30.

Dates of examination of principal parts—Cylinders..... Covers..... Pistons..... Rods..... Connecting rods.....

Crank shaft..... Flywheel shaft..... Thrust shaft..... Intermediate shafts 13.2.56..... Tube shaft.....  
Screw shafts 31.1.56..... Propeller 26.1.56..... Stern tube..... Engine seatings 26.1.56..... Engine holding down bolts 18.2

Completion of fitting sea connections..... 26.1.56..... Completion of pumping arrangements..... 14.2.56..... Engines tried under working conditions..... 26.

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

Thrust shaft, material..... Identification mark..... Intermediate shafts, material 31/35 Steel..... Identification marks.....

Tube shaft, material..... Identification mark..... Screw shaft, material 31/35 Steel..... 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..... 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 gal Froth type extinguishers..... 10 20'0" length of 2" canvas hose 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.....

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..... no..... If so, state name of vessel.....

General Remarks (State quality of workmanship, opinions as to class, Speed restrictions, &c.)..... The above machinery has been

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 and found satisfactory.

It is submitted, that the machinery of this vessel is eligible, in my opinion, to be classed in the

Register with the notation + LMC 2, 56.

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

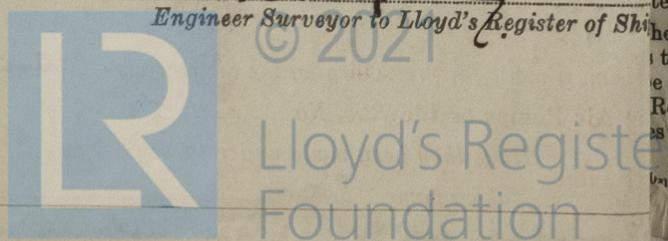
The amount of Entry Fee..... £ 31 : - : -

Special..... £ 20 : - : -  
Supervision of Specification..... £ 15 : - : -  
Donkey Boiler Fee..... £ : - : -

Travelling Expenses (if any) £ 1 : 10 : -

Committee's Minute..... GLASGOW 17 APR 1956

Assigned..... Referred.



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