

REPORT ON OIL ENGINE MACHINERY.

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 Quadrate Wheel Vessel "PADAMY"
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.

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. ft. or Kg. cm.²) Means of ignition Kind of fuel used

Crankshaft { Solid forged dia. of journals as per Rule as fitted Crank pin dia. Crank webs Mid. length breadth Thickness parallel to axis
Semi built All built as fitted

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

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

Brass 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 FLOATS 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. in.² or Kg. cm.²) 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

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 { 2000 - Main Engine driven Working F.W. One
2000 - Aux. Engine driven

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 (Bilge + 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 -

Branches, &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 bunkers how How are they protected

Do all pipes pass through the deep tanks how 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

Is the 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

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

Engine No. 746655R on port side and engine No. 746656R on starboard side Reports Nos. London Certificate Nos. 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.....
 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. 16. 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..... Propeller 8.5.56..... Stern tube..... Engine seatings 8.5.56..... Engine holding down bolts 22.5.56.....
 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..... PADDLES..... Screw shaft, material 31/35 Steel..... Identification marks 27.12.56.....
 Identification marks on air receivers 5/1935 (see Manchester Report No 17081) and 5/1244 (see Manchester Report No 17212).

Welded receivers, state Makers' Name J. H. MacLennan & Co., Ltd.
 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 Froth Extinguisher 1-30 length 2" hose canvas hose with 2" N 25. 10 gallon Foam Extinguisher longest 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 "Padang", "Panya", "Paderbin", "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 Glasgow 7 AUG 1956
 Assigned DeFord



16/3/56

The Surveyor is requested not to write on or below the space for Committee's Minute.