

REPORT ON OIL ENGINE MACHINERY.

No. 21,753

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Date of writing Report 13/9/1948 When handed in at Local Office 13/9/1948 Port of SYDNEY N.S.W.

No. in Reg. Book. Survey held at PORT KEMBLA N.S.W. Date, First Survey 24th OCTOBER 1946 Last Survey 9th JULY 1948 Number of Visits 16

Single on the Twin Triple Quadruple Screw vessel MOTOR LAUNCH "PLYM" Tons Gross 74 Net 57

Built at PORT KEMBLA, N.S.W. By whom built A.E. GOODWIN LTD. Yard No. 78 When built 1948

Engines made at READING By whom made JOHN I. THORNYCROFT & CO. LTD. Engine Nos. RL6/626 When made 1947

Donkey Boilers made at ✓ By whom made ✓ Boiler No. RL6/627 When made ✓

Brake Horse Power 260 TOTAL Owners ANGLO-SAXON PETROLEUM CO. LTD. Port belonging to ✓

Nom. Horse Power as per Rule 29.6 MN=30 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted YES

Trade for which vessel is intended COASTING SERVICE EAST INDIAN ARCHIPELAGO.

OIL ENGINES, &c.—Type of Engines THORNYCROFT RL6 2 To 1 REDUCTION GEAR 2 or 4 stroke cycle 4 Single or double acting SINGLE

Maximum pressure in cylinders 800 LB/IN² Diameter of cylinders 4 3/4" Length of stroke 6 1/2" No. of cylinders 6 No. of cranks 6

Mean Indicated Pressure 100 Span of bearings, adjacent to the crank measured from inner edge to inner edge 4 3/8" Is there a bearing between each crank YES

Revolutions per minute 1600 MAX. PROP. 800. Flywheel dia. 19 1/2" Weight 167 LBS Means of ignition COMPRESSION Kind of fuel used DISTILLATE

Crank Shaft, Solid forged dia. of journals as per Rule 3 1/2" Crank pin dia. 3" Crank webs Mid. length breadth 4 1/2" Thickness parallel to axis ✓

Semi built dia. of journals as fitted 3 1/2" Crank webs Mid. length thickness 1 1/2" shrunk Thickness around eyehole ✓

All built Flywheel Shaft, diameter as per Rule 2 3/4" Intermediate Shafts, diameter as per Rule 2 3/4" Thrust Shaft, diameter at collars as fitted 2 1/4"

Tube Shaft, diameter as per Rule 2 1/4" Screw Shaft, diameter as fitted 2 1/4" Is the tube shaft fitted with a continuous liner No

✓ Is the screw shaft fitted with a continuous liner No

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 ✓

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 tube shaft No

If so, state type ✓ Length of bearing in Stern Bush next to and supporting propeller 9"

Propeller, dia. 31" Pitch 25" No. of blades 3 Material BRONZE whether moveable No Total developed surface 2.88 sq. feet

Method of reversing Engines GEARBOX Is a governor or other arrangement fitted to prevent racing of the engine when declutched YES Means of lubrication FORCED

Thickness of cylinder liners 3/8" DRY TYPE Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers water cooled or lagged with non-conducting material YES

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. ONE ON EACH ENGINE 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. ONE ON EACH ENGINE Diameter 5" Stroke GEAR TYPE Can one be overhauled while the other is at work ✓

Pumps connected to the Main Bilge Line { No. and size 2 - 5" } 1 - 1 1/2" GEAR PUMP

{ How driven MAIN ENGINES } V BELT FROM AUX. ENG

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 size ✓ Power Driven Lubricating Oil Pumps, including spare pump, No. and size ONE ON EACH MAIN ENGINE

Are two independent means arranged for circulating water through the Oil Cooler YES Suctions, connected to both main bilge pumps and auxiliary

bilge pumps, No. and size:—In machinery spaces 1 @ 1 1/2", 2 @ 1" - also 1" H.P. suction In pump room ✓

holds, &c. 1 @ 1" in chain locker, 1 @ 1 1/2" and 1 @ 1" in fore accommodation, 1 @ 1" in aft accommodation, 1 @ 1" in steering coaft.

Independent Power Pump Direct Suctions to the engine room bilges, No. and size 1 - 1" STUART TURNER PORTABLE ELECTRIC PUMP & HOSE

Are all the bilge suction pipes in holds and tunnel well 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 STRUM BOXES FITTED. FLOOR PLATES ONLY 18" TO 20"

Are all Sea Connections fitted direct on the skin of the Ship YES Are they fitted with valves or cocks VALVES Are they fixed

sufficiently high on the ship's side to be seen without lifting the platform HIGH SEA SUCTIONS ABOVE PLATES

Are they each fitted with a discharge valve always accessible on the plating of the vessel YES Are the overboard discharges above or below the deep water line ABOVE

Are the blow off cocks fitted with a spigot and brass covering plate ✓

What pipes pass through the bunkers ✓ How are they protected ✓

What pipes pass through the ✓ tanks ✓ 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 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 No 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. ✓ No. of stages ✓ diameters ✓ stroke ✓ driven by ✓

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

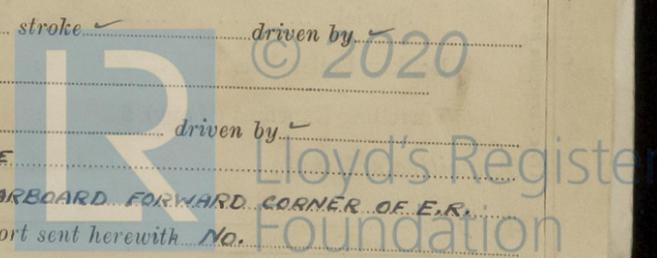
Small Auxiliary Air Compressors, No. ✓ No. of stages ✓ diameters ✓ stroke ✓ driven by ✓

What provision is made for first charging the air receivers ✓

Scavenging Air Pumps, No. ✓ diameter ✓ stroke ✓ driven by ✓

Auxiliary Engines crank shafts, diameter as per Rule ✓ No. ONE

Have the auxiliary engines been constructed under special survey No Is a report sent herewith No



00292 00601-0080

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

Is each receiver, which can be isolated, fitted with a safety valve as per Rule...

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 ... by Rules ... Actual ...

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

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

Seamless, lap 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...

SPARE GEAR.

Has the spare gear required by the Rules been supplied. YES

State the principal additional spare gear supplied...

The foregoing is a correct description, Manufacturer.

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: Crank shaft, Flywheel shaft, Thrust shaft, Intermediate shafts, Tube shaft, Screw shaft, Propeller, Stern tube, Engine seatings, Engine holding down bolts, Completion of fitting sea connections, Completion of pumping arrangements, Engines tried under working conditions...

Identification marks on air receivers, Crank shaft, material, Thrust shaft, material, Tube shaft, material, Identification marks on intermediate shafts, material, Screw shaft, material...

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

Description of fire extinguishing apparatus fitted THREE - 2 GALLON FOAM TYPE . FOUR - 1 QT. PYRENE TYPE.

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...

Is this machinery duplicate of a previous case NO If so, state name of vessel...

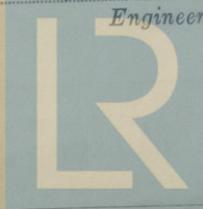
General Remarks (State quality of workmanship, opinions as to class, &c. This machinery was not constructed under the Society's Special Survey but was examined under running tests as per London Certificate D.16567 dated 31st July 1947. The machinery has been examined in accordance with the Rules for Special Survey, found in good condition, properly installed and the materials and workmanship appear to be of good quality. The machinery has been tested under working conditions with satisfactory results and in my opinion is eligible to be classed, with record of L.M.C. 7,48 to be made in the Register Book.

T.V.C. approved for Service Speed of 1600 R.P.M. 31/12/47.

The amount of Entry Fee ... £ Special ... £ 20:0:0 Donkey Boiler Fee... £ Travelling Expenses (if any) £

When applied for 15/7/48 When received 19

A. Gerard & Co. B.P. Hildren Engineer Surveyors to Lloyd's Register of Shipping



Lloyd's Register Foundation

Committee's Minute Assigned