

YACHT.

18 JUN 1930 17836

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 7022

Date of writing Report 5-4-1930 When handed in at Local Office 10-4-1930 Port of

Received at London Office 11 APR 1930

No. in Survey held at Reg. Book.

Date, First Survey 5-11-29.

Last Survey 4-4-1930

Number of Visits 9

on the ~~Single~~ ~~Twin~~ ~~Triple~~ ~~Quadruple~~ Screw vessel

ave Sch "JOHN WILLIAMS V"

Tons Gross Net

Built at

By whom built

Messrs The Langemouth Ith. Co. Ltd. Yard No. 418 When built

Engines made at

Manchester

By whom made

Messrs L. Gardner & Sons Ltd.

Engine No. 28475 When made 1930

Donkey Boilers made at

By whom made

Boiler No. When made

Brake Horse Power 152

Owners

The London Missionary Society Port belonging to London

Nom. Horse Power as per Rule 43

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Trade for which vessel is intended

OIL ENGINES, &c.—Type of Engines Vertical, reversing, solid injection, air starting. 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 580 lbs/sq. in. Diameter of cylinders 11" Length of stroke 13 1/4" No. of cylinders 4 No. of cranks 4

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 18 3/8" Is there a bearing between each crank Yes.

Revolutions per minute 320 Flywheel dia. 44" Weight 2655 lbs. Means of ignition Heat of compression of fuel used Heavy oil

Crank Shaft, dia. of journals as per Rule 6 3/4" as fitted 6 3/4" Crank pin dia. 6 3/4" Crank Webs 8 1/4" Mid. length breadth 8 1/4" Mid. length thickness 3 1/6" Thickness parallel to axis Solid. Thickness around eyehole Solid.

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted 3 3/4" Thrust Shaft, diameter at collars as per Rule as fitted 4.13" Approved.

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted 4 1/4" Is the shaft fitted with a continuous liner None.

Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes 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 or other appliance fitted at the after end of the tube

shaft If so, state type Length of Bearing in Stern Bush next to and supporting propeller 20"

Propeller, dia. 52" Pitch 36" No. of blades 4 Material bronze whether Moveable Solid Total Developed Surface 960 sq. ins.

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

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IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting *yes*
(If not, state date of approval)

Receivers *yes*

Separate Tanks *yes*

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR

1. Propeller shaft. N° 1685 LLOYD'S & CO.
1. Cylinder Head. Tested & Stamped LLOYD'S 20-3-30 CE

The foregoing is a correct description.

L GARDNER & SONS LIMITED.

William Gardner, Manufacturer.

Dates of Survey while building { During progress of work in shops - 5/11/29, 6/2/30, 11/2/30, 6/3/30, 11/3/30, 19/3/30, 20/3/30, 2/4/30, 4/4/30.
During erection on board vessel - - -
Total No. of visits

Dates of Examination of principal parts—Cylinders 6-3-30 Covers 20-3-30 Pistons 20-3-30 Rods 5-11-29
Crank shaft 11-3-30 Flywheel shaft 6-2-30 Thrust shaft 20-3-30 Intermediate shaft 11-2-30 Connecting rods 20-3-30
Screw shaft 19-3-30 2-4-30 Propeller 4-4-30 Stern tube 4-4-30 Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions in shop 4-4-30
Crank shaft, Material Mild Steel Identification Mark N° 107 CE Flywheel shaft, Material Identification Mark
Thrust shaft, Material Mild Steel Identification Mark N° 1647 CE Intermediate shaft, Material Mild Steel Identification Marks N° 3 CE
Tube shaft, Material Identification Mark Screw shaft, Material Mild Steel Identification Mark N° 1685 CE

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.

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

If so, have the requirements of the Rules been complied with

Is this machinery duplicate of a previous case *yes*

If so, state name of vessel Messrs H. Robb & Co 128. Mch. Report N° 6696

General Remarks (State quality of workmanship, opinions as to class, &c.) The above main engine of Gardner's Type 458 and one Gardner petrol-paraffin 2V Type single cylinder vertical engine N° 28484 direct coupled to an English Electric dynamo N° 47705 B1 of 110 volts, 2 K.W. at 550 R.P.M., the armature shaft extended carrying a sliding pinion driving a single acting general service pump and the opposite end of engine crankshaft clutch coupled to a two stage Keane air compressor N° 26641; also a Gardner 2V Type single cylinder petrol-paraffin engine N° 28485 direct coupled to an English Electric dynamo N° 47706 B1 of 110 volts, 2 K.W. at 550 R.P.M. have been built under special survey, and the materials tested in accordance with the Rules of this Society. The materials so far as can be seen are sound and the workmanship is good. The engine proved satisfactory under shop tests on full load & the main engine manoeuvred well. These engines are in my opinion eligible for the notation of L.M.C. with date when fitted on board the vessel in accordance with the Rule requirements.

Certificate (if required) to be sent to

The amount of Entry Fee ... £ : ✓ : When applied for,
Special ... (1/5) £ 8 : 12 : 10-4-1930
Donkey Boiler Fee ... £ : ✓ : When received,
Travelling Expenses (if any) £ : ✓ : London 14/6/30

Committee's Minute

GLASGOW 17 JUN 1930

Assigned

See Glasgow Report No 50569

J. J. Campbell
Engineer Surveyor to Lloyd's Register of Shipping.



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