

YACHT

20554

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 8303
15 APR 1935

Received at London Office

Date of writing Report 3rd April 1935 When handed in at Local Office 12th April 1935 Port of Manchester

No. in 3277 Survey held at Manchester Date, First Survey 1st March 1935 Last Survey 27th April 1935
Reg. Book. Number of Visits 6 (incl)

Single } Sch. vessel, Yacht "LILY MAID IV"
Twin }
Triple }
Quadruple }

Tons } Gross 37.76
Net 18.81
T.M. 34

Built at Sartrouville, S/O. By whom built Chant. Nav. de Sartrouville Yard No. _____ When built 1928-740

Engines made at Manchester By whom made L. Gardner & Son Ltd Engine No. 33354 When made 1935

Donkey Boilers made at _____ By whom made L. Boiler No. _____ When made _____

Brake Horse Power 102 Owners Captain C.E.A. Rumbold Port belonging to Jersey, C.I.

Nom. Horse Power as per Rule 146 1/8 Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

Trade for which vessel is intended Yacht

Vertical, unless fuel injection, 2 or 4 stroke cycle 4 Single or double acting single
Type of Engines _____
Maximum pressure in cylinders 650 lbs. starting. compressed air starting _____

Mean Indicated Pressure 108 lbs. Diameter of cylinders 5 1/2" Length of stroke 7 3/4" No. of cylinders 6 No. of cranks 6

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6 15/16" approx 6 5/8" cranks Is there a bearing between each crank yes

Revolutions per minute 800 Flywheel dia. 29 1/2" Weight 514 lb Means of ignition Compression Kind of fuel used Heavy oil

Crank Shaft, dia. of journals as per Rule 3.25" Crank pin dia. 3 5/8" Mid. length breadth 5 1/2" Thickness parallel to axis SOLID
as fitted 4 1/8" Crank Webs Mid. length thickness 1 1/2" Thickness around eye-hole _____

Intermediate Shafts, diameter as per Rule _____ as fitted _____ Driven Shaft, diameter at collars as per Rule approved
as fitted 3 (min) as fitted _____ as fitted 2 1/2 (min)

Stern Shaft, diameter as per Rule _____ as fitted _____ Is the { tube } shaft fitted with a continuous liner { _____ }
as fitted _____ as fitted _____ as fitted _____

Stern 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 _____

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-corrosive _____

When 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 _____

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

Propeller, dia. 30" Pitch 20" No. of blades 3 Material Brass whether Moveable No Total Developed Surface 348 sq. feet

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

Thickness of cylinder liners 1/16" Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with _____

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. One - on engine Is the sea suction provided with an efficient strainer which can be cleared within the vessel _____

Ge Pumps worked from the Main Engines, No. One Diameter 2 1/2" Stroke 1 1/4" Can one be overhauled while the other is at work _____

Pumps connected to the Main Bilge Line { No. and Size _____
How driven _____

Is the cooling water led to the bilges _____ If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping _____

Enginements _____

Fast Pumps, No. and size _____ Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size _____

Are two independent means arranged for circulating water through the Oil Cooler _____ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge _____

Pumps, No. and size:—In Machinery Spaces _____ In Pump Room _____

Holds, &c. _____

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size _____

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes _____ Are the Bilge Suctions in the Machinery Spaces _____

from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges _____

Are all Sea Connections fitted direct on the skin of the ship _____ Are they fitted with Valves or Cocks _____

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates _____ Are the Overboard Discharges above or below the deep water line _____

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel _____ Are the Blow Off Cocks fitted with a spigot and brass covering plate _____

Do all pipes pass through the bunkers _____ How are they protected _____

Do all pipes pass through the deep 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 _____

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 _____

Is the Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

On 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 _____

All Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____

Reversing Air Pumps, No. _____ Diameter _____ Stroke _____ Driven by _____

Auxiliary Engines crank shafts, diameter as per Rule _____ as fitted _____



W316-0151

AIR RECEIVERS:—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.....

High Pressure Air Receivers, No...... Cubic capacity of each..... Internal diameter..... thickness.....

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

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

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

IS A DONKEY BOILER FITTED?..... 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 *Yes (Crank Room for) Receivers*..... Separate Tanks.....
(If not, state date of approval)

Donkey Boilers..... General Pumping Arrangements..... Oil Fuel Burning Arrangements.....

SPARE GEAR.

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

State the principal additional spare gear supplied.....

*The following spare gear supplied:-
10 piston rings One sprayer assembly
One lubricating oil pump
2 Inlet valve springs 2 Exhaust valve springs
3 Fuel pump delivery springs 2 Fuel pump plunger
1 Air starting valve spring 1 Governor spring (outside)
1 Lub. oil Relief valve spring. A number of washers, gaskets*

The foregoing is a correct description,

L. GARDNER & SONS LD.

Manufacturer.

William Gardner.

Dates of Survey while building { During progress of work in shops - - } *1st, 5th, 8th, 15th, 25th, 29th March 1935* Director.
{ During erection on board vessel - - }
Total No. of visits *6 (mech)*

Dates of Examination of principal parts—Cylinders *1-3-35* Covers *1-15-35* Pistons *15-3-35* Rods Connecting rods *5-3-35*

Crank shaft *1-3-35* DRIVEN Flywheel shaft *8-3-35* DRIVEN Thrust shaft *8-3-35* Intermediate shafts..... Tube shaft.....

Screw shaft..... Propeller..... Stern tube..... Engine seatings..... Engines holding down bolts.....

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

Crank shaft, Material *S. Steel* Identification Mark *LLOYD'S N° 50194* DRIVEN Flywheel shaft, Material *S. Steel* Identification Mark *LLOYD'S N° 5594*

Thrust shaft, Material *S. Steel* Identification Mark *LLOYD'S N° 5594* Intermediate shafts, Material..... Identification Marks.....

Tube shaft, Material..... Identification Mark..... Screw shaft, Material..... Identification Mark.....

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.....

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 propelling engine, Messrs L. Gardner & Son Ltd type 643. has been built under special survey and the materials have been tested in accordance with the Rules*

The materials so far as can be seen are sound and the workmanship is good

The engine has been tested under full load in the shop and found satisfactory

This engine has been sent to Messrs Luke Bros, Hamble, Hampshire, for installation in the vessel.

.....
.....
.....

The amount of Entry Fee .. £	:	:	:	When applied for,
Special ... <i>4/5</i> ... £	<i>4</i>	<i>4</i>	<i>4</i>	<i>12/4/1935</i>
Donkey Boiler Fee ... £	:	:	:	When received,
Travelling Expenses (if any) £	:	:	:	<i>9.5</i> 19.35

George Amerson & MacBlack
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **TUE. 20 AUG 1935**

FRI. 30 AUG 1935

Assigned *See Jan. Rpt. 15937*



Certificate (if required) to be sent to.....
(The Surveyors are requested not to write on or below the space for Committee's Minute)