

REPORT ON OIL ENGINE MACHINERY.

No. 21209

Writing Report 8th May 1952 When handed in at Local Office 19 Port of SOUTHAMPTON Received at London Office 13 MAY 1952

Survey held at SOUTHAMPTON Date, First Survey 14-1-52 Last Survey 3rd March 1952 Number of Visits 3

Book 86 on the Single Twin Triple Quadruple Screw vessel M.Y. GIROFLEE Tons Gross 59 Net 44.55

Built at DARTMOUTH By whom built PHILIP & SON LTD Yard No. 19286 When built 19286

Engines made at BIRMINGHAM By whom made AUSTIN LTD Engine No. 19286 When made 19286

Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓

Horse Power ✓ Owners ✓ Port belonging to DARTMOUTH

Power as per Rule ✓ Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES

For which vessel is intended ✓

ENGINES, &c. — Type of Engines 2 - AUSTIN CHIEF "40" 2 or 4 stroke cycle 4 Single or double acting SINGLE

Working pressure in cylinders ✓ Diameter of cylinders 3.437" Length of stroke 4.375" No. of cylinders 6 No. of cranks ✓

Indicated Pressure ✓ Ahead Firing Order in Cylinders 1-5-3-6-2-4 Span of bearings, adjacent to the crank, measured YES EXCEPT BETWEEN 1800 ENGINE

Inner edge to inner edge 7.25", 7.125", 7.25" Is there a bearing between each crank CHS 3x4 Revolutions per minute 900 SHAFT

Piston dia 12.76" Weight 67 lbs Moment of inertia of flywheel (lbs. in² or Kg. cm.²) ✓ Means of ignition MAG Kind of fuel used PETROL

Solid forged ✓ dia. of journals as per Rule 1.552" Crank pin dia. 2.125" Crank webs Mid. length breadth 3 3/16" Thickness parallel to axis ✓

as fitted 2.479" Mid. length thickness 3/4" shrunk ✓ Thickness around eye hole ✓

Main Shaft, diameter as per Rule ✓ Intermediate Shafts, diameter as per Rule ✓ Thrust Shaft, diameter at collars as fitted ✓

as fitted ✓ as fitted ✓ as per Rule ✓

Main Shaft, diameter as per Rule ✓ Screw Shaft, diameter as per Rule ✓ Is the tube shaft fitted with a continuous liner No

as fitted ✓ as fitted ✓ as fitted ✓

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 boss ✓

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

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-✓

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 ✓

shaft No If so, state type ✓ Length of bearing in Stern Bush next to and supporting propeller 7"

Piston dia 21 3/4" Pitch 17" No. of blades 3 Material G.M. whether moveable No Total developed surface 14824 sq. feet

Moment of inertia of propeller (lbs. in² or Kg. cm.²) ✓ Kind of damper, if fitted ✓

of reversing Engines REVERSE GEAR Is a governor or other arrangement fitted to prevent racing of the engine when declutched ✓ Means of ✓

Thickness of cylinder liners CAST Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers ✓

with non-conducting material YES If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned ✓

engine SILencers Cooling Water Pumps, No. 1 P.S. Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

pumps worked from the Main Engines, No. NONE Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓

connected to the Main Bilge Line No and size 1 GEAR TYPE 1-1/2" S.R.

How driven GENERATOR ENGINE HAND ALSO BELT DRIVEN FROM GEAR PUMP

bilge 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 ✓

pumps, No. and size ✓ Power Driven Lubricating Oil Pumps, including spare pump, No. and size ✓

independent means arranged for circulating water through the Oil Cooler No Suctions, connected to both main bilge pumps and auxiliary ✓

pumps, No. and size:—In machinery spaces ✓ In pump room ✓

Main Power Pump Direct Suctions to the engine room bilges, No. and size ✓

bilge suction pipes in holds and tunnel well fitted with strum-boxes YES Are the bilge suction in the machinery spaces led from easily ✓

strum-boxes, placed above the level of the working floor, with straight tail pipes to the bilges No

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

high on the ship's side to be seen without lifting the platform plates No Are the overboard discharges above or below the deep water line ABOVE

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 ✓

pass through the bunkers ✓ How are they protected ✓

pass through the deep tanks ✓ Have they been tested as per Rule ✓

cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times YES

arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the ✓ machinery

one compartment to another YES Is the shaft tunnel watertight ✓ Is it fitted with a watertight door ✓ worked from ✓

vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork DRIP TRAYS FITTED

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

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

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

on is made for first charging the air receivers ✓

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

engines crank shafts, diameter as per Rule ✓ No. ✓ Position ✓

as fitted ✓

Auxiliary engines been constructed under special survey ✓ Is a report sent herewith ✓

AIR RECEIVERS:—Have they been made under survey... 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... 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 forward... Is the donkey boiler intended to be used for domestic purposes only...

PLANS. Are approved plans forwarded herewith for shafting... Donkey boilers... General pumping arrangements... Pumping arrangements in machinery space... Have Torsional Vibration characteristics been approved... Date of approval...

SPARE GEAR.

Has the spare gear required by the Rules been supplied... 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—Cylinders... Covers... Pistons... Rods... Connecting rods... Crank shaft... Flywheel shaft... Thrust shaft... Intermediate shafts... Tube shaft... Screw shafts... Propeller... Stern tube... Engine seatings... Engine holding down bolts... Completion of fitting sea connections... Completion of pumping arrangements... Engines tried under working conditions... Crank shaft, material... Identification mark... Flywheel shaft, material... Identification mark... Thrust shaft, material... Identification mark... Intermediate shafts, material... Identification marks... Tube shaft, material... Identification mark... Screw shaft, material... 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... Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with... Description of fire extinguishing apparatus fitted... 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... If so, state name of vessel...

General Remarks (State quality of workmanship, opinions as to class, &c.)... Vessel on slipway at J. I. Thompson & Co. Ltd. Northam. New bronze propeller shafts of satisfactorily tested material, together with new stern tubes and A brackets now fitted. Both port and starboard main motors removed to works, opened up examined in entirety and found to now placed in good condition. Crankshaft dimensions checked and found as stated above. The motors subsequently examined on being re-installed, tried under working conditions and proved satisfactory. These motors, which were not manufactured under survey, are, in my opinion, soundly constructed and eligible for classification in the Yacht Register with the notation LMC (with date) N.E. (with date) and T.S. P. & S. N. 2.52.

The amount of Entry Fee... £ 16.-... Special... £... Donkey Boiler Fee... £... Travelling Expenses (if any) £... When applied for... 12/5/52... When received... 19... Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute... Assigned... FRI. 16 MAY 1952... Lloyd's Register Foundation