

REPORT ON OIL ENGINE MACHINERY.

No. 3710

Received at London Office

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Date of writing Report 20th June 43 When handed in at Local Office

Port of LISBON

No. in Survey held at ALFEITE
Reg. Book.Date, First Survey 2nd February Last Survey 15th June 1943

Number of Visits 22

Single
on the Triple
Quadruple

Screw vessel

Motor Trawler

"PORTAFERRY"

Tons Gross 307
Net 128

Built at Alfeite, Lisbon. By whom built Arsenal do Alfeite Yard No. C8 When built 1943.

Engines made at Lincoln By whom made Ruston & Hornsby Ltd. Engine No. 206513 When made 1942

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

Brake Horse Power 560 Owners Loch Fishing Co. of Hull Port belonging to

Nom. Horse Power as per Rule 107 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes.

Trade for which vessel is intended Trawling.

OIL ENGINES, &c.—Type of Engines Vertical Solid Injection 7 VGBM 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 675 lb. Diameter of cylinders 12 1/2" Length of stroke 15" No. of cylinders 7 No. of cranks 7

Mean Indicated Pressure 100.5 lb. Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 13 13/16" Is there a bearing between each crank Yes.

Revolutions per minute 430 Prop. 170 Flywheel dia. 51" Weight 37 cwt. Means of ignition compression Kind of fuel used Diesel oil

Crank Shaft, { Solid forged
Semi built dia. of journals as per Rule Appd. 4.8.39 as fitted 9" Crank pin dia. 7" Crank Webs Mid. length breadth 12" Thickness parallel to axis
Mid. length thickness 3 5/16" crank Thickness around eye hole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule Appd. 7.2.41 fitted 6 1/8" Thrust Shaft, diameter at collars as per Rule as fitted

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule Appd. 7.2.41 as fitted 7 1/8" Is the screw shaft fitted with a continuous liner no.

Bronze 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 or other appliance fitted at the after end of the tube

shaft Yes If so, state type Newark Length of Bearing in Stern Bush next to and supporting propeller 2'-6"

Propeller, dia. 8'-3" Pitch 8'-1" No. of blades 213 Material M. Bronze whether Moveable no Total Developed Surface 26 sq. feet

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

Forced Thickness of cylinder liners 1" Are the cylinders fitted with safety valves yes 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. 1 PLUNGER PUMP 4 3/4" x 4 3/4" 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. 1 Diameter 4 3/4" Stroke 4 3/4" Can one be overhauled while the other is at work ✓

Pumps connected to the Main Bilge Line { No. and Size 1-4 3/4" x 4 3/4" 1-2 1/2" TRUSLOVE G.S. & BILGE PUMP - 20 TON/HR.
How driven M.E. 4 VROZ aux. engine.

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 1 1/2" RUSTON GEAR PUMP
1 1/2" DRYSDALE HORIZONTAL PUMP
FOR GEARS 1 1/2" RUSTON GEAR PUMP
SPARE - 2 - 2" HAMMATHY ROTO FOIL PUMPS.

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 1-2" dia. 1-2 1/2" dia. 1-3" dia. In Pump Room ✓

In Holds, &c. 1-2" Steering gear for; 1-2" Cofferdam; 1-2" Hold; 1-2" Accom. flat for; 1-2" Chain locker; 1-2" F. Peak.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-3" M.E. pump 1-2 1/2" G.S. pump.

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions 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 Valves.

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. 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 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 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 ✓

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 1 Diameters 3" Stroke 3 1/2" Driven by Belt from M.E.

Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 3 3/4" - 1 1/8" Stroke 3 1/4" Driven by Clutch - Aux. Eng.

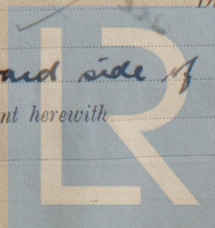
Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 3 3/4" - 1 1/8" Stroke 3 1/4" Driven by Clutch - Aux. Eng.

What provision is made for first Charging the Air Receivers Auxiliary engine is hand starting

Scavenging Air Pumps, No. ✓ Diameter 17.5.40 Stroke 1 Driven by

Auxiliary Engines crank shafts, diameter as per Rule appd. 17.5.40 as fitted P. 3" J. 3" Position Starboard side of Eng. Room.

Have the Auxiliary Engines been constructed under special survey Yes. Is a report sent herewith

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AIR RECEIVERS: — Have they been made under survey yes State No. of Report or Certificate C.635., C.411.

Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes.
Can the internal surfaces of the receivers be examined and cleaned yes. Is a drain fitted at the lowest part of each receiver yes.

Injection 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. 2 Total cubic capacity 46.8 cu. ft. Internal diameter 2' 6" thickness 3/8"
Seamless, lap welded or riveted longitudinal joint Seamless Material S.M. Steel Range of tensile strength 26-30 Working pressure by Rules Appd. 5.5.38
Actual 300 lb.

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 4.8.39 Receivers 5.5.38 Separate Fuel Tanks 25.2.41
(If not, state date of approval) 7.2.41

Donkey Boilers ✓ General Pumping Arrangements 9.7.41 Pumping Arrangements in Machinery Space 9.7.41
Oil Fuel Burning Arrangements ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied -

State the principal additional spare gear supplied To admiralty requirements

The foregoing is a correct description.

Manufacturer.

Dates of Survey while building
During progress of work in shops - ✓ See Nottingham Rpt. No. 35.
During erection on board vessel - 2 February 1943 to 15 June 1943
Total No. of visits (15 + 22 = 37)

Dates of Examination of principal parts—Cylinders 9.4.43 Covers 9.4.43 Pistons 9.4.43 Rods 9.4.43 Connecting rods 9.4.43

Crank shaft 9.4.43 Flywheel shaft ✓ Thrust shaft 9.4.43 Intermediate shafts 11.5.43 Tube shaft ✓

Screw shaft 20.4.43 Propeller 20.4.43 Stern tube 20.4.43 Engine seatings 28.4.43 Engines holding down bolts 11-5-43

Completion of fitting sea connections 20.4.43 Completion of pumping arrangements 11-5-43 Engines tried under working conditions 7-6-43

Crank shaft, Material S.M. Steel Identification Mark 316. 18.9.41 Flywheel shaft, Material ✓ Identification Mark ✓

Thrust shaft, Material ✓ Identification Mark ✓ Intermediate shafts, Material S.M. Steel Identification Marks ✓

Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material S.M. Steel Identification Mark ✓

Identification Marks on Air Receivers
B.2848 B.2798
LLOYDS TEST LLOYDS TEST
600 lb./sq.in. 600 lb./sq.in.
W.P. 300 lb./sq.in. W.P. 300 lb./sq.in.
T.N.B. 22.1.42 T.N.B. 17.7.42

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 3 - 2 gallon in E.R.

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 no

Is this machinery duplicate of a previous case yes If so, state name of vessel ILHA GRACIOSA, ILHA FAIAL, PORT JACKSON
PORTISHAM, ETC.

General Remarks (State quality of workmanship, opinions as to class, &c.)

The above machinery has now been satisfactorily fitted on board this vessel in accordance with the approved plans, the Secretary's letters and the Society's Rules. The materials and workmanship are good. Mooring and sea trials carried out were satisfactory.

The machinery of this vessel is eligible in our opinion to be classed with Record of + LMC 6.43; TS(OG) and to have the notations "Oil Eng." "Mach. aft." in the Register Book subject to spare valves being supplied.

The amount of Entry Fee .. £

Special ...

Donkey Boiler Fee

Travelling Expenses (if any)

Committee's Minute

Assigned

When applied for,

When received,

Engineer Surveyor to Lloyd's Register of Shipping.



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