

Rpt. 4b.

## REPORT ON OIL ENGINE MACHINERY.

No 3553.

-6 JUL 1947

Received at London Office

Date of writing Report 20<sup>th</sup> JUNE 1942 When handed in at Local Office

Port of LISBON

No. in Survey held at LISBON  
Reg. Book.Date, First Survey 29<sup>th</sup> APRIL 1942 Last Survey 16<sup>th</sup> JUNE 1942  
Number of Visits 30.Single  
on the Triple  
Screw vessel

Motor Trawler "PORT JACKSON."

Tons Gross 307  
Net 128

Built at Lisbon

By whom built Cia. Uniao Fabril

Yard No. 111 When built 1942

Engines made at Lincoln

By whom made Ruston &amp; Hornsby Ltd

Engine No. 206509 When made 1941

Donkey Boilers made at ✓

By whom made ✓

Boiler No. ✓ When made ✓

Brake Horse Power 560

Owners. LOCH FISHING CO.

Port belonging to HULL

Nom. Horse Power as per Rule 107 ✓ Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted Yes.

Trade for which vessel is intended Trawling.

OIL ENGINES, &amp;c.—Type of Engines Vertical solid injection 7 V.B.M. ✓ or 4 stroke cycle 4 Single or double acting Single

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

Mean Indicated Pressure 100.5 lbs. ✓

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 ENG. 430 ✓ PROP. 170 ✓ Flywheel dia. 51" ✓ Weight 37 cwt. ✓ Means of ignition Compression ✓ Kind of fuel used Diesel oil. ✓

Crank Shaft, { Solid forged dia. of journals as per Rule APPD 4.8.39 as fitted 9" ✓ Crank pin dia. 7" ✓ Crank Webs Mid. length breadth 12" ✓ Mid. length thickness 3 5/16" ✓ shrunk Thickness parallel to axis ✓ Thickness around eyehole ✓

Flywheel Shaft, diameter as per Rule as fitted ✓ Intermediate Shafts, diameter as per Rule APPD 7.2.41 as 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 3 ✓ Material MANG. BRONZE ✓ whether Movable No ✓ Total Developed Surface 26 sq. feet

Method of reversing Engines REVERSE &amp; REDUCTION 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 Lagged ✓

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- 2 1/2" No. 5 Inshore "Conquest" G.S. &amp; Bilge pump - 20 Cons/hr. ✓ How driven 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 none ✓ Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 1/2" Ruston Sea Pump ✓ FOR ENGINES 1 1/2" Ruston Sea Pump ✓ FOR GEARS 1 1/2" Ruston Sea Pump ✓ SPARE 2-2" Hawthornley Rotary Pump ✓

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

In Holds, &amp;c. 1x2" Steering Gear Pnt. 1x2" Coffdam 1x2" hold. 1x2" accorn? flat forward, 1x2" chain locker, 1x2" F.P. Tk. ✓

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1x3" M.E. pump ✓ 1x2 1/2" aux. eng. driven 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 Yes ✓ 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 ✓ Diameters ✓ Stroke ✓ Driven by ✓

Auxiliary Air Compressors, No. 1 ✓ No. of stages 1 ✓ Diameters 3" ✓ Stroke 3 1/2" ✓ Driven by Belt from m. eng.

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

What provision is made for first Charging the Air Receivers Aux. engine is hand started.

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

Auxiliary Engines crank shafts, diameter as per Rule APPD 17.5.40 as fitted P. 3" J. 3 5/8" ✓ Position Starboard side of engine room.

Have the Auxiliary Engines been constructed under special survey Yes ✓ Is a report sent herewith Yes (Copy of Nottingham Rpt.)



# AIR RECEIVERS:—Have they been made under survey

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*

Injection Air Receivers, No. *✓*

Seamless, lap welded or riveted longitudinal joint *✓*

Starting Air Receivers, No. *2*

Seamless, lap welded or riveted longitudinal joint *Seamless*

## IS A DONKEY BOILER FITTED?

Is the donkey boiler intended to be used for domestic purposes only *4.8.39*

PLANS. Are approved plans forwarded herewith for Shafting *7.2.41*  
 (If not, state date of approval)

Donkey Boilers *✓*

Oil Fuel Burning Arrangements *✓*

Has the spare gear required by the Rules been supplied *Yes, except set of valves for one cylinder.*

State the principal additional spare gear supplied *To. Admiralty requirements.*

## SPARE GEAR.

The foregoing is a correct description

COMPANHIA UNIAO FABRIL

ESTALEIRO NAVAL DA A. R. P. L.

Manufacturer.

Dates of Survey  
 while building

During progress of work in shops--  
 During erection on board vessel--  
 Total No. of visits *30.*

Dates of Examination of principal parts—Cylinders *15.6.42* Covers *15.6.42* Pistons *15.6.42* Rods *15.6.42* Connecting rods *15.6.42*

Crank shaft *15.6.42* Flywheel shaft *✓* Thrust shaft *✓* Intermediate shafts *15.6.42* Tube shaft *✓*

Screw shaft *5.5.42* Propeller *5.5.42* Stern tube *5.5.42* Engine seatings *5.5.42* Engines holding down bolts *10.6.42*

Completion of fitting sea connections *5.5.42* Completion of pumping arrangements *10.6.42* Engines tried under working conditions *11.6.42*

Crank shaft, Material *S.M. steel* Identification Mark *176 78. 22.5.41* Flywheel shaft, Material *✓* Identification Mark *✓*

Thrust shaft, Material *✓* Identification Mark *✓* Intermediate shafts, Material *S.M. steel* Identification Marks *6004 28/8/41*

Tube shaft, Material *✓* Identification Mark *✓* Screw shaft, Material *S.M. steel* Identification Mark *5996 28/8/41*

Identification Marks on Air Receivers *B 2808 B 2809*

*LLOYDS TEST  
 600 lbs./sq. ins.  
 W.P. 300 lbs./sq. ins.  
 T.B. 2.9.41 T.B.*

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 *✓*

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 *Yes*

If so, state name of vessel *"Ilha Encosta" + "Ilha Jacia"*

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 & the Society's Rules. The materials and workmanship are good. Mooring & sea trials carried out were satisfactory.*

*The Machinery of this vessel is eligible in my opinion to be classed with Record of + LMC 6.42, TS. (OG.) 6.42 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 *M...* .. £

Donkey Boiler Fee .. £

Travelling Expenses (if any) .. £

When applied for, .. 19..

When received, .. 19..

Committee's Minute

Assigned

FRI. 10 JUL 1942

*+ LMC 6.42*

*oil Eng. OG.*

*G. M. M.*

Engineer Surveyor to Lloyd's Register of Shipping.



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