

REPORT ON OIL ENGINE MACHINERY.

No. 42869

Received at London Office

FEB - 4 1941

Date of writing Report 21-1-1941 When handed in at Local Office Belfast Port of Belfast

No. in Survey held at Reg. Book. 1941 on the Triple Screw vessel "PAMPAS"

Date, First Survey 16 June 1939 Last Survey 23 January 1941 Number of Visits 191

Tons: Gross 5415 Net 3080

Built at Belfast By whom built Messrs Harland & Wolff Yard No. 1027 When built 1941

Engines made at Belfast By whom made Messrs Harland & Wolff Engine No. 1027 When made 1941

Donkey Boilers made at Stockton By whom made Stockton C.E. & R.B. & Co. Boiler No. 6412 When made 1940.

Brake Horse Power 6000 Owners Royal Mail Lines Ltd. Port belonging to London

Nom. Horse Power as per Rule 1232 Is Refrigerating Machinery fitted for cargo purposes 40 Is Electric Light fitted yes

Trade for which vessel is intended General Cargo 2476 55 1/8"

MAIN ENGINES, &c. Type of Engines Harland & W Heavy Oil 2 or 4 stroke cycle 2 Single or double acting D.A.

Maximum pressure in cylinders 700 lbs/sq. in. Diameter of cylinders 620 7/8" Length of stroke 1400 7/8" No. of cylinders 6 No. of cranks 6

Mean Indicated Pressure 100 lbs/sq. in. Flywheel dia. 2483 7/8" Weight 2500 kg Means of ignition Comp. Kind of fuel used Heavy oil

Position of bearings, adjacent to the Crank, measured from inner edge to inner edge 1164 7/8" Is there a bearing between each crank yes

Revolutions per minute 104 Crank pin dia. 485 1/2" (with 115% centre hole) Crank Webs Mid. length breadth 250 7/8" Kind of fuel used Heavy oil

Crank Shaft, dia. of journals as per Rule as approved as fitted 485 1/2" Crank pin dia. 485 1/2" (with 115% centre hole) Mid. length thickness 272 5/8" Thickness parallel to axis 250 7/8" Thickness around eye-hole 272 5/8"

Flywheel Shaft, diameter as per Rule as approved as fitted 460 1/2" Intermediate Shafts, diameter as per Rule as approved as fitted 173 1/4" Thrust Shaft, diameter at collars as per Rule as approved as fitted 460 1/2"

Main Shaft, diameter as per Rule as fitted 18 1/8" Is the screw shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule as fitted 15/16" Thickness between bushes as per Rule as fitted 29/32" Is the after end of the liner made watertight in the propeller boss yes.

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

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 yes.

Are two liners fitted, is the shaft lapped or protected between the liners yes. Is an approved Oil Gland or other appliance fitted at the after end of the tube yes.

Length of Bearing in Stern Bush next to and supporting propeller 6' 3" Total Developed Surface 1162 sq. feet

Propeller, dia. 18' Pitch 16' 13/4" No. of blades 4 Material Bronze whether Moveable yes

Method of reversing Engines Air Is a governor or other arrangement fitted to prevent racing of the engine when running yes. Means of lubrication Grease

Thickness of cylinder liners 42 1/2" Are the cylinders fitted with safety valves yes. Are the exhaust pipes and silencers water cooled or lagged with insulating material lagged.

Drinking Water Pumps, No. 1 2 Main SW 1 Aux SW 1 FW 1 FW 5 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes.

Large Pumps worked from the Main Engines, No. 1 Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size 1 @ 85 tons per hour 1 @ 170 tons per hour. How driven Electrically

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.

Fast Pumps, No. and size 1 @ 170 tons per hour Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2 @ 280 tons per hour

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 6: 4 @ 2" dia. 2 @ 3" dia. 1 in Tunnel @ 3 1/2" In Pump Room

Holds, &c. No. 1 deep tank 2 @ 3 1/2", No. 2 deep tank 2 @ 3 1/2", No. 1 tween deck 2 @ 3 1/2", Nos. 2, 3, 4 holds 2 @ 3 1/2", No. 5 deep tank 2 @ 3 1/2", No. 5 hold 2 @ 2 1/2"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2. 1 @ 5", 1 @ 6"

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

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

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 yes.

Do all pipes pass through the bunkers none How are they protected

Do all pipes pass through the deep tanks Heating coils Have they been tested as per Rule yes.

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 yes. Is it fitted with a watertight door yes. worked from shaft etc.

Is the vessel a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Auxiliary Air Compressors, No. none No. of stages Diameters Stroke Driven by

Primary Air Compressors, No. 2 No. of stages 2 Diameters 245/280 7/8" Stroke 130 7/8" Driven by Electric motor

Secondary Air Compressors, No. 1 No. of stages 2 Diameters 88/100 7/8" Stroke 80 1/2" Driven by Steam Eng.

Is any provision made for first Charging the Air Receivers Steam driven Compressor.

Revolving Air Blowers, No. 2 Diameter 310 1/2" min capacity each at 1.2 atmosphere + 104 Rpm. Driven by Main Engine

Auxiliary Engines crank shafts, diameter as per Rule as approved as fitted 160 1/2" No. 3 Position Bottom platform No. 1 Sta; Nos 2 & 3 port

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

