

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 10 APR 1942

Date of writing Report 7-4-1942 When handed in at Local Office 9-4-1942 Port of Leith  
 No. in Survey held at Burntisland Date, First Survey 21-1-42 Last Survey 6-4-1942  
 Reg. Book. 39003 on the S.S. "WILLIAM PEARMAN." (Number of Visits 8) Gross Tons 1552 Net Tons 891  
 Built at Burntisland By whom built Burntisland S.B. Co. Ltd. Yard No. 257 When built 1942  
 Engines made at Glasgow By whom made J. Rowan & Co. Ltd. Engine No. 1098 When made 1942  
 Boilers made at Glasgow & Annan By whom made J. Rowan & Co. Ltd. & Buchanan & Co. Boiler No. MAIN 1098 DONKEY 15229 When made 1942  
 Registered Horse Power \_\_\_\_\_ Owners London Power Co. Ltd. Port belonging to London  
 Nom. Horse Power as per Rule 184 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 Trade for which Vessel is intended \_\_\_\_\_

## ENGINES, &c.—Description of Engines

Revs. per minute 89 (LOADED VESSEL)

Dia. of Cylinders \_\_\_\_\_ Length of Stroke \_\_\_\_\_ No. of Cylinders \_\_\_\_\_ No. of Cranks \_\_\_\_\_  
 Crank shaft, dia. of journals \_\_\_\_\_ as per Rule \_\_\_\_\_ Crank pin dia. \_\_\_\_\_ Crank webs \_\_\_\_\_ Mid. length breadth \_\_\_\_\_ Thickness parallel to axis \_\_\_\_\_  
 as fitted \_\_\_\_\_ Crank pin dia. \_\_\_\_\_ Mid. length thickness \_\_\_\_\_ shrunk \_\_\_\_\_ Thickness around eye hole \_\_\_\_\_  
 Intermediate Shafts, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_ Thrust shaft, diameter at collars \_\_\_\_\_ as per Rule \_\_\_\_\_  
 as fitted \_\_\_\_\_ as fitted \_\_\_\_\_  
 Tube Shafts, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_ Screw Shaft, diameter \_\_\_\_\_ as per Rule \_\_\_\_\_  
 as fitted \_\_\_\_\_ as fitted \_\_\_\_\_ tube screw shaft fitted with a continuous liner \_\_\_\_\_  
 Bronze 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  
 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 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 \_\_\_\_\_ Is an approved Oil Gland or other appliance fitted at the after end of the tube  
 a t \_\_\_\_\_ If so, state type \_\_\_\_\_ Length of Bearing in Stern Bush next to and supporting propeller \_\_\_\_\_  
 Propeller, dia. \_\_\_\_\_ Pitch \_\_\_\_\_ No. of Blades \_\_\_\_\_ Material \_\_\_\_\_ whether Moveable \_\_\_\_\_ Total Developed Surface \_\_\_\_\_ sq. feet  
 Feed Pumps worked from the Main Engines, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
 Bilge Pumps worked from the Main Engines, No. \_\_\_\_\_ Diameter \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
 Feed Pumps \_\_\_\_\_ No. and size \_\_\_\_\_ Pumps connected to the \_\_\_\_\_ No. and size \_\_\_\_\_ How driven \_\_\_\_\_  
 How driven \_\_\_\_\_ Main Bilge Line \_\_\_\_\_ How driven \_\_\_\_\_  
 Ballast Pumps, No. and size one, 9" x 11" x 10" 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;—In Engine and Boiler Room 1 forward, 2 1/2" dia. 1 engine room well, 2 1/2" dia. 1 direct, 3 1/2" dia.  
 In Pump Room \_\_\_\_\_ In Holds, &c. \_\_\_\_\_  
No. 1 Hold, one in well, 3 1/2" dia. No. 2 Hold, 1 port, 1 star, in well 3" dia.  
 Main Water Circulating Pump Direct Bilge Suctions, No. and size one, at 5" dia. independent Power Pump Direct Suctions to the Engine Room Bilges,  
 No. and size one, at 3 1/2" dia. Are all the Bilge Suction Pipes in holds and \_\_\_\_\_ well fitted with strum-boxes Yes  
 Are the Bilge Suctions in the Machinery Space 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, except main tank injection on steel reservoir. Are they fitted with Valves or Cocks. Both  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Overboard Discharges above or below the deep water line Below  
 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  
 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 Engines aft Is it fitted with a watertight door \_\_\_\_\_ worked from \_\_\_\_\_

## MAIN BOILERS, &c.—(Letter for record \_\_\_\_\_)

Total Heating Surface of Boilers \_\_\_\_\_

Which Boilers are fitted with Forced Draft \_\_\_\_\_ Which Boilers are fitted with Superheaters \_\_\_\_\_  
 No. and Description of Boilers \_\_\_\_\_ Working Pressure \_\_\_\_\_  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? See Glasgow Report No. 65197.  
 IS A DONKEY BOILER FITTED? \_\_\_\_\_ If so, is a report now forwarded? \_\_\_\_\_  
 Can the donkey boiler be used for domestic purposes only \_\_\_\_\_

PLANS. Are approved plans forwarded herewith for Shafting \_\_\_\_\_ Main Boilers \_\_\_\_\_ Auxiliary Boilers \_\_\_\_\_ Donkey Boilers \_\_\_\_\_  
 (If not state date of approval) \_\_\_\_\_  
 Superheaters \_\_\_\_\_ General Pumping Arrangements \_\_\_\_\_ Oil fuel Burning Piping Arrangements \_\_\_\_\_

## SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes  
 State the principal additional spare gear supplied See list.

The foregoing is a correct description.

Manufacturer.



IF THIS STATEMENT, OR ANY PART THEREOF, IS FOUND TO BE FALSE, THE SIGNATURES OF THE ENGINEER AND SURVEYOR WILL BE DEEMED TO BE A FRAUD.

During progress of work in shops - -

Dates of Survey while building

During erection on board vessel - - 21/1/42, 2/2/42, 26/2/42, 4/3/42, 11/3/42, 16/3/42, 19/3/42, 6/4/42.

Total No. of visits 8.

Dates of Examination of principal parts—Cylinders Slides Covers

Pistons Piston Rods Connecting rods

Crank shaft Thrust shaft Intermediate shafts

Tube shaft Screw shaft *in place 2-2-42* Propeller *in place 2-2-42*

Stern tube *in place 2-2-42* Engine and boiler seatings *2-2-42* Engines holding down bolts *11-3-42*

Completion of fitting sea connections *2-2-42*

Completion of pumping arrangements *19-3-42* Boilers fixed *16-3-42* Engines tried under steam *19-3-42 & 6-4-42*

Main boiler safety valves adjusted *19-3-42* Thickness of adjusting washers *P=3/8" S=3/8" MAIN BOILER, P=1/2" S=1/2" DONKEY BOILER*

Crank shaft material Identification Mark Thrust shaft material Identification Mark

Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark

Screw shaft, material Identification Mark Steam Pipes, material Test pressure Date of Test

Is an installation fitted for burning oil fuel *No.* Is the flash point of the oil to be used over 150°F.

Have the requirements of the Rules for the use of oil as fuel been complied with

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 *S.S. SIR LEONARD PEARCE Lth. Rpt. N° 205*

General Remarks (State quality of workmanship, opinions as to class, &c. *This machinery - Glasgow Report N° 65197 has been efficiently fitted on board, the materials and workmanship being sound and good. On completion, the main and donkey boiler safety valves were adjusted to suit the working pressure and the Main and Auxiliary machinery were tried under working conditions at sea and found satisfactory. This machinery in my opinion, is in a safe working condition and eligible to be classed in the Register Book with the notation of L.M.C. 4-42, T.S.C.L., F.I.*

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

The amount of Entry Fee ... £ 9 : 4 : 0 *To be collected by Lth. & credited to Lth.* When applied for, 9-4-1942

Special ... £

Donkey Boiler Fee ... £

Travelling Expenses (if any) £ 1 : 8 : 6 When received, 19

*J. F. Campbell*  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *TUE. 21 APR 1942*

Assigned *+ Lth. 4.42 J.D., Ch.*

