

REPORT ON OIL ENGINE MACHINERY.

No. 90942

Date of writing Report 5th Jan. 1927 When handed in at Local Office 6 JAN 1927 Port of London (Spurwich)  
No. in Survey held at 100 Reg. Book.  
on the. Single } Screw vessels "SOUTHLAND"  
Twin }  
Triple }  
Built at Dublin By whom built Dublin Dockyard Co. Ltd.  
Engines made at Spurwich By whom made Vickers-Pittman Ltd.  
Monkey Boilers made at ✓ By whom made ✓  
Indicated Horse Power 25 Owners The Bluff Harbour Board  
Nominal Horse Power as per Rule 7 Is Refrigerating Machinery fitted for cargo purposes ✓  
Date, First Survey 24 June 1926 Last Survey 5th January 1927  
Number of Visits NINE  
Tons Gross Not  
Yard No. 120 When built  
Aux. Engine No. 1018 When made 1926  
Boiler No. ✓ When made ✓  
Port belonging to Bluff Harbour N.Z.  
Is Electric Light fitted Yes

ENGINES, &c.—Type of Engines Semi-Diesel (See Aux Comp. & Gen Service Pump) 2 or 4 stroke cycle 2 Single or double acting Single  
Maximum pressure in cylinders 280-300 lbs No. of cylinders one Diameter of cylinders 9" No. of cranks one Length of stroke 10"  
Pitch of bearings, adjacent to the Crank, measured from inner edge to inner edge 11" Is there a bearing between each crank ✓  
Revolutions per minute 375 Flywheel dia. 4'-0" Weight 7642 lbs Means of ignition Hot surface Kind of fuel used Grade oil.  
Crank Shaft, dia. of journals as per Rule 4" as fitted 4" Crank pin dia. 4" Crank Webs Mid. length breadth 6" Mid. length thickness 2 5/8" Kind of fuel used Grade oil.  
Wheel Shafts, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collar as per Rule as fitted  
Main Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube screw shaft fitted with a continuous liner ✓  
Cylinder 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  
peller boss ✓ If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner ✓  
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 ✓  
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  
of the tube shaft 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  
Method of reversing Engines ✓ Is a governor or other arrangement fitted to prevent racing of the engine when declutched ✓ Means of lubrication  
Thickness of cylinder liners 5/8" Are the cylinders fitted with safety valves ✓ Are the exhaust pipes and silencers water cooled or lagged with  
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 ✓  
Sling Water Pumps, No. one Is the sea suction provided with an efficient strainer which can be cleared within the vessel  
Ice Pumps fitted to the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work ✓  
Pumps connected to the Main Bilge Line { No. and Size ✓ How driven ✓  
Fast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size  
Two independent means arranged for circulating water through the Oil Cooler  
Pumps, No. and size:—In Engine and Boiler Room Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge  
Pumps, No. and size:—In Engine and Boiler Room  
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size  
All the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Are the Bilge Suctions in the Machinery Space  
from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges  
All Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks  
Key fixed sufficiently high on the ship's side to be seen without lifting the platform plates Are the Overboard Discharges above or below the deep water line  
Key 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  
Pipes pass through the bunkers How are they protected  
Pipes pass through the deep tanks Have they been tested as per Rule  
Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times  
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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from  
Good vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork  
Air Compressors, No. No. of stages Diameters Stroke Driven by  
Main Air Compressors, No. No. of stages Diameters Stroke Driven by  
Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by  
Suctioning Air Pumps, No. Diameter Stroke Driven by  
Main Engines crank shafts, diameter as per Rule as fitted

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule  
Internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces  
Shipping a drain arrangement fitted at the lowest part of each receiver  
Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness  
lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules  
Suctioning Air Receivers, No. Total cubic capacity Internal diameter thickness  
lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

HYDRAULIC TESTS:-

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS <i>Liner</i>	11.6.26	280-300 lb. sq. in.	560 lb. sq. in.	<i>ABT.</i>	<i>Satisfactory</i>
" " <i>Head cover + jacket</i>	12.6.26	" " (Head)	560 + 50 lb. sq. in.	<i>ABT.</i>	"
" " JACKETS	12.6.26	—	50 lb. sq. in.	<i>ABT.</i>	"
" PISTON WATER PASSAGES					
MAIN COMPRESSORS—1st STAGE					
" 2nd "					
" 3rd "					
AIR RECEIVERS—STARTING <i>Value</i>	26.8.26	200 lb. sq. in.	400 lb. sq. in.	<i>ABT.</i>	<i>Satisfactory</i>
" INJECTION					
AIR PIPES					
FUEL PIPES	24.9.26	600 lb. sq. in.	1200 lb. sq. in.	<i>ABT.</i>	<i>Satisfactory</i>
FUEL PUMPS					
SILENCER	23.8.26	—	50 lb. sq. in.	<i>ABT.</i>	<i>Satisfactory</i>
" WATER JACKET	23.8.26	—	50 lb. sq. in.	<i>ABT.</i>	"
SEPARATE FUEL TANKS	5.1.27	—	7 1/2 lb. sq. in.	<i>ABT.</i>	"

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

Receivers ✓

Separate Tanks ✓

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR

*As per attached list.*

The foregoing is a correct description,

VICKERS-PETTERS LTD.

*L. Garrett*

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—Cylinder 12.6.26 *Head* 12.6.26 Pistons 3.7.26 Rods ✓ Connecting rods ✓

Crank shaft 3.7.26 Flywheel shaft ✓ Thrust shaft ✓ Intermediate shafts ✓ Tube shaft ✓

Screw shaft ✓ Propeller ✓ Stern tube ✓ Engine seatings ✓ Engines holding down bolts ✓

Completion of fitting sea connections ✓ Completion of pumping arrangements ✓ Engines tried under working conditions ✓

Crank shaft, Material *Steel* Identification Mark *V.P. 1296 2.10.26. ABT.* 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

Is the flash point of the oil to be used over 150° F. ✓

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.) *This engine has been constructed under supervision of the Society's Rules. The material & workmanship are good. The cylinder, water jackets, cylinder head, air pump, fuel pump & silencer, have been hydraulic tested & stamped as above. On completion the engine tried under working conditions on a full power shop trial & proved satisfactory.*

*This engine has been dispatched to Dublin to be fitted in the Dublin Dockyard Co. S.S. 120 for driving the Compressor & General Service Pump.*

The amount of Entry Fee ... £

Special @ 2/10 per N.H. £

Donkey Boiler Fee ... £

Travelling Expenses (if any) £ ✓

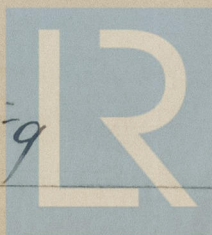
Committee's Minute

Assigned

WED. 8 JUN 1927

*A.E. Larminier*

Engineer Surveyor to Lloyd's Register of Ships



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