

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

7 OCT 1931

Date of writing Report 5<sup>th</sup> Oct 1931 When handed in at Local Office 6<sup>th</sup> Oct 1931 Port of Leith

No. in Survey held at Leith Date, First Survey 20<sup>th</sup> July Last Survey 30<sup>th</sup> Sept 1931  
Reg. Book. 41108 on the s/s "LAFONIA" (Number of Visits 17)

Built at Leith By whom built Henry Robb & Co. Yard No. 189 When built 1931  
Engines made at Boatbridge By whom made W. Beardmore & Co. Engine No. 556 when made 1931  
(Sec. 14 9/9/31)

Boilers made at Sunderland By whom made Mac Bell & Pollock Boiler No. 374 when made 1931

Registered Horse Power 118 Owners Falkland Islands Co. Ltd. Port belonging to Leith

Nom. Horse Power as per Rule 118 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes

Trade for which Vessel is intended Falkland Islands - Monte Video

**ENGINES, &c.**—Description of Engines Triple Expansion, Surface Condensing Revs. per minute 105  
 Dia. of Cylinders 14" - 24" - 40" Length of Stroke 27" No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals 7.43" as per Rule 7.43" as fitted 7.3/4" Crank pin dia. 7.3/4" Crank webs Mid. length breadth 12" Thickness parallel to axis 4.3/4"  
 as fitted 7.3/4" Mid. length thickness 4.3/4" shrunk Thickness around eye-hole 3.9/16"  
 Intermediate Shafts, diameter as per Rule 7.08" as fitted 8.1/8" Thrust shaft, diameter at collars as per Rule 7.43" as fitted 7.3/4"  
 Tube Shafts, diameter as per Rule 8.01" as fitted 8.5/8" Is the tube shaft fitted with a continuous liner yes  
 as fitted 8.5/8" Is the screw shaft fitted with a continuous liner yes  
 Screw Shaft, diameter as per Rule 8.01" as fitted 8.5/8"  
 Bronze Liners, thickness in way of bushes as per Rule .54" as fitted 9/16" Thickness between bushes as per Rule .4" as fitted 1/2" 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 Continuous  
 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 yes  
 If two liners are 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 shaft No If so, state type yes Length of Bearing in Stern Bush next to and supporting propeller 2'-10 1/2"  
 Propeller, dia. 11'-3" Pitch 10'-1" No. of Blades 4 Material Cast Iron whether Moveable No Total Developed Surface 42.5 sq. feet  
 Feed Pumps worked from the Main Engines, No. 2 Diameter 3" Stroke 13 1/2" Can one be overhauled while the other is at work yes  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3" Stroke 13 1/2" Can one be overhauled while the other is at work yes  
 Feed Pumps { No. and size 1 - 6"x4"x6" Pumps connected to the { No. and size 1 - 6"x7"x7"  
 How driven Steam-driven Main Bilge Line { How driven Steam-driven  
 Ballast Pumps, No. and size 1 - 6"x7"x7" Lubricating Oil Pumps, including Spare Pump, No. and size yes  
 Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room Eng Room 2-2" Boiler Room 2-2" Tunnel Well 1-2"  
 In Holds, &c. No 1 Hold 2-2" No 2 Hold 2-2" After Hold 2-2 1/2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-3 1/2" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-2 3/4" Are all the Bilge Suction Pipes in holds and tunnel 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 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 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  
 What Pipes pass through the bunkers Suctions to fore holds How are they protected boxed in  
 What pipes pass through the deep tanks yes 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 top platform

**MAIN BOILERS, &c.**—(Letter for record S) Total Heating Surface of Boilers 2209 sq. ft.  
 Is Forced Draft fitted No No. and Description of Boilers 2 Single Ended Multi Working Pressure 180 lbs  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes (See Rpt. N° 30694)  
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? yes

**PLANS.** Are approved plans forwarded herewith for Shafting reports Main Boilers yes Auxiliary Boilers yes Donkey Boilers yes  
 Superheaters yes General Pumping Arrangements yes Oil fuel Burning Piping Arrangements yes

**SPARE GEAR.** State the articles supplied:— Propeller, propeller shaft, piston rod, two main bearing bolts & nuts, two top end bolts & nuts, two bottom end bolts & nuts, 1 set top end brasses, 1 set bottom end brasses, 1 set coupling bolts, 1 set feed pump valves, 1 set bilge pump valves, 1 main feed check valve, 1 aux. feed check valve, 3 jink ring bolts, assorted bolts & nuts & iron, 2 safety valve springs, 6 plain boiler tubes, 2 stay tubes, 12 condenser tubes & ferrules, 1 set piston & bucket rings for ballast pump, 1 set piston & bucket rings for feed pump.

The foregoing is a correct description,

Manufacturer.



18070

During progress of work in shops - - -

Dates of Survey while building

1931 July 20, 21, Aug 13, 27, Sept. 1, 3, 5, 7, 9, 11, 16, 18, 23, 24, 25, 29, 30

Total No. of visits 17.

Dates of Examination of principal parts—Cylinders Slides Covers

Pistons Piston Rods Connecting rods

Crank shaft Thrust shaft 1-7-31 (Sunderland) Intermediate shafts 1-7-31 (Sunderland)

Tube shaft Screw shaft 16-7-31 (Sunderland) Propeller 16-7-31 (Sunderland)

Stern tube 9-7-31 (Sunderland) Engine and boiler seatings 20-7-31 Engines holding down bolts 5-9-31

Completion of fitting sea connections 13-8-31

Completion of pumping arrangements 23-9-31 Boilers fixed 27-8-31 Engines tried under steam 25-9-31

Main boiler safety valves adjusted 24-9-31 Thickness of adjusting washers Star. 132 S.V. 1/32 P.V. 3/8, Port. 132 S.V. 3/8 P.V. 13/32

Crank shaft material Identification Mark Thrust shaft material Steel Identification Mark

Intermediate shafts, material Steel Identification Marks LLOYD'S N° 7054 1-7-31 T.D.S. LLOYD'S N° 7055 1-7-31 T.D.S. Tube shaft, material Identification Mark

Screw shaft, material Steel Identification Mark LLOYD'S N° 6276 16-7-31 T.D.S. Steam Pipes, material Copper Test pressure 360 lbs Date of Test 11-9-31

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 ✓ If so, have the requirements of the Rules been complied with ✓

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 Machinery - Gls Rpt. N° 46370, & Sld. Rpt. N° 30694 - has been efficiently fitted on board, & the materials & workmanship are sound & good.

The Main Engines were opened up & examined & were found in good order & condition. On completion of installing, the safety valves were adjusted under steam to 185 lbs per sq in. & the Main Engines & Auxiliaries were tried at sea under full load & working conditions, & were found satisfactory.

In my opinion the Machinery of this vessel is eligible to be classed in the Register Book with the notation of + L.M.C. 9-31.

Certificate to be sent to Leith

The amount of Entry Fee ... £ 3 : 0 : 0 When applied for, 6/10/1931

Special Install... £ 6 : 6 : 0

Donkey Boiler Fee ... £ : : : When received, 19.10.1931

Travelling Expenses (if any) £ : : :

John Houston  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 16 OCT 1931

Assigned + L.M.C. 9.31 CERTIFICATE WRITTEN C.L.



Rpt.

Date of

No. in Reg. B

Built

Engin

Boiler

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