

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report *Dec: 28th 1929* When handed in at Local Office *Jan 6th 1930* Port of *GLASGOW.*
 No. in Survey held at *Yroon.* Date, First Survey *14 8 29* Last Survey *Jan 3rd 1930.*
 Reg. Book. on the *S.S. THE MONARCH.* (Number of Visits *29*)
 Built at *Yroon* By whom built *Ailsa S.B. Co Ltd.* Yard No. *412* Tons Gross *824* Net *405*
 Engines made at *Yroon* By whom made *Ailsa S.B. Co Ltd* Engine No. *144* when made *1930*
 Boilers made at *Glasgow.* By whom made *David Rowan & Co Ltd* Boiler No. *345* when made *1929.*
 Registered Horse Power *P-51* Owners *J. Hay & Sons Ltd* Port belonging to *Glasgow*
 Nom. Horse Power as per Rule *115.✓* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *Yes.*
 Trade for which Vessel is intended *P.S. - 11 - 11*

ENGINES, &c.—Description of Engines *Triple Expansion* Revs. per minute *94.*
 Dia. of Cylinders *14" 23½" 39"* Length of Stroke *30"* No. of Cylinders *3.* No. of Cranks *3.*
 Crank shaft, dia. of journals as per Rule *4.96* as fitted *8½"* Crank pin dia. *8½"* Crank webs Mid. length breadth *15½"* Thickness parallel to axis *5"*
 as fitted *8½"* Mid. length thickness *5"* shrunk Thickness around eye-hole *3½"*
 Intermediate Shafts, diameter as per Rule *4.876* as fitted *Done* Thrust shaft, diameter at collars as per Rule *4.96* as fitted *8½" Michell.*
 Tube Shafts, diameter as per Rule *—* as fitted *—* Screw Shaft, diameter as per Rule *8½"* as fitted *8½"* Is the *tube* screw shaft fitted with a continuous liner? *Yes.*
 Bronze Liners, thickness in way of bushes as per Rule *5.56* as fitted *5/8"* Thickness between bushes as per Rule *4.14"* as fitted *1½"* 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 *—*
 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 *Close fit*
 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 *No* Length of Bearing in Stern Bush next to and supporting propeller *2'-11"*
 Propeller, dia. *11'-6"* Pitch *12'-0"* No. of Blades *4.* Material *C. Iron* whether Moveable *No* Total Developed Surface *45.4 sq. feet*
 Feed Pumps worked from the Main Engines, No. *2* Diameter *2 ½"* Stroke *15"* Can one be overhauled while the other is at work *Yes*
 Bilge Pumps worked from the Main Engines, No. *2* Diameter *2 ½"* Stroke *15"* Can one be overhauled while the other is at work *Yes*
 Feed Pumps { No. and size *1 Duplex 6" x 4 ½" x 6"* Pumps connected to the { No. and size *1 Duplex 4" x 8" x 8"*
 How driven *Steam* Main Bilge Line How driven *Steam*
 Ballast Pumps, No. and size *1 @ 4" x 8" x 8"* 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 *Three @ 2 ½"*
 In Holds, &c. *Two @ 3"*

Main Water Circulating Pump Direct Bilge Suctions, No. and size *1 @ 4"* Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size *1 @ 3"* 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 *Hold bilge suction* How are they protected *Wood protected*
 What pipes pass through the deep tanks *—* 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 *None* Is it fitted with a watertight door *—* worked from *—*

MAIN BOILERS, &c.—(Letter for record *(5)*) Total Heating Surface of Boilers *2021 sq feet*
 Is Forced Draft fitted *No* No. and Description of Boilers *One S.B.* Working Pressure *200 lbs.*
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? *Yes*
 IS A DONKEY BOILER FITTED? *No* If so, is a report now forwarded? *—*

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. State the articles supplied:— *Two connecting rod top end bolts and nuts. Two bottom end bolts and nuts. Two main bearing bolts. One set of coupling bolts. One set of feed and bilge pump valves. A quantity of assorted bolts and nuts and iron of various sizes*

The foregoing is a correct description,
 FOR AILSA SHIPBUILDING CO., LIMITED.

McNaughton
 MANAGER

Manufacturer.



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Lloyd's Register
 Foundation

W1150-0108

1929 Aug 14-16 Sep 6-12-18 24-26 Oct 4-10-14-17-22-24-29 Nov 1-5-11-14-21-25-29 Dec 3-6-10-13

Dates of Survey while building

During erection on board vessel - - -

Total No. of visits

29

Dates of Examination of principal parts—Cylinders 14-10-29 Slides 14-10-29 Cocks 14-10-29

Pistons 14-10-29 Piston Rods 14-10-29 Connecting rods 12-9-29

Crank shaft 12-9-29 Thrust shaft 16-8-29 Intermediate shafts -

Tube shaft - Screw shaft 11-11-29 Propeller 14-10-29

Stern tube 11-11-29 Engine and boiler seatings 1-11-29 Engines holding down bolts 29-11-29

Completion of fitting sea connections 1-11-29

Completion of pumping arrangements 10-12-29 Boilers fixed 29-11-29 Engines tried under steam 30-12-29

Main boiler safety valves adjusted 26-12-29 Thickness of adjusting washers PV 1/2" SV 3/4"

Crank shaft material S Identification Mark LLOYDS No 5495 PCB 12-9-29 Thrust shaft material S Identification Mark LLOYDS No 5495 PCB 16-8-29

Intermediate shafts, material - Identification Marks LLOYDS No 218 PCB 11-11-29 Tube shaft, material - Identification Mark LLOYDS No 5495 PCB 16-8-29

Screw shaft, material S Identification Mark LLOYDS No 218 PCB 11-11-29 Steam Pipes, material Copper Test pressure 400 lbs Date of Test 11-29-29

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

Is this machinery duplicate of a previous case Yes If so, state name of vessel SS The Viceroy

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery has been built under

Special Survey in accordance with the Rules of the Society.

The workmanship and materials are of good quality.

The engines and boiler have been securely fitted on board and tried under steam with satisfactory results.

It is submitted that this vessel is eligible for record of LMC 1-30.

6/1/30

+ LMC 1-30. Ch.

9/1/30

The amount of Entry Fee ... £ 3 : 0 :
3/5 Special ... £ 14 : 5 :
Donkey Boiler Fee ... £ - : - :
Travelling Expenses (if any) £ 3 : 5 :
When applied for, 7-1-30
When received, 9-1-30

David C Barr.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 7 - JAN 1930

Assigned + LMC 1.30

CERTIFICATE WRITTEN



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