

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 29 NOV 1944

Date of writing Report 20th NOVEMBER 1944. When handed in at Local Office 28th NOVEMBER 1944. Port of GREENOCK

No. in Survey held at GREENOCK Date, First Survey 17th JUNE 1943 Last Survey 24th NOVEMBER 1944
 Reg. Book (S) on the "NADIR" (Number of Visits 78.)

Built at PORT GLASGOW. By whom built LITHGOWS LD. Yard No. 1004. When built 1944
 Engines made at GREENOCK By whom made RANKIN & BLACKMORE LD. Engine No. 497 When made 1944
 Boilers made at GREENOCK By whom made RANKIN & BLACKMORE LD. Boiler No. 497 When made 1944
 Registered Horse Power Owners ASIATIC STEAM NAVIGATION CO. LD. Port belonging to LONDON.
 Nom. Horse Power as per Rule 517 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted YES
 Trade for which vessel is intended FOREIGN.

ENGINES, &c.—Description of Engines Triple Expansion. Revs. per minute 72

Dia. of Cylinders 24 1/2" x 41" x 70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 14.2" as fitted 14 1/2" Crank pin dia. 14 1/2" Crank webs Mid. length breadth Thickness parallel to axis 9" Mid. length thickness shrunk Thickness around eye-hole 6 1/4"

Intermediate Shafts, diameter as per Rule 13.53" as fitted 13 3/4" Thrust shaft, diameter at collars as per Rule 14.2" as fitted 14 1/2"

Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 14.99" as fitted 15 1/2" Is the shaft fitted with a continuous liner YES

Bronze Liners, thickness in way of bushes as per Rule 751" as fitted 7/8" Thickness between bushes as per Rule 565" as fitted 3/4" 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

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 at No. If so, state type

Propeller, dia. 17-6" Pitch 17-8" MAX. No. of Blades 4 Material C.I. whether Moveable YES Total Developed Surface 102 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 24" Can one be overhauled while the other is at work YES

Feed Pumps No. and size 10 1/2" x 8" x 22" (Twin) 1-8 1/2" x 7" x 24" Pumps connected to the Main Bilge Line No. and size 1-12 1/2" x 14" x 24" How driven STEAM 1-8" x 9" x 18"

Ballast Pumps, No. and size ONE 12 1/2" x 14" x 24" 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 3-3" dia

In Pump Room COFFEROOM 102" No. 4-203" In Holds, &c. No. 1-203" No. 2-203 1/2" No. 3-202 1/2" No. 5-203" TUNNEL WELL - 102 1/2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size ONE - 5" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size

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 ORON 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 MAIN BELOW OTHERS 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 FOR HOLD SUCTIONS How are they protected WOOD CASINGS

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 YES Is it fitted with a watertight door ACCESS BY TRUNK FROM UPPER DECK worked from

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 7266 sq. ft

Which Boilers are fitted with Forced Draft 3 MAIN Which Boilers are fitted with Superheaters

No. and Description of Boilers 3 S.E. MULTITUBULAR Working Pressure 230 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? YES

IS A DONKEY BOILER FITTED? NO 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

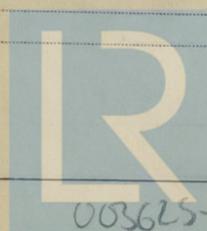
State the principal additional spare gear supplied

The foregoing is a correct description.
 FOR RANKIN & BLACKMORE, LTD.

[Signature]

MANAGING DIRECTOR.

Manufacturer.



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Lloyd's Register
 Foundation

003625-0056

VJH

During progress of work in shops - - (1943) JUNE 17, AUG 31, OCT 6, 18, 21, NOV 17, 29, DEC 17, 28 (1944) JAN 5, 7, 17, 19, 24, 31, FEB 4, 14, 21, 29, MAR 3, 10, 16, 21, 24, 29, APRIL 4, 10, 14, 19, 21, MAY 2, 9, 15, 24, JUNE 1, 14, 19, 24, 29, JULY 13, 17, 18, 20, 26, 28, AUG 1, 5, 11, 14, 28, 29, SEPT 1, 4, 5, 7, 11.
 During erection on board vessel - - 13, 19, 25, 24, OCT 4, 6, 16, 18, 19, 20, 23, 26, 24, NOV 1, 2, 3, 4, 10, 15, 24.
 Total No. of visits 48.

Dates of Examination of principal parts—Cylinders 5.8.44 Slides 5.9.44 Covers 5.9.44
 Pistons 5.9.44 Piston Rods 11.9.44 Connecting rods 11.9.44
 Crank shaft 1.6.44 Thrust shaft 4.9.44 Intermediate shafts 1.9.44
 Tube shaft / Screw shaft 5.8.44 Propeller 1.9.44
 Stern tube 1.9.44 Engine and boiler seatings 18.9.44 Engines holding down bolts 2.11.44
 Completion of fitting sea connections 7.9.44
 Completion of pumping arrangements 7.11.44 Boilers fixed 27.10.44 Engines tried under steam 15.11.44
 Main boiler safety valves adjusted 7.11.44 Thickness of adjusting washers P 9/16 CS 3/8 S. S 7/16
 Crank shaft material Steel Identification Mark MS 1.6.44 No 12455 Thrust shaft material Steel Identification Mark MS 4.9.44 No 12455
 Intermediate shafts, material Steel Identification Marks MS 1.9.44 No 12455 Tube shaft, material / Identification Mark /
 Screw shaft, material Steel Identification Mark MS 5.8.44 Steam Pipes, material S.D. Steel Test pressure 690 lbs Date of Test Oct. Nov. 1944
 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 MALIKA Greenock Report No. 22473

General Remarks (State quality of workmanship, opinions as to class, &c. These engines and boilers have been built under Special Survey in accordance with the Rules and the approved plans, securely fitted in the vessel and tried under steam satisfactorily. The materials and workmanship are good. The machinery is eligible, in my opinion, to have the Record of L.M.C. 11.44 and the Notation Y.S. C.L. and 3 Single Boilers F.D.

Certificate to be sent to Greenock

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee	£ 6 : 0	When applied for, 24 th Nov 1944
Special	£ 100 : 17	
Donkey Boiler Fee	£ :	When received, 19
Travelling Expenses (if any)	£ :	

M. Caldwell
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 28 NOV 1944 JLR
 Assigned -/- L.M.C. 11.44 JS

