

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

No. 119224

24 OCT 1949

24 OCT 1949

Received at London Office 10 NOV 1949

held at LONDON Port of LONDON
 Date, First Survey 20-5-47 Last Survey 19-8-49
 (Number of Visits 127)
 Triple screw icebreaker "LAZAR KAGONOVITCH"
 COLAIEFF By whom built ANDRE MARTI S. B. YD (USSR Plant No. 198) and No. 5621
 Tons Gross 5621 Net 1734
 at NICOLAIEFF By whom made - do - When built 1938-12
 at NICOLAIEFF By whom made - do - Engine No. 14-2-2 When made 1938
 Horse Power 2466 Boiler No. 14-2-2 When made 1938
 Owners U.S.S.R. Port belonging to VLAN/VOSTOCK
 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES

Description of Engines TRIPLE EXPANSION Three main engines
 Length of Stroke 1140 mm No. of Cylinders THREE Revs. per minute 120
 Length of Journals 348.4 mm Crank pin dia. 358 mm No. of Cranks THREE
 Crank webs Mid. length breadth 240 mm Thickness parallel to axis 73.6 mm
 Mid. length thickness 240 mm Thickness around eye-hole 140 mm
 Shafts, diameter as per Rule 331.8 mm Thrust shaft, diameter at collars as per Rule 360 mm
 as fitted 360 mm Is the screw shaft fitted with a continuous liner No
 Screw Shaft, diameter as per Rule ICE, 391 mm as fitted 430 mm
 Thickness in way of bushes as per Rule as fitted Thickness between bushes as per Rule as fitted
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner as fitted
 Is the after end of the liner made watertight in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive as fitted
 Is an approved Oil Gland or other appliance fitted at the after end of the tube as fitted
 Length of Bearing in Stern Bush next to and supporting propeller 6 ft 4 ins
 Material best steel whether Moveable YES Total Developed Surface 3807 sq. feet
 Pumps worked from the Main Engines, No. none Diameter as fitted Stroke as fitted Can one be overhauled while the other is at work as fitted
 Pumps connected to the Main Bilge Line { No. and size 2-duplex 100 tons 1-centrifugal 1500 tons
 How driven Vertical steam duplex Lubricating Oil Pumps, including Spare Pump, No. and size Integral with turbo-generators
 independent means arranged for circulating water through the Oil Cooler YES Suctions, connected both to Main Bilge Pumps and Auxiliary Pumps:—In Engine and Boiler Room 8-3" in E.R. 1-3" in Aft Well. 8-3" in B.R. 2-12" in E.R. 2-12" in B.R.
 In Holds, &c. as fitted

Water Circulating Pump Direct Bilge Suctions, No. and size 1-350 mm on each Independent Power Pump Direct Suctions to the Engine and/or Boiler Room Bilges, No. and size none conforming to Rules 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
 All Sea Connections fitted direct on the skin of the ship no - See notes Are they fitted with Valves or Cocks Valves
 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 See notes Are the Blow Off Cocks fitted with a spigot and brass covering plate See notes
 at Pipes pass through the bunkers Forward tank suction, coal bunker suction How are they protected Trunkways in all cases
 at pipes pass through the deep tanks suctions to nos 2 and 3 feed tanks Have they been tested as per Rule Fried
 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 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 SHELTER DECK

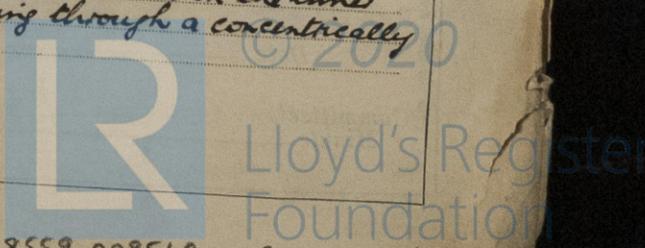
IN BOILERS, &c.—(Letter for record) Total Heating Surface of Boilers 3213 sq. metres (9 x 357) + 9 x 100 m² (8m)
 Which Boilers are fitted with Forced Draft ALL Which Boilers are fitted with Superheaters ALL
 No. and Description of Boilers three multitubular cylindrical Working Pressure 15.5 Kg/cm²
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? YES
 IS A DONKEY BOILER FITTED? NO If so, is a report now forwarded? as fitted
 Can the donkey boiler be used for other than domestic purposes as fitted
 PLANS. Are approved plans forwarded herewith for Shafting as fitted Main Boilers as fitted Auxiliary Boilers as fitted Donkey Boilers as fitted
 Superheaters as fitted General Pumping Arrangements as fitted Oil fuel Burning Piping Arrangements as fitted

SPARE GEAR.
 Has the spare gear required by the Rules been supplied YES
 State the principal additional spare gear supplied.

NOTES: All discharge valves pass through an icebox one port and one starboard built into the ship's double hull, each discharge valve is mounted direct on the icebox. Ship side blow down valves are mounted direct on the inner skin of the hull with a steel trunkway connecting both skins, the valves discharging through a concentrically mounted inner copper tube.

The foregoing is a correct description.

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 - Cylinders 6-6-47 Harum
 Pistons 6-6-47 Harum Piston Rods 6-6-47 Harum Slides 6-6-47 Harum Covers 6-6-47 Harum
 Crank shafts 20-5-47 + Var: Thrust shaft 20-5-47 Connecting rods 6-6-47 Harum
 Tube shaft - Screw shaft 22-9-48 Intermediate shafts 20-5-47
 Stern tube - Engines holding down bolts tested
 Completion of fitting sea connections Engine and boiler seatings ✓ Propeller 22-9-48 + Var
 Completion of pumping arrangements 5-7-49 Tested ✓ Engines tried under steam 19-8-49
 Main boiler safety valves adjusted 14-7-49 ✓ Boilers fixed ✓ Thickness of adjusting washers not given
 Crank shaft material ✓ Identification Mark ✓ Thrust shaft material ✓
 Intermediate shafts, material ✓ Identification Mark ✓ Steam Pipes, material ✓ Identification Mark
 Screw shaft, material ✓ Identification Mark ✓ Tube shaft, material ✓ Identification Mark
 Is an installation fitted for burning oil fuel NO ✓ Test pressure ✓ Date of Test ✓
 Have the requirements of the Rules for the use of oil as fuel been complied with NO ✓
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo NO ✓
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with YES ✓
 Is this machinery duplicate of a previous case NO ✓ If so, state name of vessel ✓
 General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel as has examined is in good order, the workmanship is good and the machinery in our opinion is eligible to be included in the L.M.C.

Pump list:
 Feed pumps 2 - 80 tons duplex type, one port, one starboard. 3 - 40 tons duplex type
 1 Ford 2 aft. Air pumps 3 off port, starboard and aft. Weir type dual 230 x 410 x 410 x 305 mm stroke
 each 22 tons. Circulating pumps 3 off port, starboard and aft. centrifugal type 700 tons each.
 Bilge & Ballast 3 off port, starboard and aft. duplex type 100 tons each. Auxiliary Condensate (oil) pumps
 1 off Worthington 7 tons. Fresh water pumps 2 off Ford E.R. port & starboard, duplex type 100 tons. Main trimming pumps
 (Ballast) Ford E.R. midships. centrifugal 1500 tons. Sanitary & fire pumps Ford E.R. port 1 - duplex
 type 110 tons. Fresh water pumps 2 Worthington, Ford E.R. midships 1 - 5 tons, aft. E.R. 1 - 7 tons
 oil cooler pump. 1 Worthington starboard aft. E.R. - 5 tons. Evaporator feed pumps 2 Worthington
 - 5 tons each. Distillate pumps 2 - Worthington - 5 tons each.

The amount of Entry Fee ... £
 Special ... £
 Donkey Boiler Fee ... £
 Travelling Expenses (if any) ... £
 Date ...
 When applied for, 19...
 When received, 19...
 YUL 24 MAR 1950

Wm Robson for self and G.C. CHAMPNESS
 Engineer Surveyor to Lloyd's Register of Shipping.

Lms
 MS 8.49
 BS 3.49

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

Committee's Minute

