

RECEIVED

No. 24471

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

D.O.

Received at London Office **22 AUG 1951**

Date of writing Report **13th AUG. 1951.** When handed in at Local Office **14th AUG. 1951.** Port of **GREENOCK**

No. in Survey held at **GREENOCK** Date, First Survey **7th FEBRUARY 1949.** Last Survey **23rd JUNE 1951.**
Reg. Book " " (Number of Visits **16.**)

on the **S.S. JALAPRATA** Tons Gross _____ Net _____

built at **UZAGADATAM** By whom built **SCINDIA STEAM NAV. CO LTD** Yard No. _____ When built _____

Engines made at **GREENOCK** By whom made **JOHN G. KINCAID & CO LTD** Engine No. **795** When made **1951**

Boilers made at " " By whom made " " Boiler No. **795** When made **1951**

Registered Horse Power _____ Owners **SCINDIA STEAM NAV. CO LTD** Port belonging to _____

Indicated Horse Power as per Rule **524** Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

Trade for which vessel is intended **GREEN SEA SERVICE**

ENGINES, &c.—Description of Engines **Invented Triple Expansion** Revs. per minute **68.5**
 Dia. of Cylinders **24 1/2 - 41 - 70** Length of Stroke **48** No. of Cylinders **3** No. of Cranks **3**
 Crank shaft, dia. of journals as per Rule **13.9** Mid. length breadth **1-8 1/2** Thickness parallel to axis **8 3/8**
 as fitted **14.25** Crank pin dia. **14.25** Crank webs shrunk Mid. length thickness **8 3/8** Thickness around eye-hole **6 3/8**
 Intermediate Shafts, diameter as per Rule **13.33** Thrust shaft, diameter at collars as per Rule **13.9**
 as fitted **13.625** as fitted **14.25**

Tube Shafts, diameter as per Rule _____ as fitted _____
 Screw Shaft, diameter as per Rule **14.809** Is the tube screw shaft fitted with a continuous liner **Yes**
 as fitted _____ as fitted **16.375**

Bronze Liners, thickness in way of bushes as per Rule **.752** Thickness between bushes as per Rule **.563**
 as fitted **.875** as fitted **.656** 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 **Yes**
 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 **One liner** Is an approved Oil Gland or other appliance fitted at the after end of the tube **Yes**

Propeller, dia. **17-9** Pitch **17-8** No. of Blades **4** Material **Bronze** whether Moveable **Yes** Total Developed Surface **91** sq. feet
 Feed Pumps worked from the Main Engines, No. **2** Diameter **4 1/2** Stroke **24** Can one be overhauled while the other is at work **Yes**
 Bilge Pumps worked from the Main Engines, No. **2** Diameter **4 1/2** Stroke **24** Can one be overhauled while the other is at work **Yes**

Feed Pumps { No. and size **Three 7-9 1/2** Pumps connected to the { No. and size **Two 24x4 1/2 One 200 tons/hr One 100 tons/hr**
 How driven **Steam** Main Bilge Line { How driven **M.E. Steam**

Ballast Pumps, No. and size **One 200 tons/hr.** Lubricating Oil Pumps, including Spare Pump, No. and size **Yes**
 Are two independent means arranged for circulating water through the Oil Cooler _____ Suctions, connected both to Main Bilge Pumps and Auxiliary Bilge Pumps:—In Engine and Boiler Room _____

In Pump Room _____ In Holds, &c. _____

Main Water Circulating Pump Direct Bilge Suctions, No. and size _____ Independent Power Pump Direct Suctions to the Engine and/or Boiler Room Bilges, No. and size _____
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes _____

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 _____
 Are all Sea Connections fitted direct on the skin of the ship _____ Are they fitted with Valves or Cocks _____

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates _____ Are the Overboard Discharges above or below the deep water line _____
 Are they 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 _____

What Pipes pass through the bunkers _____ How are they protected _____
 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 _____
 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 _____ Is the Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

MAIN BOILERS, &c.—(Letter for record _____) Total Heating Surface of Boilers **7563**
 Which Boilers are fitted with Forced Draft **All** Which Boilers are fitted with Superheaters **None**
 No. and Description of Boilers **Three cylindrical SE.** Working Pressure **220 lb.**

IS A REPORT ON MAIN BOILERS NOW FORWARDED? **Yes**
 IS A DONKEY BOILER FITTED? **No** If so, is a report now forwarded? **Yes**

Can the donkey boiler be used for other than domestic purposes **Yes**
 PLANS. Are approved plans forwarded herewith for Shafting **16-9-47 6-8-47 31-10-47** Main Boilers **7-10-47** Auxiliary Boilers **Yes** Donkey Boilers **Yes**

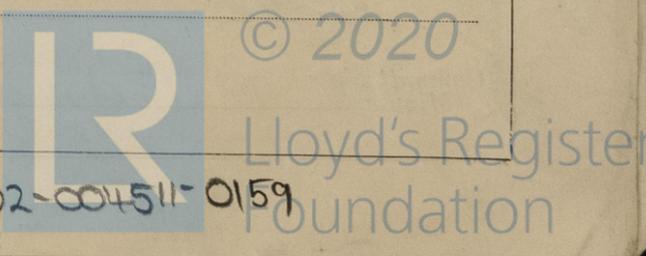
Superheaters **Yes** General Pumping Arrangements **Bilge Ballast 9-9-48** Oil fuel Burning Piping Arrangements **Yes**

SPARE GEAR.
 Has the spare gear required by the Rules been supplied **Yes**
 State the principal additional spare gear supplied _____

For JOHN G. KINCAID & COY., LIMITED.

The foregoing is a correct description.
J. G. Kincaid
 Chief Draughtsman.

Manufacturer.



004502-004511-0159

Handwritten initials and date: **14/9/51**

4/ 24471.

RECEIVED
AUG 1951
N D.O.

Dates of Survey while building
 During progress of work in shops - - (1949) FEB. 4. 11. 16. JUNE 14. 16. 20. JULY 25. AUG. 24. 29. 31. SEPT. 1. (1950) JAN. 11. JULY 28. AUG. 24. (1951) FEB. 19.
 MAR. 1. 13. 20. 23. 28. APRIL 2. 6. 12. 18. 24. MAY 1. 4. 9. 11. 17. 21. 24. 25. 29. 31. JUNE 1. 4. 5. 6. 8. 19. 20. 22. JULY 20. 23.
 During erection on board vessel - - -
 Total No. of visits 46.

Dates of Examination of principal parts—Cylinders 1-6-51 Slides 20-7-51 Covers 1-6-51
 Pistons 20-7-51 Piston Rods 20-7-51 Connecting rods 20-7-51
 Crank shaft 20-7-51 Thrust shaft 20-7-51 Intermediate shafts 11-5-51
 Tube shaft / Screw shaft 20-7-51 Propeller 20-7-51
 Stern tube 19-6-51 Engine and boiler seatings / Engines holding down bolts /
 Completion of fitting sea connections / Boilers fixed / Engines tried under steam /
 Completion of pumping arrangements / Thickness of adjusting washers /
 Main boiler safety valves adjusted / Crank shaft material SMS Identification Mark 110405 CNN 18672 29/7/51 Thrust shaft material SMS Identification Mark 110405 CNN 18672 29/7/51
 Intermediate shafts, material SMS Identification Marks 110405 CNN 18672 11/5/51 Tube shaft, material / Identification Mark /
 Screw shaft, material SMS Identification Mark 110405 CNN 18672 20/7/51 Steam Pipes, material SDS Test pressure / Date of Test /
 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 /
 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 400 If so, state name of vessel GRK FE N° 24395

General Remarks (State quality of workmanship, opinions as to class, &c.)
 This engine has been constructed under special survey in accordance with the Rules and approved plans. The materials & workmanship are sound & good. The engine & boilers complete with steam pipes (flanges loose) all valves, cocks & pumps have been shipped to VIZAGAPATAM to be installed in the vessel. This machinery will be eligible in my opinion to be Classed in the Society's Register Book with Record + LMC with date and Notation Screw Shaft CL. 3 SBs 220 lbs) °10. when the installation is completed. Certificate commensurate to this engine and 796 to follow will be forwarded on completion of the contract

4/59 /179-16-0
 The amount of Entry Fee ... £ 142 : 16-8 :
 Special ... £ : :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 16th AUG. 1951.
 When received, 19.

Charles J. Hunter
 Engineer Surveyor to Lloyd's Register of Shipping.

Date GLASGOW 21 AUG 1951

FRI 28 NOV 1951

Committee's Minute

Deferred for completion // See F.E. mch rpt Cal 15829

