

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

No. 13506

Date of writing Report 19 When handed in at Local Office 19 Port of Calcutta - 5 JAN 1949  
 No. in Survey held at Vizagapatam Date, First Survey 16-1-48 Last Survey 20-10-1948  
 Reg. Book. on the "JALASHA" (Number of Visits " )  
 Built at Vizagapatam By whom built The Scindia Steam Nav. Co. Ltd Yard No. VC. 101 Tons { Gross 5102  
 Engines made at Greenock By whom made J. C. Kincaid When built 1948  
 Boilers made at Greenock By whom made J. C. Kincaid Engine No. 739 When made 1945  
 Registered Horse Power Owners The Scindia Steam Nav. Co. Ltd Boiler No. 2324 When made 1945  
 Nom. Horse Power as per Rule 524 Is Refrigerating Machinery fitted for cargo purposes no Port belonging to Bombay  
 Trade for which Vessel is intended Foreign going Is Electric Light fitted Yes

## ENGINES, &c.—Description of Engines

Dia. of Cylinders Length of Stroke No. of Cylinders Revs. per minute  
 Crank shaft, dia. of journals as per Rule Length of Stroke No. of Cranks  
 as fitted Crank pin dia. Crank webs Mid. length breadth Thickness parallel to axis  
 Intermediate Shafts, diameter as per Rule as fitted Thrust shaft, diameter at collars as per Rule as fitted  
 Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted  
 Is the tube screw shaft filled with a continuous liner? Yes  
 Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per Rule as fitted  
 Is the after end of the liner made watertight in the propeller boss? 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? Yes  
 Is an approved Oil Gland or other appliance fitted at the after end of the tube? Yes

Propeller, dia. 17-6" Pitch 17-6" No. of Blades 4 Material C.I. whether Movable Yes Total Developed Surface 94 sq. feet  
 Length of Bearing in Stern Bush next to and supporting propeller 5-2"  
 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 2 - 7" x 9 1/2" x 21" Main Bilge Line { No. and size 2 - 4 1/2" x 24", 1 - 8" x 7" x 18", 1 - 7" x 6 1/2" x 15"  
 How driven Steam How driven Steam

Ballast Pumps, No. and size 1 - 8" x 7" x 18" Lubricating Oil Pumps, including Spare Pump, No. and size  
 Are two independent means arranged for circulating water through the Oil Cooler? Yes  
 Bilge Pumps;—In Engine and Boiler Room 4 - 3" (ER), 1 - 2" (stoke hold), 2 - 3" (stoke hold) Suctions, connected to both Main Bilge Pumps and Auxiliary  
 In Pump Room 4" Hold, 2 - 3", Tunnel well, 1 - 2 1/2" In Holds, &c. 4" Hold, 2 - 3", 4" Hold, 2 - 3 1/2", 4" Hold, 2 - 3"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 - 8" Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 No. and size 1 - 4 1/2" 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? Yes  
 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? Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate? Yes  
 What Pipes pass through the bunkers? Bilge and ballast How are they protected? Limber boards  
 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? Yes Is it fitted with a watertight door? Yes worked from Bilge & stoke hold

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 7563  
 Is Forced Draft fitted? Yes No. and Description of Boilers 3 - S.E. Cylindrical Working Pressure 220 lbs  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Attached  
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? Yes

PLANS. Are approved plans forwarded herewith for Shafting retained Main Boilers retained Auxiliary Boilers Yes Donkey Boilers Yes  
 (If not state date of approval) General Pumping Arrangements retained Oil fuel Burning Piping Arrangements Yes  
 Superheaters Yes

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

The foregoing is a correct description,  
 For The Scindia Steam Navigation Co. Ltd.  
 James S. Campbell  
 Chief Shipyard Manager.



004900-004905-0138

During progress of work in shops - -  
 16-1-48 ✓  
 During erection on board vessel - - -  
 13 } 23-48 ✓  
 14 } 19 & 20 Aug. 1948 ✓  
 19 & 20 Oct. '48 ✓  
 Total No. of visits Eleven (11)

Dates of Examination of principal parts—Cylinders ✓ Slides ✓ Covers ✓  
 Pistons ✓ Piston Rods ✓  
 Crank shaft ✓ Thrust shaft ✓  
 Tube shaft ✓ Screw shaft 13-3-48 Intermediate shafts ✓  
 Stern tube 16-2-48 Engine and boiler seatings 19-8-48 Propeller 13-3-48  
 Completion of fitting sea connections 16-1-48 Engines holding down bolts 19-8-48  
 Completion of pumping arrangements 7-10-48 Boilers fixed 21-9-48 Engines tried under steam 6-10-48  
 Main boiler safety valves adjusted 6-10-48 Thickness of adjusting washers P.B.L.R. SV. 3/8", Cent. Pl. SV. 3/8", S.B. Pl. SV. 3/8"  
 Crank shaft material ✓ Identification Mark ✓ Thrust shaft material ✓ Identification Mark ✓  
 Intermediate shafts, material ✓ Identification Marks ✓ Tube shaft, material ✓ Identification Mark ✓  
 Screw shaft, material ✓ Identification Mark ✓ Steam Pipes, material S.D.S. Test pressure 660 lbs Date of Test 29-7-48  
 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 Yes If so, state name of vessel "Jalakrishna"

**General Remarks** (State quality of workmanship, opinions as to class, &c.)  
 The machinery of this vessel has been installed under Special Survey in accordance with Rule Requirements and approved plans. The materials and workmanship are sound and good. Upon completion of the installation the main boiler was subjected to an accumulation test in accordance with the Rules and the safety valves adjusted under steam for a working pressure of 220 lbs sq. in. Finally, the main and auxiliary machinery was tried under full working conditions with satisfactory results. This machinery is eligible in my opinion to be classed in the Register Book with the notation of LMC 10, 48 and record of CL 3, 48. Anterior Certificate issued, copy attached hereto. Classification Certificates in 'duplicate' are requested.

YIZRQPATAM OFFICE.

Certificate to be sent to

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

The amount of Entry Fee ... £	When applied for,
Special Survey (1st) £ 820/- Rs.	19
Donkey Boiler Fee ... £	When received,
Travelling Expenses (if any) £ 785/- Rs.	19

F. E. Fitchard  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
 Assigned + LMC 10.48  
 3 lb, 220 lb F. D. C. L.