

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

2 SEP 1948

Received at London Office

Date of writing Report 17-8-48 When handed in at Local Office 28-8-48 Port of GLASGOW

No. in Survey held at PAISLEY Date, First Survey 14th May 1947 Last Survey 13-8-1948  
 (Number of Visits 41)

48 on the SS "KUTUBTARI" Tons { Gross \_\_\_\_\_ Net \_\_\_\_\_

built at BOMBAY By whom built SCINDIA STEAM NAVIGATION CO. LD Yard No. \_\_\_\_\_ When built \_\_\_\_\_

Engines made at PAISLEY By whom made MCKIE & BAXTER Engine No. 1380 When made 1948

Boilers made at GREENOCK By whom made JOHN KINCAID & CO Boiler No. 483 When made 1948

Registered Horse Power \_\_\_\_\_ Owners SCINDIA STEAM NAVIGATION CO. LD Port belonging to BOMBAY

Norm. Horse Power as per Rule 67 Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted -

Trade for which vessel is intended \_\_\_\_\_

ENGINES, &c.—Description of Engines TRIPLE EXPANSION Revs. per minute 230

Dia. of Cylinders 10 1/2" - 17" - 28" Length of Stroke 18" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 5.31 as fitted 5 7/16 Crank pin dia. 5 7/16 Crank webs Mid. length breadth 10 1/4" Thickness parallel to axis 3 3/4"  
 as per Rule 5.06 as fitted 5 1/8 Mid. length thickness 3 3/4" shrunk Thickness around eye-hole 2 13/32"

Intermediate Shafts, diameter as per Rule 5.31 as fitted 5 1/8 Thrust shaft, diameter at collars as per Rule 5.31 as fitted 5 1/2"

Tube Shafts, diameter as per Rule 5.42 as fitted 5 7/8, 5 1/2 (F) Is the NO shaft fitted with a continuous liner { screw }

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 ✓  
 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 ✓

Propeller If so, state type NEWARK Length of Bearing in Stern Bush next to and supporting propeller 2'-0"

Propeller, dia. 5'-6" Pitch 6'-5 1/2" No. of Blades 4 Material BRONZE whether Moveable SOLID Total Developed Surface 11.5 sq. feet

Feed Pumps worked from the Main Engines, No. 1 Diameter 2 1/4" Stroke 9" Can one be overhauled while the other is at work ✓

Bilge Pumps worked from the Main Engines, No. 1 Diameter 2 1/4" Stroke 9" Can one be overhauled while the other is at work ✓

Feed Pumps { No. and size \_\_\_\_\_ How driven \_\_\_\_\_ Pumps connected to the Main Bilge Line { No. and size \_\_\_\_\_ How driven \_\_\_\_\_

Ballast Pumps, No. and size \_\_\_\_\_ Lubricating Oil Pumps, including Spare Pump, No. and size \_\_\_\_\_

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 1470 ft<sup>2</sup>

Which Boilers are fitted with Forced Draft NO Which Boilers are fitted with Superheaters \_\_\_\_\_

No. and Description of Boilers 1-SE Working Pressure 180 lbs / sq. in.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? NO

IS A DONKEY BOILER FITTED? - If so, is a report now forwarded? -

Can the donkey boiler be used for other than domestic purposes \_\_\_\_\_

PLANS. Are approved plans forwarded herewith for Shafting 18-3-47 Main Boilers \_\_\_\_\_ Auxiliary Boilers ✓ Donkey Boilers ✓  
 (If not state date of approval) 21-3-47

Superheaters ✓ General Pumping Arrangements ✓ Oil fuel Burning Piping Arrangements ✓

## SPARE GEAR.

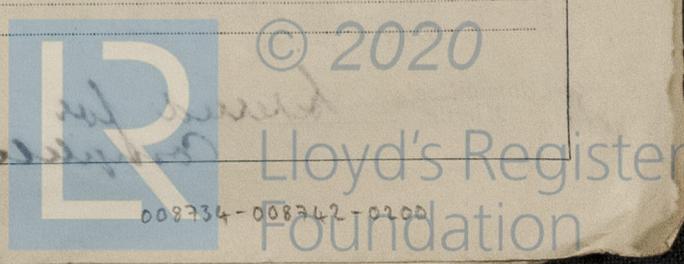
Has the spare gear required by the Rules been supplied? YES

State the principal additional spare gear supplied \_\_\_\_\_

The foregoing is a correct description of the machinery of the vessel.

MCKIE & BAXTER, LIMITED Manufacturer.

Director



4/73171.

Dates of Survey while building

During progress of work in shops - - { 1947. May 14, Jun 3, 6, 16, July 2, 15, Sept 2, 17, Oct 7, 10, 14, 22, 28, 31, Nov 13, 19, Dec 11, 15, 24.  
1948. Jan 21, 29, Feb 6, 12, 27, Mar 4, 11, 19, 30, Apr 5, 7, 9, 15, 29, May 11, 18, 20, Jun 17, July 5, 28, Aug 13.

During erection on board vessel - - - {

Total No. of visits. ....

Dates of Examination of principal parts - Cylinders 6-9-2-48 Slides 6-2-48 Covers 6-2-48

Pistons 31-10-47 Piston Rods 3-6-47 Connecting rods 16-6-47

Crank shaft 20-5-48 Thrust shaft 19-11-47 Intermediate shafts 3-6-47

Tube shaft ✓ Screw shaft 28-5-48 Propeller 28-5-48

Stern tube 20-5-48 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 O.H. STEEL Identification Mark LLOYDS No 16203 Thrust shaft material O.H. STEEL Identification Mark LLOYDS No 16203

Intermediate shafts, material O.H. STEEL Identification Marks LLOYDS No 16203 Tube shaft, material - Identification Mark -

Screw shaft, material O.H. STEEL Identification Mark LLOYDS No 16203 Steam Pipes, material - Test pressure 140 LBS HP 40" 8-7-48 Date of Test -

Is an installation fitted for burning oil fuel - 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. No If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, &c. These engines, condenser, shafting & stern tube, have been constructed under Special Survey, in accordance with the Rule Requirements & approved plan. The materials & workmanship are good. These parts have been dispatched to Bombay, for installation in Messrs. Scindia Steam Navigation Co Ltd Yard No - 55. "KUTUBTARI".

Certificate to be sent to

The amount of Entry Fee ... £ : : When applied for, 31 AUG 1948

Special 2/5<sup>THS</sup> ... £ 8 : - : When received, 19

Donkey Boiler Fee ... £ : : 19

Travelling Expenses (if any) £ : : 19

R. J. Eastledge  
Engineer Surveyor to Lloyd's Register of Shipping.

Date GLASGOW 31 AUG 1948 FRI. 12 AUG 1948

Approved for Completion

