

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 10 MAR 1930

Date of writing Report 12/2/30 When handed in at Local Office 12/2/30 Port of SINGAPORE  
 No. in Survey held at SINGAPORE Date, First Survey Oct 22-29 Last Survey Jan 21 1930  
 Reg. Book. on the Steel Side Paddle Train Ferry J.J. II. (Number of Visits 3)  
 Built at Leith By whom built H. Robb Ltd Yard No. 141 When built 1929  
 Engines made at Glasgow By whom made McKie & Baxter Engine No. 1244 when made 1929  
 Boilers made at " By whom made A. Anderson & Sons Ltd Boiler No. 3047 when made 1929  
 Registered Horse Power — Owners Sir John Jackson (Eng) Ltd Port belonging to Singapore  
 Nom. Horse Power as per Rule 62 Is Refrigerating Machinery fitted for cargo purposes — Is Electric Light fitted —

Tons { Gross 309.9  
 Net 164.68

## ENGINES, &c.—Description of Engines

Diagonal Compound Paddle

Dia. of Cylinders  Length of Stroke  Revs. per minute  No. of Cylinders  No. of Cranks   
 Dia. of Crank shaft journals  as per rule  Dia. of Crank pin  Crank webs  Mid. length breadth  Thickness parallel to axis   
 as fitted  Mid. length thickness  shrunk: Thickness around eye-hole   
 Diameter of Thrust shaft under collars  as per rule  Diameter of Tunnel shaft  as per rule  Diameter of Screw shaft  as per rule  Is the Screw shaft fitted with a continuous liner the whole length of the stern tube  Is the after end of the liner made watertight in the propeller boss   
 If the liner is in more than one length are the joints burned  If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with 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 appliance fitted at the after end of the shaft to permit of it being efficiently lubricated   
 Length of Stern Bush  Diameter of Propeller   
 Pitch of Propeller  No. of Blades  State whether Moveable  Total Surface  square feet.  
 No. of Feed Pumps fitted to the Main Engines one Diameter of ditto 2 1/2" Stroke 10 1/2" Can one be overhauled while the other is at work   
 No. of Bilge Pumps fitted to the Main Engines one Diameter of ditto 2 1/2" Stroke 10 1/2" Can one be overhauled while the other is at work   
 Total number and size of power driven Feed and Bilge Auxiliary Pumps one 4 1/2" x 2 3/4" x 4" Dawson & Downie  
 No. and size of Pumps connected to the Main Bilge Line Main bilge & above pump  
 No. and size of Ballast Pumps  No. and size of Lubricating Oil Pumps, including Spare Pump   
 Are two independent means arranged for circulating water through the Oil Cooler  No. and size of suction connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room Three 2" dia and in Holds, &c. Winch room (fat soft) one 2" dia. Hold - Two 2" dia - Accommodation Two 2" dia.

No. and size of Main Water Circulating Pump Bilge Suctions one 3 1/2" dia No. and size of Donkey Pump Direct Suctions to the Engine Room Bilges one 2 1/2" dia 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 connections with the sea direct on the skin of the ship  Yes Are they 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 Discharge Pipes above or below the deep water line 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 are carried through the bunkers Bilge How are they protected wood casings  
 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 Screw Shaft Tunnel watertight  Is it fitted with a watertight door  worked from

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 920 sq ft  
 Is Forced Draft fitted No No. and Description of Boilers Two Low Marine Working Pressure 150 lbs sq. in.  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED?  2 docs B.  
 IS A DONKEY BOILER FITTED?  If so, is a report now forwarded?

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

SPARE GEAR. State the articles supplied:— See Glasgow report 49463.

The foregoing is a correct description,

Manufacturer.



THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

During progress of work in shops -- }  
 Dates of Survey while building }  
 During erection on board vessel --- }  
 Total No. of visits 9

Oct 22<sup>nd</sup> - Nov 1<sup>st</sup> - 12<sup>th</sup> - 25<sup>th</sup> - Dec 23<sup>rd</sup> - Jan 4<sup>th</sup> - 7<sup>th</sup> - 14<sup>th</sup> - 21<sup>st</sup>.

Dates of Examination of principal parts - Cylinders ✓ Slides ✓  
 Covers ✓ Pistons ✓ Rods ✓  
 Connecting rods ✓ Crank shaft ✓ Thrust shaft ✓  
 Tunnel shafts ✓ Screw shaft ✓ Propeller ✓  
 Stern tube ✓ Engine and boiler seatings Dec 23<sup>rd</sup> Engines holding down bolts Dec 23<sup>rd</sup>  
 Completion of pumping arrangements Jan 4<sup>th</sup> Boilers fixed Dec 23<sup>rd</sup> Engines tried under steam Jan 21<sup>st</sup>  
 Completion of fitting sea connections Jan 4<sup>th</sup> Stern tube ✓ Screw shaft and propeller ✓  
 Main boiler safety valves adjusted Jan 21<sup>st</sup> Thickness of adjusting washers  $P\frac{1}{4} - S\frac{1}{4}$   $P\frac{1}{4} - S\frac{1}{4}$   
 Material of Crank shaft ✓ Identification Mark on Do. ✓  
 Material of Thrust shaft ✓ Identification Mark on Do. ✓  
 Material of Tunnel shafts ✓ Identification Marks on Do. ✓  
 Material of Screw shafts ✓ Identification Marks on Do. ✓  
 Material of Steam Pipes S.D. Bothie Test pressure 300 lbs. Date of Test Dec 23<sup>rd</sup>  
 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 carrying and burning oil fuel been complied with ✓  
 Is this machinery duplicate of a previous case Yes If so, state name of vessel J. J. 10.

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Boilers, Main & Aux Machinery with their pipes & connections have been erected in this vessel in accordance with the approved plans & Secretary's letter June 19<sup>th</sup> 1929.

The main & auxiliary machinery tested under working conditions & found satisfactory. Safety valves adjusted under steam.

The machinery of this vessel is now eligible in my opinion to be classed in the Register Book with record of +L.M.C. 1, 30.

It is submitted that this vessel is eligible for THE RECORD. +L.M.C. 1, 30.  
 J. H. Mather  
 14/3/30

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

The amount of Entry Fee ... £	: 14	When applied for,
Special ...	\$ 116	8/2/19 30
Donkey Boiler Fee ... £	: 04	When received,
Travelling Expenses (if any) \$	27	19

J. H. Mather  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 18 MAR 1930  
 Assigned +L.M.C. 1, 30

CERTIFICATE WRITTEN

