

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office.

18 AUG 1943

Date of writing Report **24th April 1943** When handed in at Local Office **19** Port of **TORONTO, CANADA**
 No. in Survey held at **TORONTO, CANADA** Date, First Survey **12th Feb.** Last Survey **30th March 1943**
 Reg. Book. (Number of Visits **23**)
 on the **10,000-ton Cargo Vessel. S.S. "FORT CAPOT RIVER"** Tons {Gross **7127.58**
 Net **4246.28**
 Built at **North Vancouver, B.C.** By whom built **North Van Ship Repairs, Ltd.** Yard No. **124.** When built
 Engines made at **Toronto, Ont.** By whom made **John Inglis Co. Ltd.** Engine No. **267 M68** When made
 Boilers made at By whom made Boiler No. When made
 Registered Horse Power Owners **Wartime Merchant Shipping Ltd.** Port belonging to
 Nom. Horse Power as per Rule **504** Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted **Yes**
 Trade for which Vessel is intended

ENGINES, &c.—Description of Engines **Triple Expansion Superheat 575°F.** Revs. per minute **76**
 Dia of Cylinders **24.5"x37"x70"** Length of Stroke **48"** No. of Cylinders **3** No. of Cranks **3** **9"HP.MP**
 as per Rule **13.98** Mid. length breadth **24.5** Thickness parallel to axis **9.5" LP.**
 Crank shaft, dia. of journals as fitted **14.25** Crank pin dia. **14.25** Crank webs Mid. length thickness **shrunken** Thickness around eye-hole **7 1/8" Pin**
 Intermediate Shafts, diameter as per Rule **13.98** Thrust shaft, diameter at collars as per Rule **13.98** as fitted **14.25** **7 5/8" Jour.**
 Tube Shafts, diameter as per Rule **13.98** Screw Shaft, diameter as per Rule **14.25** Is the {tube} shaft fitted with a continuous liner { }
 as fitted **14.25** as fitted **14.25**
 Bronze Liners, thickness in way of bushes as per Rule **13.98** Thickness between bushes as per Rule **14.25** Is the after end of the liner made watertight in the
 as fitted **14.25** as fitted **14.25**
 Propeller boss 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 **Yes** Is an approved Oil Gland or other appliance fitted at the after end of the tube **Yes**
 Shaft **Yes** If so, state type **Yes** Length of Bearing in Stern Bush next to and supporting propeller **Yes**
 Propeller, dia. **Yes** Pitch **Yes** No. of Blades **Yes** Material **Yes** whether Moveable **Yes** Total Developed Surface **Yes** sq. ft.
 Feed Pumps worked from the Main Engines, No. **None** Diameter **Yes** Stroke **Yes** Can one be overhauled while the other is at work **Yes**
 Bilge Pumps worked from the Main Engines, No. **2** Diameter **4.5"** Stroke **26"** Can one be overhauled while the other is at work **Yes**
 Feed (No. and size **Two 10"x7"x24" 4000 Imp. Gallons** Pumps connected to the { No. and size **Yes**
 pumps {How driven **Independent** Main Bilge Line { How driven **Yes**
 Ballast Pumps, No. and size **Yes** Lubricating Oil Pumps, including Spare Pump, No. and size **Yes**
 Are two independent means arranged for circulating water through the Oil Cooler **Yes** Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room **Yes**
 In Pump Room **Yes** In Holds, &c. **Yes**

Main Water Circulating Pump Direct Bilge Suctions, No. and size **Yes** Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **Yes**
 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 **Yes**
 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 **Yes** How are they protected **Yes**
 What pipes pass through the deep tanks **Yes** 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 **Yes**

MAIN BOILERS, &c.—(Letter for record **S**) Total Heating Surface of Boilers **7140 Sq. Ft. (3 Boilers)**
 Which Boilers are fitted with Forced Draft **All three boilers** Which Boilers are fitted with Superheaters **All three boilers**
 No. and Description of Boilers **Three Scotch Marine** Working Pressure **220 lbs. per sq. in.**
IS A REPORT ON MAIN BOILERS NOW FORWARDED? No.
IS A DONKEY BOILER FITTED? No. If so, is a report now forwarded?
 Can the donkey boiler be used for domestic purposes only **Yes**
 PLANS. Are approved plans forwarded herewith for Shafting **N.E.M.No.694 6 Oct.1941 N.Y.** Main Boilers **John S.** Auxiliary Boilers **Yes** Donkey Boilers **Yes**
 (If not state date of approval) **Approval 15.11.40 Heck per C.M.** Oil fuel Burning Piping Arrangements **Yes**
 Superheaters **Yes** General Pumping Arrangements **Yes**

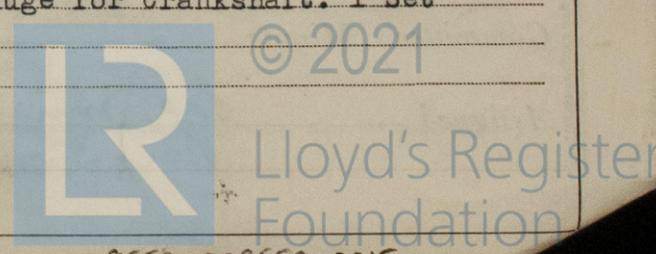
SPARE GEAR.

Has the spare gear required by the Rules been supplied **Yes.**
 State the principal additional spare gear supplied **1 set Piston rings and Springs for HP MP and LP Pistons and HP Piston-Valve, top and bottom, 1 set of pads for ahead face of Thrust Bearing, 2 Bottom end Bolts and Nuts, Top end Bolts & Nuts, 2 Main Bearing Bolts & Nuts, 6 Coupling Bolts & Nuts, 1 Bottom end Bearing (2 Halves) 2 Pairs Top end Bearings, 1 Set Bottom End Bearing Liners, 1 Set Metallic Packing for P. MP. LP, Piston Rods & Valve Spindles. 1 Set (6) Air Pump Head Valve Discs (Top & Bottom) 4 Pressure Glasses, 4 Springs, 4 Guide Rings, 8 Gaskets, 1 Pump Unit complete for Lubricator. 1 Glycerine Gun, 1 Valve & Seat for S.D.N.R. Valve & Lift Valve on Suc. & Disch. Chests, 3 Carrying Bars for Crossheads, 1 lifting bar for Main Bearings, 1 Wear down Gauge for Crankshaft. 1 Set Spanners & Wrenches as per Specification.**

The foregoing is a correct description

The John Inglis Company Limited
 Date **May 3/43** By **John McKenzie**

Manufacturer.



Feb. 12, 19, 22, Mar. 2, 3, 5, 6, 8, 10, 11, 12, 13, 15, 16, 17, 19, 20, 22, 24, 25, 26, 27, 30

Dates of Survey while building
 During progress of work in shops - -
 During erection on board vessel - - -
 Total No. of visits 23.

Dates of Examination of principal parts — Cylinders HP 19.2.43 Slides HP 19.2.43
 MP 12.2.43 Covers MP 12.2.43
 LP 22.2.43 LP 22.2.43
 Pistons 25.3.43 Piston Rods 24.3.43 Connecting rods 20.3.43
 Crank shaft 5.3.43 Thrust shaft 3.3.43 Intermediate shafts -
 Tube shaft - Screw shaft - Propeller -
 Stern tube - Engine and boiler seatings - Engines holding down bolts -
 Completion of fitting sea connections -
 Completion of pumping arrangements - Boilers fixed - Engines tried under steam -
 Main boiler safety valves adjusted - Thickness of adjusting washers -
 Crank shaft material O.H. Steel Identification Mark LLOYDS 5321C I.J.T.26.11.42 Thrust shaft material O.H. Steel Identification Mark LLOYDS 2060 E.E.R.12.2.43
 Intermediate shafts, material - Identification Marks LLOYDS 4687B. .C.H.W.30.9.42 Tube shaft, material - Identification Mark J.B.F.3.3.43
 Screw shaft, material - Identification Mark - Steam Pipes, material - Test pressure - 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 - Yes If so, state name of vessel N.E.M. TYPE

General Remarks (State quality of workmanship, opinions as to class, &c.) The Main Engine was built under the Special Survey of the Society's Surveyors to the requirements of the Rules and in accordance with the approved plans.

The workmanship was good and the materials were made at an approved works and tested as required by the Rules to the satisfaction of the Society's Surveyors.

In my opinion this main engine is eligible to be classed in the Society when satisfactorily installed and tried under steam to the satisfaction of the Society's Surveyors.

Forging Reports Nos. 1435, 1511, 1473, 1983, 1654, 1264, 5165, 5321, 4844 are attached hereto
 Thrust Shaft LLOYDS 2060 E.E.R.12.2.43 J.B.F.3.3.43. was examined in finished condition and found satisfactory.

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

The amount of First Entry Fee ...	£ 30.00	: } When applied for,
Special Survey...	£267.00	
Donkey Boiler Fee ...	£ :	: } When received,
Travelling Expenses (if any) £	10.00	

Jas B Sadler
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 7 SEP 1943

Assigned see minute on Va J.B. Rpl

