

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office **19 JAN 1944**

Date of writing Report **Nov. 5th, 1942.** When handed in at Local Office **19** Port of **TORONTO, CANADA.**

No. in Survey held at **Toronto, Canada** Date, First Survey **Sept. 18th,** Last Survey **Oct. 30th, 1942.**
 Reg. Book. (Number of Visits **26**) Gross **7134.05**
 on the **10,000-ton Cargo Vessel "FORT RAMPART"** Tons Net **4243.98**

Built at **Vancouver, B.C.** By whom built **West Coast Shipbuilders Ltd.** Yard No. **113** When built **1942**

Engines made at **Toronto, Ontario** By whom made **John Inglis Co. Ltd.** Engine No. **134-M53** When made **1942**

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**

Crank shaft, dia. of journals as per Rule **13.98** Crank pin dia. **14.25** Crank webs Mid. length breadth **24.5** Thickness parallel to axis **9"HP.MP.**
 as fitted **14.25** Mid. length thickness shrunk Thickness around eye-hole **9.5"LP, 1/8"Pin**

Intermediate Shafts, diameter as per Rule Thrust shaft, diameter at collars as per Rule **13.98 (7 5/8"Journal)**
 as fitted Thickness around eye-hole **14.25**

Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule Is the {tube} shaft fitted with a continuous liner {
 as fitted as fitted as fitted

Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the
 as fitted as fitted as fitted 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

shaft If so, state type Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch No. of Blades Material whether Moveable Total Developed Surface sq. ft.

Feed Pumps worked from the Main Engines, No. **None** Diameter Stroke Can one be overhauled while the other is at work

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
 Pumps (How driven) **Independent** Main Bilge Line { 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 to both 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 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 **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 **N.E.M. No.694 6 Oct.1941 NY**

PLANS. Are approved plans forwarded herewith for Shafting **Lloyds** Main Boilers **John S. Heak** Auxiliary Boilers **Donkey Boilers**
 (If not state date of approval) Approval **15.11.40** per **C.M.**

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 **1 set Piston rings and springs for H.P. M.P. & L.P. Pistons & H.P.**

Piston Valve, top and bottom. **1 set of pads for ahead face of Thrust Bearing, 2 Bottom end Bolts and**

Nuts, 4 top end Bolts and Nuts, 2 Main Bearing Bolts and Nuts, 6 coupling Bolts and Nuts, 1 bottom

end Bearing (2 halves), 2 pairstop end Bearings, 1 set bottom end Bearing Liners, 1 set Metallic

Packing for H.P. M.P. L.P. Piston Rods and Valve Spindles, 1 set (6) Air Pump Head Valve Discs (top

and Bottom), 4 pressure glasses, 4 springs, 4 guide rings, 8 gaskets, 1 Pump unit complete for

Lubricator, 1 Glycerine gun, 1 Valve and seat for S.D.N.R. Valve and Lift Valve on Suc. and Disch.

Chests, 3 carrying bars for Crossheads, 1 lifting bar for Main Bearings, 1 wear down Gauge for

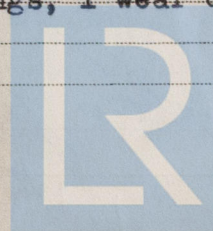
Crankshaft, 1 set Spanners and Wrenches as per specification.

The foregoing is a correct description

The John Inglis Company Limited

Date Nov. 9/42 (Sgd) Jas. McKenzie.

Manufacturer.



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Lloyd's Register

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Dates of Survey while building
During progress of work in shops - Sept. 18, 19, 21, 24, 26, 28, 29, 30.
During erection on board vessel - Oct. 2, 3, 5, 7, 10, 12, 13, 14, 15, 17, 20, 22, 23, 24, 26, 27, 28, 30.
Total No. of visits 26

Dates of Examination of principal parts - Cylinders H.P. 28.9.42 M.P. 21.9.42 L.P. 17.9.42 Slides H.P. 28.9.42 M.P. 21.9.42 L.P. 17.9.42 Covers H.P. 28.9.42 M.P. 21.9.42 L.P. 17.9.42
Pistons 22.10.42 Piston Rods 26.10.42 Connecting rods 17 and 20.10.42
Crank shaft 29.9.42 Thrust shaft 13.10.42 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 - LLOYDS 3709B
Crank shaft material O.H. Steel Identification Mark IJT. 26.5.42 Thrust shaft material O.H. Steel Identification Mark 8602
Intermediate shafts, material Identification Marks LLOYDS 3928A IJT 4.6.42 A.S. 10.9.42
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.

Forgings reports Nos. 7074, 3709, 3924C, 3441D, 6949, 7009, 8024, 4695, and 8005 are attached hereto.

Thrust Shaft LLOYDS 8602 A.S. 10.9.42, J.B.F. 13.10.42 was examined in finished condition and found satisfactory.

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.

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	25.1. 43 RR
	Donkey Boiler Fee	£	:	When received,
	Travelling Expenses (if any)	£	10.00	✓ 19. VCR.

Gas B Lutter
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
Assigned Lee fe mach, rpt.
FRI. 28 JAN 1944



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