

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office **26 JUN 1945**

Date of writing Report **Apr. 18th 1945** When handed in at Local Office **May 2nd, 1945** Port of **HALIFAX, Nova Scotia.**

No. in Survey held at **PICTOU, N. S.,** Date, First Survey **Nov. 20, 1944** Last Survey **Apr. 14th 1945**

Reg. Book **-** (Number of Visits **42**)

on the **S. S. "EVANGELINE PARK"** Tons **Gross 2895**
Net 1658

Built at **Pictou, N. S.,** By whom built **Foundation Maritime Ltd.,** Yard No. **21** When built **1944**

Engines made at **Three Rivers, Que.,** By whom made **Canada Iron Foundries Ltd.** Engine No. **2034** When made **1944**

Boilers made at **Lachine, Que.,** By whom made **Dominion Bridge Co. Ltd.,** Boiler No. **1421** P7 S7 When made **1944**

Registered Horse Power **-** Owners **CANADIAN GOVERNMENT** Port belonging to **Montreal**

Nom. Horse Power as per Rule **269** Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **Yes**

Trade for which Vessel is intended **OCEAN GOING.**

ENGINES, &c.—Description of Engines **TRIPLE EXPANSION - 3 CYLINDERS** Revs. per minute **72**

Dia. of Cylinders **20" 31" 55"** Length of Stroke **39"** No. of Cylinders **THREE** No. of Cranks **THREE**

Crank shaft, dia. of journals **as per Rule 10.99** Crank pin dia. **11.25"** Crank webs Mid. length breadth **16.25"** Thickness parallel to axis **6.875"**
as fitted 11.25" Mid. length thickness **6.875"** Thickness around eye-hole **4.75"**

Intermediate Shafts, diameter **as per Rule 11.47"** Thrust shaft, diameter at collars **as per Rule 10.99"**
as fitted 10.75" **as fitted 11.25"**

Tube Shafts, diameter **as per Rule -** Screw Shaft, diameter **as per Rule 11.78"** Is the ~~xxx~~ shaft fitted with a continuous liner **YES**
as fitted - **as fitted 12.25"**

Bronze Liners, thickness in way of bushes **as per Rule .657"** Thickness between bushes **as per Rule .493"** Is the after end of the liner made watertight in the
as fitted .6875" **as fitted .53125"** propeller boss **YES** 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 **NO** If so, state type **-** Length of Bearing in Stern Bush next to and supporting propeller **51.375"**

Propeller, dia. **15.75 ft** Pitch **14' 0"** No. of Blades **4** Material **BRONZE** whether Moveable **NO** Total Developed Surface **-** sq. ft.

Feed Pumps worked from the Main Engines, No. **2** Diameter **3"** Stroke **26"** Can one be overhauled while the other is at work **YES**

Bilge Pumps worked from the Main Engines, No. **2** Diameter **4.25"** Stroke **26"** Can one be overhauled while the other is at work **YES**

Feed Pumps (No. and size **Two 6" Simplex** Pumps connected to the (No. and size **Main Engine pumps and ballast pump**
(How driven **Indep't. Steam** Main Bilge Line (How driven **Main engine Indep't Steam.**

Ballast Pumps, No. and size **One Duplex 12" x 10"** 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 **Five 3" dia. & two bilge suction from dry tanks, under boilers.**

In Pump Room **-** In Holds, &c. **Nos. 1 & 2 - 3" dia. Nos. 3 & 4 - 2 1/2" dia.**

Main Water Circulating Pump Direct Bilge Suctions, No. and size **One - 6" dia. Independent Power Pump Direct Suctions to the Engine Room Bilges,**
No. and size **One - 6", One - 4"** 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 **VALVES**

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 **NONE** 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 **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 **NO** ~~xxxxxxx~~ **Perm. Closed**

MAIN BOILERS, &c.— (Letter for record **S**) Total Heating Surface of Boilers **3854 sq.ft.**

Which Boilers are fitted with Forced Draft **Port & Stbd.** Which Boilers are fitted with Superheaters **Port & Stbd.**

No. and Description of Boilers **Two multitubular Scotch type.** Working Pressure **200 lbs.**

IS A REPORT ON MAIN BOILERS NOW FORWARDED? **YES**

IS A DONKEY BOILER FITTED? **NO** If so, is a report now forwarded? **-**

Can the donkey boiler be used for domestic purposes only **-**

PLANS. Are approved plans forwarded herewith for Shafting **App. Lon. Main Boilers App. NewYk. Auxiliary Boilers - Donkey Boilers -**
(If not state date of approval)

Superheaters **-** General Pumping Arrangements **App. New York** Oil fuel Burning Piping Arrangements **-**
Drawings sent for "AVONDALE PARK"

SPARE GEAR.

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

State the principal additional spare gear supplied **One set packing wearing segments for all piston rods & valve spindles.**
25 Condenser tubes & 50 ferrules.
10 Plain boiler tubes, one furnace door & 2 ash pit doors & spare gear for forced draught fronts.

The foregoing is a correct description
FOUNDATION MARITIME LIMITED
R. F. Shaw
MANAGER

Manufacturer.



Dates of Survey while building
 During progress of work in shops - - -
 1944- Nov. 20, 21, 25, 27, Dec. 13, 22, 27, 28, 29. 1945 - Jan. 2, 3, 5, 6, 8, 9,
 During erection on board vessel - - -
 10, 11, 12, 13, 15, 16, 18, 19, 22, 24, 25, 26, 29, 30, 31. Feb. 1, 2, 3, 5, 6, Apr. 4,
 6, 9, 11, 13, 14
 Total No. of visits 41 During erection on board.

Dates of Examination of principal parts - Cylinders Slides Covers
 Pistons Piston Rods Connecting rods
 Crank shaft Thrust shaft 20-10-44 Intermediate shafts 3-1-45 & 13-10-44
 Tube shaft ✓ Screw shaft 20-10-44 Propeller 20-11-44
 Stern tube 21-11-44 Engine and boiler seatings 5-1-45 Engines holding down bolts 8-1-45
 Completion of fitting sea connections 10-11-44
 Completion of pumping arrangements 2-2-45 Boilers fixed 11-1-45 Engines tried under steam 1-2-45
 Main boiler safety valves adjusted 31-1-45 Thickness of adjusting washers Port Blr. P. 9/16" S. 5 15" Stb. Blr. P. 32" 13"
 Crank shaft material Webs Cast steel Identification Mark 3328 Thrust shaft material O.H. Steel Identification Mark 4468
 Intermediate shafts, material O.H. Steel Identification Mark 9098, 9009, 8964, 9325, 9008 Tube shaft, material Identification Mark
 Screw shaft, material O.H. Steel Identification Mark 8945 Steam Pipes, material Steel Test pressure 600 lbs. / sq. in. Date of Test 9-1-45
 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 NO 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 S.S. AVONDALE PARK
 General Remarks (State quality of workmanship, opinions as to class, &c.)

The boilers and machinery of this vessel have been installed on board under special survey and in accordance with the Approved Plans, Rule Requirements and Specification and special instructions received from Wartime Shipbuilding Limited.

The steam and feed pipes have been tested to Rule Requirements and found sound and tight. The boilers examined under steam and the safety valves adjusted to 200 lbs. per sq.in., in main valves and 205 lbs. per sq.in. superheater safety valves.

The materials and workmanship are of good quality and the main and auxiliary machinery, pumping arrangements, etc. have all been tried under full working conditions and found satisfactory.

In my opinion this machinery is suitable for the purpose intended and eligible for the notation +, L.M.C. 4, 45 and T.S. (c.l) 4, 45.

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	\$ 20.00	Mtl. a/c	When applied for,
Engines	\$ 200.00	"	May 2nd 1945.
Boilers	\$ 200.00	"	
Expenses	\$ 38.00	"	When received,
Installation Expenses	\$ 250.00		
Committee's Minute	\$ 35.00		

FRI. 15 JUN 1945

Jan. H. Navin
 Engineer Surveyor to Lloyd's Register of Shipping.

+ L.M.C. 4, 45 Spk.
 J.D. O.L.

