

pt. 4b. RECEIVED

REPORT ON OIL ENGINE MACHINERY

met. Rpt. No. 7016

Received at London Office

16 DEC 1946

Date of writing Report 28th Oct. 1946 when handed in at Local Office 29th Oct. 1946 Port of QUEBEC, Que.

No. in Reg. Book. Survey held at Quebec, Que. Date, First Survey 1st March Last Survey 22nd Oct. 1946 Continuous Attendance

88368 on the ~~Triple~~ ^{Single} Screw vessel M/V "MAYMERE" (ex "Ottawa Maymere") Tons { Gross 521.84 Net 253.86

built at Quebec, Que. By whom built St. Lawrence Metal & Marine Works Ltd No. 68 When built 1946

engines made at San Francisco By whom made Enterprise Eng. & Foundry Co. Engine No. 42201 When made 1944

monkey Boilers made at Amherst, N.S. By whom made Robb Engineering Works Ltd Boiler No. B1814/5 When made 1946

Indicated Horse Power 500 Owners Maymere Shipping Co. Port belonging to Montreal

nom. Horse Power as per Rule 112.3 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

made for which Vessel is intended Coastal Trade

OIL ENGINES, &c.—Type of Engines Vertical Diesel Engine 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 675 Diameter of cylinders 12" Length of stroke 15" No. of cylinders 8 No. of cranks 8

Mean Indicated Pressure 90 Is there a bearing between each crank Yes

Number of bearings, adjacent to the Crank, measured from inner edge to inner edge 12.125" Means of ignition Solid Injection of fuel used Diesel

Revolutions per minute 400 Flywheel dia. 33" Weight 1355 lbs Crank pin dia. 8" Crank Webs Mid length breadth 13-7/8" Thickness parallel to axis --

Crank Shaft, { Solid forged as per Rule --- as fitted 8 1/2" Crank pin dia. 8" Crank Webs Mid length thickness 3-1/8" Thickness around eyehole --

Intermediate Shafts, diameter as per Rule --- as fitted 8" Thrust Shaft, diameter at collars as per Rule --- as fitted 7"

Propeller Shaft, diameter as per Rule --- as fitted --- Screw Shaft, diameter as per Rule --- as fitted 6" Is the screw shaft fitted with a continuous liner No

Propeller 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 Yes

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner ---

When 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 Yes

If so, state type Newark Oil Gland Length of Bearing in Stern Bush next to and supporting propeller 25"

Propeller, dia. 60" Pitch 60" No. of blades Three Material Bronze Whether Moveable Fixed Total Developed Surface 9 sq. feet

Method of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication forced

Thickness of cylinder liners 51/64 Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with conducting material Lagged

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine ---

Number of Bilge Water Pumps, No. Two Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Number of Bilge Pumps worked from the Main Engines, No. One Diameter 1-1/2" Stroke Rotary Can one be overhauled while the other is at work ---

Number of Pumps connected to the Main Bilge Line { No. and Size Two x 7 1/2" x 5" x 10" How driven Steam

Is the cooling water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements ---

Number of Lubricating Pumps, No. and size One x 7 1/2" x 5" x 10" Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size One x 18 G.P.M. One x 24 G.P.M.

Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces Four x 2 1/2" In Pump Room ---

Number of Holds, &c. Two x 2" each hold, one x 2" each cofferdam

Number of Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One x 4", One x 1 1/2"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces 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 platform 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 ---

Do any pipes pass through the bunkers Heating Coils & Suction Pipes How are they protected ---

Do any pipes pass through the deep tanks Suction Pipes 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 --- Is it fitted with a watertight door --- worked from ---

On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork --- Belt from Main Air Compressors, No. One No. of Stages Two Diameters 4 1/2" & 2 1/2" Stroke 3 1/2" Driven by Main Eng.

Auxiliary Air Compressors, No. One No. of Stages Two Diameters 4 1/2" & 1 1/2" Stroke 4" Driven by Steam Engine

Small Auxiliary Air Compressors, No. --- No. of Stages --- Diameters --- Stroke --- Driven by ---

What provision is made for first Charging the Air Receivers Steam driven auxiliary compressor

Number of Scavenging Air Pumps, No. --- Diameter --- Stroke --- Driven by ---

Auxiliary Engines crank shafts, diameter as per Rule --- as fitted --- Position ---

Have the Auxiliary Engines been constructed under special survey --- Is a report sent herewith ---

AIR RECEIVERS:—Have they been made under survey Yes State No. of Report or Certificate Nos. 4715, 4716, 4717

Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

Can the internal surfaces of the receivers be examined and cleaned Yes Is a drain fitted at the lowest part of each receiver Yes

Injection Air Receivers, No. -- Cubic capacity of each -- Internal diameter -- thickness --

Seamless, lap welded or riveted longitudinal joint -- Material -- Range of tensile strength -- Working pressure by Rules -- Actual Shell 5/16" Head 13/32"

Starting Air Receivers, No. Three Total cubic capacity 56.5 cu.ft. Internal diameter 22" thickness 27.6 Working pressure by Rules 250 Actual 28.1

Seamless, lap welded or riveted longitudinal joint Welded Material O.H. Steel Range of tensile strength 27.6 Working pressure 250

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

Is the donkey boiler intended to be used for domestic purposes only No - Auxiliary machinery steam driven

PLANS. Are approved plans forwarded herewith for Shafting 18/3/46 New York Receivers Separate Fuel Tanks --

(If not, state date of approval) Donkey Boilers -- General Pumping Arrangements -- Pumping Arrangements in Machinery Space 1/2/46 New York

Oil Fuel Burning Arrangements --

SPARE GEAR.

Has the spare gear required by the Rules been supplied Coastal Service

State the principal additional spare gear supplied --

The foregoing is a correct description of the work done.

Audiedeman 200-7-1946 Manufacturer.

Dates of Survey while building: During progress of work in shops --; During erection on board vessel 1st March to 22nd October, 1946; Total No. of visits Continuous Attendance

Dates of Examination of principal parts: Cylinders -- Covers -- Pistons -- Rods -- Connecting rods AB 28/8/46; Crank shaft AB 15/3/44 Flywheel shaft -- Thrust shaft -- Intermediate shafts 16/4/46 Tube shaft --; Screw shaft 12/12/45 Propeller 10/6/46 Stern tube 15/10/45 Engine seatings 20/5/46 Engines holding down bolts 8/7/46; Completion of fitting sea connections 17/6/45 Completion of pumping arrangements 16/10/46 Engines tried under working conditions 16/10/46; Crank shaft, Material Steel Identification Mark AB 2050 Flywheel shaft, Material -- Identification Mark --; Thrust shaft, Material Steel Identification Mark 30191-11-W Intermediate shafts, Material O.H. Steel Identification Marks 4716 F.D.; Tube shaft, Material -- Identification Mark -- Screw shaft, Material O.H. Steel Identification Mark A73 J.B.S.; Identification Marks on Air Receivers B1889D - 4715, B1889E - 4716, B1889F-- 4717 all 5/8/46 T.O.M.

Is the flash point of the oil to be used over 150° F. Yes

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with Yes

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 Not desired

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. The forgings for this Engine have been made and tested by the Surveyors to the American Bureau of Shipping (Copies of Certificates attached) and the completed engine shop tested by the United States Navy surveyor. (Copy of Certificate attached). This Main Engine has now been installed aboard this Vessel, opened up, examined, tested and closed in good order. The machinery has been tried out under full working conditions and found satisfactory. The workmanship and materials are good and sound. The Boiler Safety Valves have been adjusted under steam, tested for accumulation and thickness of washers noted. It is recommended for the favourable consideration of the Committee that this Vessel be classed in the Society's Register Book L.M.C. 10,46 and have notations T.S.(O.G.) & D.B. fitted for oil fuel 10,46 F.P. above 150° F. Subject to stand by lubricating oil pump being fitted on board at first opportunity.

The amount of Entry Fee £ 10.00 Special £ 20.00 Donkey Boiler Fee £ 0.00 Travelling Expenses (if any) £ 2.00

D. Galt Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute Feb. 4 JUN 1946 Assigned L.M.C. 10,46 Oil Eng. E made 44 fitted 46 DBS 10,46 S (O.G.) 10,46 WTDB 200/11

