

RECEIVED

a List of

Form 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 115261

Date of writing Report 3-7-1947 When handed in at Local Office 4 JUL 1947

Received at London Office 4 JUL 1947

No. in Survey held at eg. Book.

Lewesloft

Port of Sp Suich Date, First Survey 11 FEBRUARY 1947 Last Survey 2-7-1947 Number of Visits NINE

Single
on the ~~Fun~~ Triple } Screw vessel hutch launch "BOSTON MOSQUITO"
Quadruple } Tons { Gross
Net

Built at Lewesloft By whom built Richards Ironworks Ltd. Yard No. 373 When built 1947.
Engines made at Manchester By whom made Crossley Bros. Ltd. Engine No. 13300 When made 1947.
Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓
Brake Horse Power (300) 330 Owners Boston Deep Sea Fishing & Ice Co. Ltd. Port belonging to Lewesloft.
Nom. Horse Power as per Rule 97. Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes.
Made for which vessel is intended M.N. 105. Fishing purposes.

ENGINES, &c.—Type of Engines ✓ 2 or 4 stroke cycle ✓ Single or double acting ✓
Maximum pressure in cylinders ✓ Diameter of cylinders ✓ Length of stroke ✓ No. of cylinders ✓ No. of cranks ✓
Position of bearings, adjacent to the Crank, measured from inner edge to inner edge ✓ Is there a bearing between each crank ✓
Revolutions per minute ✓ Flywheel dia. ✓ Weight ✓ Means of ignition ✓ Kind of fuel used ✓
Crank Shaft, dia. of journals as per Rule ✓ as fitted ✓ Crank pin dia. ✓ Crank Webs Mid. length breadth ✓ Thickness parallel to axis ✓
Mid. length thickness ✓ shrunk ✓ Thickness around eyehole ✓
Flywheel Shaft, diameter as per Rule ✓ as fitted ✓ Intermediate Shafts, diameter as per Rule app. 4 7/8 ✓ Thrust Shaft, diameter at collars as per Rule ✓
as fitted ✓ Screw Shaft, diameter as per Rule app. 5 1/2" ✓ Is the screw shaft fitted with a continuous liner No ✓
as fitted ✓ Thickness between bushes as per rule ✓ as fitted ✓ Is the after end of the liner made watertight in the
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
If so, state type ✓ Not approved type ✓ Length of Bearing in Stern Bush next to and supporting propeller 22 3/4"
Propeller, dia. 62" ✓ Pitch 46" ✓ No. of blades 4 ✓ Material C.I. ✓ whether Moveable No ✓ Total Developed Surface 9 1/2 sq. feet
Method of reversing Engines ✓ Is a governor or other arrangement fitted to prevent racing of the engine when declutched ✓ Means of lubrication
Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves ✓ Are the exhaust pipes and silencers water cooled or lagged with
insulating material ✓ If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine ✓
Cooling Water Pumps, No. ✓ Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes ✓
Large Pumps worked from the Main Engines, No. ✓ Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓
Pumps connected to the Main Bilge Line { No. and Size One 4 1/4" x 3" ✓ One 20 ton. Cent. pump. ✓
How driven main engine. Aux. engine.
Ballast Pumps, No. and size One 20 tons Lubricating Oil Pumps, including Spare Pump, No. and size Change over cocks, if pump fails.
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 2-2 1/2" ✓ One 2" ✓ One 4" hand pump ✓ 2" suction.
Holds, &c. Fish Hold. One - 2" ✓ One - 4" hand pump. Forecath Space One 4" hand pump - 2" suction. After accommodation }
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One - 2 1/2" ✓ One 4" hand pump - 2" suction.
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. Both ✓
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. ✓
What pipes pass through the bunkers. None ✓ How are they protected. ✓
What pipes pass through the deep tanks. None ✓ 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
apartment to another. Yes ✓ Is the Shaft Tunnel watertight. None ✓ Is it fitted with a watertight door. ✓ worked from ✓
If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork. ✓
Main Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓
Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓
Small Auxiliary Air Compressors, No. One ✓ No. of stages Two ✓ Diameters 3 3/4" - 1 1/8" ✓ Stroke 3 1/4" ✓ Driven by Aux. engine ✓
Serving Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓
Auxiliary Engines crank shafts, diameter as per Rule ✓ as fitted ✓ See Manchester Report No 12877.

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule
Are the internal surfaces of the receivers be examined. What means are provided for cleaning their inner surfaces
Is there a drain arrangement fitted at the lowest part of each receiver.
High Pressure 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
Starting Air Receivers, No. Total cubic capacity Internal diameter thickness
Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules



005194-005209-0115

IS A DONKEY BOILER FITTED? *no* ✓

If so, is a report now forwarded? ✓

PLANS. Are approved plans forwarded herewith for Shafting *Line Shafting 12/19/46* Receivers ✓
(If not, state date of approval)

Separate Tanks *5-12-46*
10-1-47

Donkey Boilers ✓ *28-2-47* General Pumping Arrangements *6-11-46* Oil Fuel Burning Arrangements ✓

SPARE GEAR *0*

The foregoing is a correct description,
For **RICHARDS IRONWORKS Limited.**

Richards

Manufacturer.

Dates of Survey while building { During progress of work in shops - - }
{ During erection on board vessel - - } *1947: FEB 11-28 MAR 7-19 JUNE 5-16 26-30 JULY 2*
Total No. of visits *NINE*

Dates of Examination of principal parts—Cylinders ✓ Covers ✓ Pistons ✓ Rods ✓ Connecting rods ✓
Crank shaft ✓ Flywheel shaft ✓ Thrust shaft ✓ Intermediate shafts *28-2-47* Tube shaft ✓
Screw shaft *28-2-47* Propeller *28-2-47* Stern tube *28-2-47* Engine seatings *28-2-47* Engines holding down bolts *5-6-47*
Completion of fitting sea connections *28-2-47* Completion of pumping arrangements *2-7-47* Engines tried under working conditions *30-6-47*
Crank shaft, Material ✓ Identification Mark ✓ Flywheel shaft, Material ✓ Identification Mark ✓
Thrust shaft, Material ✓ Identification Mark ✓ Intermediate shafts, Material *Stal* Identification Marks *440 YDS. N° 383, 705*
Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material *Stal* Identification Mark *440 YDS N° 307, 705*

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 ✓
Is this machinery duplicate of a previous case *Yes* ✓ If so, state name of vessel *"BOSTON SPITFIRE"*

General Remarks (State quality of workmanship, opinions as to class, &c.)
The machinery, manufactured Reports L^o 12807 and 12877, has been efficiently fitted on board the vessel in accordance with the Rules Requirements & Secretarial letters. The materials & workmanship are of good description. The machinery has been examined under working conditions and found satisfactory & is eligible, in my opinion to be Classed + L.M.C. 6-47.

Certificate (if required) to be sent to
(The Surveys are requested not to write on or below the space for Committee's Minutes.)

The amount of Entry Fee ... £	:	:	When applied for,
Special <i>Lineally</i> <i>Installation</i> £ 10 : 10 : 0	:	:	<i>14 JUL 1947</i> 19
Donkey Boiler Fee ... £	:	:	When received,
Travelling Expenses (if any) £	:	:	19

Committee's Minute *REL. 29 AUG 1947*
Assigned *+ LMC 6,47 Oil Eng.*

