

REPORT ON OIL ENGINE MACHINERY.

No. 119121

Received at London Office

Date of writing Report 18-10-1949 When handed in at Local Office 25 Oct 1949 Port of IPSWICH.

No. in Survey held at LOWESTOFT. Date, First Survey 21 Nov 1948 Last Survey 6-10-1949. Reg. Book. Number of Visits 16

on the ^{Single} ~~Triple~~ ~~Quadruple~~ Screw vessel MOTOR TRAWLER "BOSTON SWALLOW" Tons ^{Gross} 156.64 _{Net} 60.34

Built at LOWESTOFT By whom built RICHARDS IRONWORKS LD. Yard No. 384 When built 1949

Engines made at MANCHESTER. By whom made CROSSLEY BROS. LD. Engine No. 13923A When made 1949

Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓

Brake Horse Power 400 Owners BOSTON DEEP SEA & ICE FISHING CO. LD. Port belonging to LOWESTOFT.

Nom. Horse Power as per Rule 117 ^{MN=126} Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES

Trade for which vessel is intended FISHING.

OIL 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 ✓

Span 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} ✓ ^{shrunk} Thickness parallel to axis ✓ ^{Mid. length thickness} ✓ Thickness around eyehole ✓

Flywheel Shaft, diameter ^{as per Rule} ✓ ^{as fitted} ✓ Intermediate Shafts, diameter ^{as per Rule} ✓ ^{as fitted} 4 7/8" Thrust Shaft, diameter at collars ^{as per Rule} ✓ ^{as fitted} ✓

Tube Shaft, diameter ^{as per Rule} ✓ ^{as fitted} ✓ Screw Shaft, diameter ^{as per Rule} ✓ ^{as fitted} 5 1/2" Is the tube screw shaft fitted with a continuous liner { No ✓

Bronze Liners, thickness in way of bushes ^{as per Rule} ✓ ^{as fitted} ✓ Thickness between bushes ^{as per Rule} ✓ ^{as fitted} 5" 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 ✓

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 projected between the liners ✓ Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft YES ✓ SEC. LETTER 15-B-48. Length of Bearing in Stern Bush next to and supporting propeller 23" ✓

Propeller, dia. 66" ✓ Pitch 48" No. of blades 4 Material C.I. whether Moveable No Total Developed Surface 12 sq. feet

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

Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves YES ✓ Are the exhaust pipes and silencers water cooled or lagged with non-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 ✓

Cooling Water Pumps, No. TWO ✓ Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES ✓

Bilge 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 GENERAL SERVICE, 3" SUCTION & 1" DELIVERY ✓ How driven AUX. ENGINE ✓

Ballast Pumps, No. and size ONE 3" CENT. (Q.S.) ✓ Lubricating Oil Pumps, including Spare Pump, No. and size ✓

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 ONE 2", TWO 2 1/2" ✓

In Holds, &c. ONE 2" IN HOLD, ONE 2" IN F.P. ✓

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size ONE 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 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 FABRICATED STEELS ✓ Are they fitted with Valves or Cocks BOTH ✓

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 ABOVE ✓

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 compartment 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 ✓ Diameters ✓ Stroke ✓ Driven by ✓

Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

Auxiliary Engines crank shafts, diameter ^{as per Rule} ✓ ^{as fitted} SEE MANCHESTER REPORT N° 13840.

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule

Can 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 Working pressure by Rules

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength

Starting Air Receivers, No. Total cubic capacity Internal diameter thickness Working pressure by Rules

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength

002330-002334-0105

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting 15-6-48.
(If not, state date of approval)

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

7-3-49

Oil Fuel Burning Arrangements

SPARE GEAR

Span Sur/ as per Rub Requirements placed on board & checked.

The foregoing is a correct description,
FOR RICHARD J. HARRIS

CR. Harris

Manufacturer.

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

1948: Nov 22. (1949) Mar 3, 9, 16, 22, 25 Apr 8, May 6, 11, June 12, Aug 24, Sept 7, 15, 26, 30 Oct 6

Dates of Examination of principal parts—Cylinders

Covers

Pistons

Rods

Connecting rods

Crank shaft

Flywheel shaft

Thrust shaft

Intermediate shafts

Tube shaft

Screw shaft

5-4-49

Propeller

8-4-49

Stern tube

8-4-49

Engine seatings

6-5-49

Engines holding down bolts

Completion of fitting sea connections

6-5-49

Completion of pumping arrangements

6-10-49

Engines tried under working conditions

6-10-49

Crank shaft, Material

Identification Mark

Flywheel shaft, Material

Identification Mark

Thrust shaft, Material

Identification Mark

Intermediate shafts, Material

Steel

Identification Marks N° 910 T.D.S. 29-948

Tube shaft, Material

Identification Mark

Screw shaft, Material

Steel

Identification Mark N° 909 T.D.S. 29-948

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

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 machinery (Inchestein Reports 15829 & 15840) has been installed on board this vessel in an efficient manner in accordance with the approved plan, Rub Requirements & Secretaries letter.

The materials & workmanship are sound & of good description.

A notice board has been fitted at the control station stating that the engine is not to be run continuously between 120 & 135 R.P.M. & the engine tachometer has been marked accordingly.

The machinery has been run under full working condition during a sea trial, the pumping arrangements listed & found satisfactory.

The amount of Entry Fee ... £

:

:

When applied for,

1/3 Special ...

£

16:16:0

26 Oct 1949

Donkey Boiler Fee ... £

:

:

When received,

Travelling Expenses (if any) £

:

:

19

Committee's Minute

FRI. 2 DEC 1949

Assigned

+ L.M.C. 10-49. Ore Eng.

O.C.

W. J. Roll.
Engineer Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register
Foundation