

REPORT ON OIL ENGINE MACHINERY.

No. 54501.

Date of writing Report 19 12 NOV 1947 When handed in at Local Office HULL Port of HULL Received at London Office 13 NOV 1947

No. in Survey held a HULL Date, First Survey 19.5.47 Last Survey 31.10.1947
 Reg. Book. Number of Visits 18

on the Single Screw vessel Fishing Vessel "KRISTIN" (ex Admiralty Fire Float 1516) Tons 1516 Gross Net

Built at _____ By whom built _____ Yard No. _____ When built _____
 Engines made at Manchester By whom made Crossley Bros. Ltd. Engine No. 132207 When made 1943
 Donkey Boilers made at _____ By whom made _____ Boiler No. _____ When made _____
 Brake Horse Power 240 Owners Oddsson & Co. Ltd. Port belonging to Hull
 Nom. Horse Power as per Rule 35 M.N. 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 Diesel (Crossley Size H). 2 or 4 stroke cycle 2 Single or double acting single

Maximum pressure in cylinders 950 lbs/sq. in. Diameter of cylinders 10 1/2" Length of stroke 13 1/2" No. of cylinders 4 No. of cranks 4

Mean Indicated Pressure 92 lbs/sq. in. Span of bearings, adjacent to the Crank/measured from inner edge to inner edge 14.11/16" Is there a bearing between each crank Yes

Revolutions per minute 340 Flywheel dia. 37 1/2" Weight 1750 lbs. Means of ignition compression Kind of fuel used Light diesel.

Crank Shaft, { Solid forged dia. of journals as per Rule as approved
 Semi built dia. of journals as fitted 7 1/2" Crank pin dia. 7 1/4" Crank Webs Mid. length breadth 9 1/2" Thickness parallel to axis _____
 All built Mid. length thickness 3.23/32" Thickness around eyehole _____

Flywheel Shaft, diameter as per Rule _____ as fitted _____ Intermediate Shafts, diameter as per Rule as approved Thrust Shaft, diameter at collars as per Rule as approved
 as fitted _____ as fitted 4 3/4" as fitted 4 3/4"

Tube Shaft, diameter as per Rule _____ as fitted _____ Screw Shaft, diameter as per Rule as approved Is the tube shaft fitted with a continuous liner { _____
 as fitted _____ as fitted 5" Is the screw shaft fitted with a continuous liner { _____
 as fitted _____ as fitted _____ Is the after end of the liner made watertight in the propeller boss _____

Bronze Liners, thickness in way of bushes as per Rule _____ Thickness between bushes as per Rule _____ If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner _____
 as fitted _____ as fitted _____ 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 Yes If so, state type Rubber ring between brass rubbing rings. Length of Bearing in Stern Bush next to and supporting propeller 210"

Propeller, dia. 5'0" Pitch 3'8" No. of blades 3 Material Bronze whether Moveable No Total Developed Surface 7 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 pumps Thickness of cylinder liners 1" Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material W.C. 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. 1 - 4 1/2" dia. x 3" 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. 1 Diameter 4 1/2" Stroke 3" Can one be overhauled while the other is at work Yes

Pumps connected to the Main Bilge Line { No. and Size 2 - main engine pump and a centrifugal pump
 How driven clutch connected to the aux. engine.

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 _____

Ballast Pumps, No. and size none Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size attached to main engine 1 3/4" x 2" st. 1.3/8" x 2" str.

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 3 - 2 1/2" In Pump Room _____

In Holds, &c. 1 - 2 1/2" in fish hold. 1 - 2 1/2" in fore peak space.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 - 2 1/2" (through valve chest)

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 Yes Are they fitted with Valves or Cocks Yes

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates P. 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 _____

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 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 _____

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork Drip trays under tank connections.

Main Air Compressors, No. 1 No. of stages 2 Diameters 2 1/2" 5 3/4" Stroke 4" Driven by main engine

Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 1 1/8" 3 1/4" Stroke HP 3 3/4" LP 3 1/2" Driven by aux. engine

Small Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____

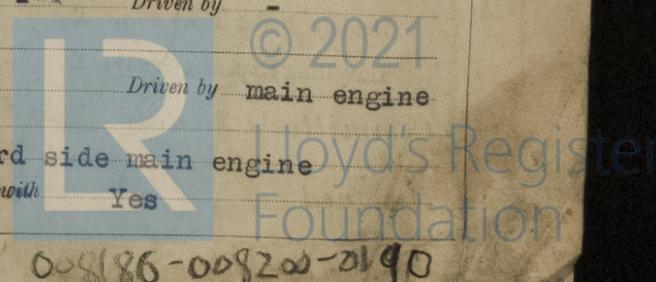
What provision is made for first Charging the Air Receivers Aux. engine can be started by hand.

Scavenging Air Pumps, No. 1 Diameter _____ Stroke _____ Driven by main engine

Auxiliary Engines crank shafts, diameter as per Rule approved No. One Position Starboard side main engine

as fitted Journals 2 1/2", Pins 2.3/8" Position Starboard side main engine

Have the Auxiliary Engines been constructed under special survey crankshaft only Is a report sent herewith Yes



AIR RECEIVERS:—Have they been made under survey No State No. of Report or Certificate -

Is each receiver, which can be isolated, fitted with a safety valve as per Rule Fusible plug fitted to each receiver and S.V. on each compressor discharge. Can the internal surfaces of the receivers be examined and cleaned Yes Is a drain fitted at the lowest part of each receiver

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

Starting Air Receivers, No. 2 Total cubic capacity 30 cu.ft. Internal diameter 24.1/8" thickness 3 1/8" & 15/32" Material stated LR tested stl. Range of tensile strength Working pressure by Rules approved WP Actual of 350lbs/sq. Sec. 1tr. 14.10

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

Is the donkey boiler intended to be used for domestic purposes only main propelling 4.9.47.

PLANS. Are approved plans forwarded herewith for Shafting aux. 14.10.47. Receivers 14.10.47. Separate Fuel Tanks No plans yet available.

Donkey Boilers - General Pumping Arrangements 24.7.47. Pumping Arrangements in Machinery Space 24.7.47.

Oil Fuel Burning Arrangements 14.10.47.

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied Extra bottom end bearing.

The foregoing is a correct description,

Manufacturer.

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

Dates of Examination of principal parts—Cylinders Covers Pistons Rods Connecting rods

Crank shaft Flywheel shaft Thrust shaft Intermediate shafts Tube shaft

Screw shaft 2-6-47 Propeller Stern tube Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions

Crank shaft, Material O.H.Stl. Identification Mark DAT 25.3.43. Flywheel shaft, Material Identification Mark

Scavenge pump Thrust shaft, Material -do- Identification Mark LLOYD'S 2028 Intermediate shafts, Material Identification Marks

Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

Identification Marks on Air Receivers

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 - excepting Tanks to examine internally and part tank to repair.

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 No If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, &c.)

The vessel has been placed on a slipway, propeller, all sea suction and overboard discharges examined & found or placed in order. The screw shaft was drawn outboard, examined & found in good condition Main engine cylinders, covers, pistons, conn. rod bearings, crankshaft, thrust & intermediate shaft clutch attached pumps & air compressor, aux. engine, auxiliary compressor, general service pump, bo air receivers (internally) examined & found or placed in satisfactory condition. Air receivers also examined under hyd. test of 700 lbs/sq.in. & found tight. Pumping arrangements checked. Pumping arrangements examined under working conditions together with main & aux. machinery & found in order. Oil fuel storage tanks examined under head of oil & found tight excepting the port tank which had a slight leak at a welded bracket attached to the top of the tank. This leakage has been temporarily stopped with cement and will be permanently repaired when the tank is examined internally. It has been agreed with the Owners to defer internal examination of the O.F. storage & settling tank until the oil has been used up in service. The machinery is eligible in our opinion to have the records T.S.-O.G.6,47 and LMC 10,47 (without distinguishing mark +) when O.F. tanks have been examined internally and the port storage tank has been permanently repaired, and the plans of the Oil Fuel tanks have been approved.

Table with columns for Classification, Amount of Fee, and Date. Includes entries for Entry Fee (£20), Special Fee, Donkey Boiler Fee, and Travelling Expenses.

N. Chambers, for J. Dobbie & Self. Engineer Surveyor to Lloyd's Register of Shipping.



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Committee's Minute

FRI, 16 JAN 1948

Assigned

* LMC 10.47 subject

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