

## REPORT ON OIL ENGINE MACHINERY.

No. 124941

Date of writing Report 26/6/52 19 When handed in at Local Office 27/52 19 Port of IPSWICH  
 No. in Survey held at WIVENHOE Date, First Survey 4/1/52 Last Survey 30/4/52 19  
 Reg. Book. Single on the Triple Screw vessel MOTOR TANK BARGE "KINGFISHER C" Number of Visits 16  
 Built at WIVENHOE By whom built JAMES COOK (WIVENHOE) LTD Yard No. 1040 When built 1942  
 Engines made at STAMFORD By whom made BLACKSTONE & CO LTD Engine No. 49119 When made 1942  
 Monkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓  
 Brake Horse Power 135 Owners Jos W Cook & Co Ltd Port belonging to Hull  
 Nom. Horse Power as per Rule 27 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 Trade for which vessel is intended RIVER ESTUARY & CANAL SERVICE (AIRE & CALDER).

**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 ✓  
 Indicated Pressure ✓ 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 ✓ Crank pin dia. ✓ Crank Webs Mid. length breadth ✓ Thickness parallel to axis ✓  
as fitted ✓ Mid. length thickness ✓ shrunk Thickness around eyehole ✓  
 Wheel Shaft, diameter as per Rule ✓ Intermediate Shafts, diameter as per Rule ✓ Thrust Shaft, diameter at collars as per Rule ✓  
as fitted ✓ as fitted ✓ as fitted ✓  
 Propeller Shaft, diameter as per Rule ✓ Screw Shaft, diameter as per Rule ✓ Is the tube ✓ shaft fitted with a continuous liner ✓  
as fitted ✓ as fitted ✓ 4 1/8" ✓ screw ✓ No ✓  
 Liners, thickness in way of bushes as per Rule ✓ Thickness between bushes as per rule ✓ Is the after end of the liner made watertight in the ✓  
as fitted ✓ as fitted ✓ ✓  
 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 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 SAND EXCLUDING & OIL RETAINING (COMPRESSOR) Length of Bearing in Stern Bush next to and supporting propeller 16 3/4"  
 Propeller, dia. 52 Pitch 36 No. of blades 4 Material BRONZE whether Moveable No Total Developed Surface 1150 sq. feet ✓  
 Method of reversing Engines S.L.M. GEAR ✓ 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 ✓ 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 ✓  
 Bilge Water Pumps, No. 2 ✓ Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES ✓  
 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 2" suction "Mono" pumps - 15 ltrs/min. ✓  
How driven Chain driven through clutch by Aux Engine or Engine ✓  
 Is 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 ✓  
 Main Pumps, No. and size NONE ✓ Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size ✓  
 Are 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" bilge suction connected to Aux Bilge Pump & Main Bilge Pump ✓ Pump Room 5" Hand Pump ✓  
also 3" Hand pump in engine room ✓  
also 4" suction to Cargo Pump only ✓ 5" Hand Pumps to Cofferdams & Peak Space ✓  
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size NONE ✓  
 Are the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes YES ✓ Are the Bilge Suctions in the Machinery Spaces ✓  
 Are easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YES ✓  
 Sea Connections fitted direct on the skin of the ship YES ✓ Are they fitted with Valves or Cocks BOTH ✓  
 Are sized 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 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 ✓  
 Pipes pass through the bunkers NONE ✓ How are they protected ✓  
 Pipes pass through the deep tanks NONE ✓ Have they been tested as per Rule ✓  
 Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times YES ✓  
 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 ✓  
 On board vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork ✓  
 Air Compressors, No. One ✓ No. of stages 1 ✓ Diameters 1 5/8" ✓ Stroke 2" ✓ Driven by 1st & 2nd Main Engines ✓  
 Auxiliary Air Compressors, No. One ✓ No. of stages One ✓ Diameters 3 1/4" ✓ Stroke 3 1/4" ✓ Driven by Aux Engines ✓  
 Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓ ✓  
 Lifting Air Pumps, No. NONE ✓ Diameter ✓ Stroke ✓ Driven by ✓  
 Main Engines crank shafts, diameter as per Rule ✓ See Bristol Report No 18601 ✓  
as fitted ✓



**AIR RECEIVERS:**—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.

**High Pressure Air Receivers, No.** None 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.** 3 Total cubic capacity 15 cu ft Internal diameter 1-6 thickness 1/16

Seamless, lap welded or riveted longitudinal joint See Nottingham Certificate C. 10888. C. 11487. C. 11871 Range of tensile strength — Working pressure — by Rules Actual

**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 —

**PLANS.** Are approved plans forwarded herewith for Shafting Tail shaft 30/1/50 Receivers — Separate Tanks —  
(If not, state date of approval)

Donkey Boilers — General Pumping Arrangements 20/6/50 Oil Fuel Burning Arrangements —

### SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes.

State the principal additional spare gear supplied —

The foregoing is a correct description,

For and on behalf of  
**JAMES W. COOK & Co. (Wivenhoe) LTD.**

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 16/11/51. 11/1/52 5/12/51 24/12/51  
During erection on board vessel -- 4/1/52 8/1/52. 24/1/52. 4/2/52 11/2/52. 18/2/52. 1/3/52 12/3/52. 4/4/52 21/4/52 25/4/52  
Total No. of visits 12 + 2 16

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

Crank shaft — Flywheel shaft — Thrust shaft — Intermediate shafts — Tube shaft —

Screw shaft 30/4/51 Propeller 9/7/51 Stern tube 11/6/51 Engine seatings 4/1/52 Engines holding down bolts 12/3/52

Completion of fitting sea connections 4/1/52 Completion of pumping arrangements 25/4/52 Engines tried under working conditions 25/4/52

Crank shaft, Material — Identification Mark — Flywheel shaft, Material — Identification Mark —

Thrust shaft, Material — Identification Mark — Intermediate shafts, Material — Identification Marks —

Tube shaft, Material — Identification Mark — Screw shaft, Material 3/11/51 Identification Mark RMCL 9/3/51

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 Tanker. 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 "KESTREL C"

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

The machinery of this ship has been built under special survey in accordance with plans approved and the requirements of the rules and satisfactorily installed on board. Materials used are sound & of good description, and materials have been carried out in accordance with rule requirements. The workmanship is good and satisfactory trials have been carried out of main & auxiliary machinery, under working conditions with the vessel in light condition. This machinery installation is in my opinion eligible for the notation +LMC. Torsional vibration characteristics approved for service speed of 600 RPM with corresponding propeller speed of 308 RPM in the case of sister ship "Kestrel C". See Secretary's ltr 28/3/52. This is identical machinery installation and no sea hammer was observed on trials.

The amount of Entry Fee .. £ 20 0 0 : When applied for, 3/7/52  
Special ... .. £ : :  
Donkey Boiler Fee ... .. £ : :  
Travelling Expenses (if any) £ : : When received, 19  
FRI. 1 AUG 1952

**Committee's Minute**

Assigned +LMC 4.52 lib. by Subject.

O.G.



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