

Rpt. 4b

Date of writing report 20/12/58. Received London 11 OFFP... Port LONDON. No. 139361
Survey held at STAMFORD, LINGS. No. of visits Three. In shops 8/12/58. First date 18/12/58. Last date

FIRST ENTRY REPORT ON INTERNAL COMBUSTION MACHINERY

No. in R.B. Name M.V. "JIM M." Gross tons

Owners Managers Port of Registry Year Month

Hull built at By Yard No. When

Main Engines made at STAMFORD, LINGS. By Blackstone & Co., Ltd. Eng. No. M.85164. When 1958.12.

Gearing made at By

Donkey boilers made at By Blr. Nos. When

Machinery installed at By When

Particulars of restricted service of ship, if limited for classification

Particulars of vegetable or similar cargo oil notation, if required

Is ship to be classed for navigation in ice? Is ship intended to carry petroleum in bulk?

Is refrigerating machinery fitted? If so, is it for cargo purposes? Type of refrigerant

Is the refrigerating machinery compartment isolated from the propelling machinery space? Is the refrigerated cargo installation intended to be classed?

The following particulars should be given as fully and as clearly as possible. Where the answer is "No" or "None", say so! Ticks and other signs of doubtful meaning are not to be used.

No. of main engines. No. of propellers. Brief description of propulsion system

MAIN RECIPROCATING ENGINES. Licence Name and Type No. Lister-Blackstone ERSMGR 4 vertical diesel.

No. of cylinders per engine 4. Dia. of cylinders 8 3/4". stroke(s) 11 1/2". 2 or 4 stroke cycle 4. Single or double acting Single.

Maximum approved BHP per engine 330. at 750. RPM of engine and 300. RPM of propeller.

Corresponding MIP 146 p.s.i. (For DA engines give MIP top & bottom) Maximum cylinder pressure 440 p.s.i. Machinery numeral 66.

Are the cylinders arranged in Vee or other special formation? No. If so, number of crankshafts per engine

TWO STROKE ENGINES. Is the engine of opposed piston type? If so, how are upper pistons connected to crankshaft?

Is the exhaust discharged through ports in the cylinders or through valve(s) in the cylinder covers? No. and type of mechanically driven scavenge pumps or blowers per engine and how driven

No. of exhaust gas driven scavenge blowers per engine Where exhaust gas driven blowers only are fitted, can the engine operate with one blower out of action?

If a stand-by or emergency pump or blower is fitted, state how driven No. of scavenge air coolers Scavenge air pressure at full power

Are scavenge manifold explosion relief valves fitted?

FOUR STROKE ENGINES. Is the engine supercharged? Yes. Are the undersides of the pistons arranged as supercharge pumps? No. No. of exhaust gas driven blowers per engine

One. No. of supercharge air coolers per engine None. Supercharge air pressure 4/5 p.s.i. Can engine operate without supercharger? Yes.

TWO & FOUR STROKE ENGINES-GENERAL. No. of valves per cylinder: Fuel One. Inlet One. Exhaust One. Starting Series. Safety One.

Material of cylinder covers Chrome Cast Iron. Material of piston crowns Allum: Alloy. Is the engine equipped to operate on heavy fuel oil? No.

Cooling medium for: Cylinders Fresh water. Pistons No. Fuel valves No. Overall diameter of piston rod for double acting engines

Is the rod fitted with a sleeve? Is welded construction employed for: Bedplate? No. Frames? No. Entablature? No. Is the crankcase separated from the

underside of pistons? No. Is the engine of crosshead or trunk piston type? Trunk. Total internal volume of crankcase 30 cu.ft.

Are flame guards or traps fitted to relief devices? Yes. Is the crankcase readily accessible? Yes. If not, must the engine be removed for

overhaul of bearings, etc? Is the engine secured directly to the tank top or to a built-up seating? How is the engine started? Compressed air.

Can the engine be directly reversed? No. If not, how is reversing obtained? MWD. gearbox.

Has the engine been tested working in the shop? Yes. How long at full power? 4 hours plus 1 hour on 10% overload.

CRANK & FLYWHEEL SHAFTING. Date of approval of torsional vibration characteristics of the propelling machinery system State barred speed range(s), if imposed

for working propeller For spare propeller Is a governor fitted? Yes. Is a torsional vibration damper or detuner fitted to the shafting? No.

Where positioned? Type No. of main bearings 6. Are main bearings of ball or roller

type? No. Distance between inner edges of bearings in way of crank(s) 10 1/16". Distance between centre lines of side cranks or eccentrics of opposed piston engines

Crankshaft type: Built, semi-built, solid. (State which) Solid.

Diameter of journals 6 3/8". Diameter of crankpins Centre 6 1/8". Breadth of webs at mid-throw 7 3/4". Axial thickness of webs 2 25/32".

If shrunk, radial thickness around eyeholes Are dowel pins fitted? Crankshaft material Journals EN 8 Approved 40 tons per sq. inch.

Webbs Tensile strength Pins Minimum 40 tons per sq. inch.

Diameter of flywheel 38". Weight 1860 lb. Are balance weights fitted? No. Total weight Radius of gyration

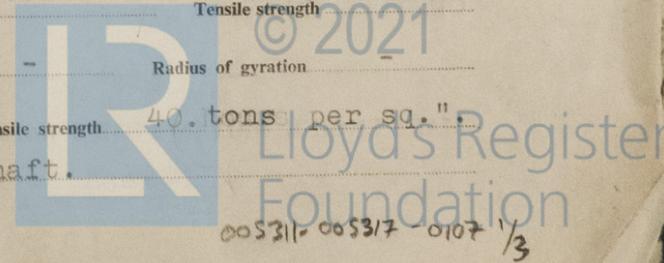
Diameter of flywheel shaft 6 3/4". Material EN 8 Steel. Minimum approved tensile strength 40 tons per sq. inch.

Flywheel shaft: separate, integral with crankshaft, integral with thrustshaft. (State which) Integral with crankshaft.

JEB.

PLEASE RETURN THIS REPORT WITH YOUR FIRST ENTRY.

005311-005317-0107 1/3



GENERAL REMARKS

State if the machinery has been constructed and/or installed under special survey in accordance with the Rules, approved plans and Secretary's letters. State quality of materials and workmanship and give recommendations for classification, including any special notation to be assigned. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.

This replacement Main Engine has been constructed and installed under Special Survey in accordance with the Rules. Secretary's letters and approved plans, tested under full power working conditions and found satisfactory.

The materials and workmanship are good and the machinery is eligible in my opinion to be classed in the Register Book * N.E. 2,59 Oil Engine 4 S.A. 4 cyl. 8 3/4" x 11 1/2" with oil operated reverse/reduction gear box (S.R.).

During River trials no vibration or gear hammer was discernable throughout the engines governed ranged.

[Handwritten signature]

Engineer Surveyor to Lloyd's Register of Shipping.

PARTICULARS OF IDENTIFICATION MARKS (Including Port of origin) of important Forgings and Castings. (Copies of certificates should be forwarded with report.)

RODS

CRANKSHAFT OR ROTORSHAFT

See London First Entry No.139361.

FLYWHEEL SHAFT

THRUSTSHAFT

GEARING

INTERMEDIATE SHAFTS

SCREW AND TUBE SHAFTS

PROPELLERS

OTHER IMPORTANT ITEMS

Is the installation a duplicate of a previous case? No. If so, state name of vessel

Date of approval of plans for crankshaft Straight shafting Gearing Clutch

Separate oil fuel tanks Pumping arrangements Oil fuel arrangements

Cargo oil pumping arrangements Air receivers Donkey boilers

Dates of examination of principal parts:—

Fitting of stern tube Fitting of propeller 30/1/59. Completion of sea connections Alignment of crankshaft in main bearings

Engine chocks & bolts Alignment of gear Box. 21/1/59 Alignment of straight shafting 21/1/59. Testing of pumping arrangements

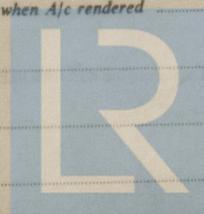
Oil fuel lines Donkey boiler supports Steering machinery Windlass

Date of Committee Special Survey Fee Lu Rpt 8.

Decision

Expenses

Date when A/c rendered FEB 1959



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