

Rpt. 4b

Attache to Ipswich Report No 144869.

Date of writing report 18/11/59. Received London Port LONDON. No. 141471. Survey held at Stamford, Lincs. In shops 5. First date 27.8.59. Last date 12.11.59. No. of visits On vessel

FIRST ENTRY REPORT ON INTERNAL COMBUSTION MACHINERY

No. in R.B. 42433 Name REDSHAW C Gross tons 146.38

Owners J.W. Book & Co. Ltd Managers Port of Registry Hull

Hull built at Wivenhoe, Essex. By James W. Cook & Co. Yard No. 1192. When 1960 1

Main Engines made at Stamford. By Blackstone & Co., Ltd. Eng. No. EV4P59H127. When 1959.11.

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. Where the wording is not applicable to the installation, a black line may be inserted. If the main engines have been constructed at another port and are covered by a separate report, the particulars given in that report need not be repeated below, but the port and report number should be stated.

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

MAIN RECIPROCATING ENGINES. Licence Name and Type No. Lister-Blackstone - EVMGR4 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 180. at 600 RPM of engine and RPM of propeller.

Corresponding MIP 106 p.s.i. (For DA engines give MIP top & bottom) Maximum cylinder pressure 800 p.s.i. Machinery numeral 36.

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? No. Are the undersides of the pistons arranged as supercharge pumps? No. No. of exhaust gas driven blowers per engine

No. of supercharge air coolers per engine None Supercharge air pressure Can engine operate without supercharger? 2 in

TWO & FOUR STROKE ENGINES-GENERAL. No. of valves per cylinder: Fuel 1. Inlet 1. Exhaust 1. Starting Series Safety 1.

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

Cooling medium for: Cylinders Fresh Water Pistons None. Fuel valves None. Overall diameter of piston rod for double acting engines

Is the rod fitted with a sleeve? No. 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. No. and total area of explosion relief devices 2 - 22 sq. ins. 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? No. Is the engine secured directly to the tank top or to a built-up seating? How is the engine started? Comp. air.

Can the engine be directly reversed? No. If not, how is reversing obtained? Rev./Red. Gearbox. MWD. type MW. Size 3B.No.12405.

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 Secy. 17.6.59 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 3/4" 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 Steel. Minimum Approved 40 tons per sq. in.

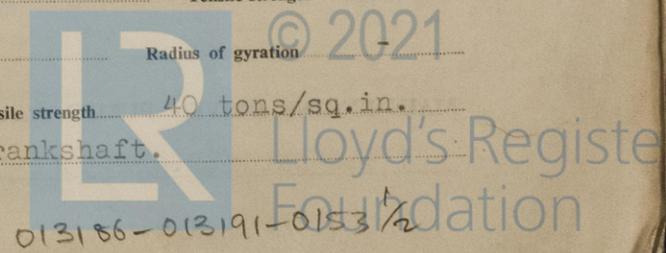
Webbs Tensile strength

Diameter of flywheel 40" Weight 2180 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/sq. in.

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

JEB.



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.

B.M.90448. This engine has been built under special survey from materials manufactured under the Supervision of Surveyors to this Society, in accordance with approved plans & the Rules of this Society.

Workmanship is good throughout. In my opinion the engine is eligible for installation in a Classed vessel.

Ipswich 24/160.

This engine has now been fitted on board the "REDSHANK C" at W.venhoe in a proper manner & found satisfactory during estuary trials on 15/160 & 16/160 under full working condition

[Signature]

W. Waddle

Engine Surveyor to Lloyd's Register of Shipping.
W. WADDLE

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

RODS BCX 161 - 162 - 160 - 140 W.W. LON. 7.9.59. Covered by Batch Certificates:- BHAM.C.38703, C.39118 & C.35753.

CRANKSHAFT OR ROTORSHAFT 6600 TDS. Not. W.W. Lon. 21.10.59.

FLYWHEEL SHAFT

THRUSTSHAFT

GEARING

INTERMEDIATE SHAFTS

SCREW AND TUBE SHAFTS

PROPELLERS

OTHER IMPORTANT ITEMS Cylinder block with liners & heads:- LLOYD'S TEST 100.lb. W.W. Lon. 27.8.59.

Is the installation a duplicate of a previous case? If so, state name of vessel

Date of approval of plans for crankshaft 17.6.59. 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 Completion of sea connections Alignment of crankshaft in main bearings

Engine chocks & bolts Alignment of gearing Alignment of straight shafting Testing of pumping arrangements

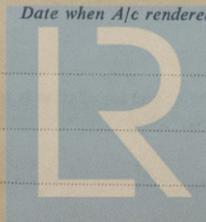
Oil fuel lines Donkey boiler supports Steering machinery Windlass

Date of Committee FRIDAY 21 OCT 1960 Construction Special Survey Fee £20-0-0d. AR

Decision See Rpt. 1. 18-260

Expenses £4-0-0d.

Date when A/c rendered 16 DEC 1959



© 2021 Lloyd's Register Foundation