

REPORT ON OIL ENGINE MACHINERY.

No 68172

16 MAR 1944

Received at London Office

Date of writing Report 8-3-44 When handed in at Local Office 11-3-44 Port of Glasgow
 No. in Survey held at Reg. Book. GLASSGOW Date, First Survey 29.6.43 Last Survey 10.3.44
 Number of Visits 72

on the Single Screw vessel M.V. MEGNIE Tons Gross 6595 Net 4391
 Built at GLASSGOW By whom built CHAS. CONNELL & CO. LD. Yard No. 445 When built 1944
 Engines made at ~D~ By whom made BARCLAY CURRIE & CO. LD. Engine No. 39 When made 1944
 Donkey Boilers made at ~D~ By whom made ~D~ Boiler No. 139 When made 1944
 Brake Horse Power 200 Owners JAMES NOURSE LD. Port belonging to LONDON
 Nom. Horse Power as per Rule 449 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES

Trade for which vessel is intended _____
 OIL ENGINES, &c.—Type of Engines DOXFORD OPPOSED PISTON 2 or 4 stroke cycle 2 Single or double acting SINGLE
 Maximum pressure in cylinders 600 lb Diameter of cylinders 22 1/2" Length of stroke 21 60/100" No. of cylinders 3 No. of cranks 9
 Mean Indicated Pressure 88.5 lb. Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 11 20/100" Is there a bearing between each crank YES
 Revolutions per minute 110 Flywheel dia. 22 20/100" Weight 44.2 Tons Means of ignition COMP Kind of fuel used DIESEL OIL
 Crank Shaft, Solid forged dia. of journals as per Rule 420 1/4" Crank pin dia. 420 1/4" Crank Webs Mid. length breadth 610 1/4" shrunk Thickness parallel to axis 240 1/4" centre
 Flywheel Shaft, diameter as per Rule _____ Intermediate Shafts, diameter as per Rule 13" Thrust Shaft, diameter at collars as per Rule 420 1/4"
 Tube Shaft, diameter as per Rule _____ Screw Shaft, diameter as per Rule 14 1/2" Is the shaft fitted with a continuous liner yes
 Bronze Liners, thickness in way of bushes as per Rule 3/16" Thickness between bushes as per Rule 9/16" 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 protected between the liners _____ Is an approved Oil Gland or other appliance fitted at the after end of the tube _____
 shaft No If so, state type _____ Length of Bearing in Stern Bush next to and supporting propeller 4' 10" Total Developed Surface 80 sq. feet
 Propeller, dia. 14' 9" Pitch 11' No. of blades 4 Material BRONZE whether Moveable No Means of lubrication FORCED
 Method of reversing Engines DIRECT Is a governor or other arrangement fitted to prevent racing of the engine when declutched YES
 Thickness of cylinder liners 23 1/4" Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled or lagged with non-conducting material YES
 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. ONE STAND BY BALLAST 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. NONE Diameter _____ Stroke _____ Can one be overhauled while the other is at work _____
 Pumps connected to the Main Bilge Line { No. and Size 1 @ 12" x 9" x 24" 1 @ 10" x 12" x 24" 1 @ 5" x 4 1/2" x 12" How driven STEAM
 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 1 @ 10" x 12" x 24" Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 STEAM 6 1/2" x 7" x 15"
 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 ENG. RM. 4 @ 3" 6 1/4" BILGE 1 @ 2" 6 1/2" TUNNEL WELL 1 @ 2 1/2" In Pump Room
 In Holds, &c. 2 @ 1, 4 Y.S. HOLDS 2 @ 3" N° 273 HOLDS 2 @ 4" 2 @ 5"
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size _____
 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 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 BOTH
 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 YES
 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 YES Is it fitted with a watertight door No 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 10 1/2" - 2 1/2" Stroke _____ Driven by _____
 Auxiliary Air Compressors, No. 2 No. of stages 3 Diameters 10 1/2" - 8 1/4" - 2 1/2" Stroke 6 Driven by STEAM ENGINE
 Small Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____
 What provision is made for first Charging the Air Receivers STEAM AUX. COMPRESSOR
 Scavenging Air Pumps, No. ONE Diameter 1600 1/4" Stroke 5-40 1/4" Driven by MAIN ENGINE
 Auxiliary Engines crank shafts, diameter as per Rule _____ Position _____
 Have the Auxiliary Engines been constructed under special survey _____ Is a report sent herewith _____



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

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 250 cub. ft. Internal diameter 4 1/2" thickness 1 3/32" ✓
 Seamless, lap welded or riveted longitudinal joint **RIVETED** Material **STEEL** Range of tensile strength 29/33 tons Working pressure by Rules **CLIFF.** Actual 600 LBS ✓

IS A DONKEY BOILER FITTED? **YES** ✓ If so, is a report now forwarded? **YES** ✓
 Is the donkey boiler intended to be used for domestic purposes only **No** ✓

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval) **Yes** Receivers 5-5-42 Separate Fuel Tanks **Yes**
 Donkey Boilers **Yes** General Pumping Arrangements **Yes** Pumping Arrangements in Machinery Space **Yes**
 Oil Fuel Burning Arrangements —

SPARE GEAR.

Has the spare gear required by the Rules been supplied **Yes (except centre & side conn. rod top & bottom end bearings)**
 State the principal additional spare gear supplied **List attached.**



The foregoing is a correct description,
FOR BARCLAY, CURLE & CO., LTD
Alexander Macnair Manufacturer.

Dates of Survey while building —
 During progress of work in shops — 1942 Jun 29 Sep 9. 23 Oct 21. 29 Dec 2. 11. 22. 38 1943 Jan 15. 29 Feb 10. 11. 15. Mar 24 May 4. 5. 6. 11 Jun 9. 24 Jul 13. 14. 28. 31. Aug 2. 17. Sep 2. 8. 17. 18. 20. 22. 29 Oct 1. 5. 11. 19. 21. 27. 28. 29 Nov 2. 4. 8. 9. 16. 17. 19. 22. 23. 25. 26. 29. 30 Dec 5. 10. 13. 14. 18. 28
 Chief Draughtsman
 During erection on board vessel — 1944 Jan 4. 7. 10. 12. 18. 21. 31 Feb 2. 9. 22 Mar 10.
 Total No. of visits 72.

Dates of Examination of principal parts — Cylinders 1-10-43 Covers ✓ Pistons 21-10-43 Rods 21-10-43 Connecting rods 2-11-43
 Crank shaft 4-11-43 Flywheel shaft — Thrust shaft 4-11-43 Intermediate shafts 29-10-43 Tube shaft ✓
 Screw shaft 8-12-43 Propeller 2-8-43 Stern tube 8-12-43 Engine seatings 10-12-43 Engines holding down bolts 21-1-44
 Completion of fitting sea connections 10-12-43 Completion of pumping arrangements 9-2-44 Engines tried under working conditions 22-2-44
 Crank shaft, Material **S.M. STEEL** Identification Mark 83584 TEST NOS 4-11-43 NK Flywheel shaft, Material — Identification Mark —
 Thrust shaft, Material **S.M. STEEL** Identification Mark 8143 Intermediate shafts, Material **S** Identification Marks 170258 & TEST 29-10-43 NK 8-2-
 Tube shaft, Material — Identification Mark — Screw shaft, Material **S** Identification Mark 8383

Identification Marks on Air Receivers —
LLOYD'S TEST
800 LBS/D"
WP 600 LBS/D"
27-10-43 W.A.L.

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** ✓
 Description of fire extinguishing apparatus fitted **Steam jet & foamite**
 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 **YES** ✓ If so, state name of vessel **M/V HUGHLI GLASGOW REPORT N° 67373**
General Remarks (State quality of workmanship, opinions as to class, &c. **This machinery has been built under special survey in accordance with the Rules and approved plans, and the materials and workmanship are good. It has been satisfactorily installed in the vessel, tested under working conditions and found efficient and, in my opinion is eligible to be classed with record + LMC 3, 44, and notation 2 D. B. 120 LBS. CL.**

The amount of Entry Fee .. £ 5 : : When applied for,
 Special £ 92 : 7 : **14 MAR 1944**
 Donkey Boiler Fee £ 18 : 4 : When received,
 Travelling Expenses (if any) £ 4 : 4 : 19.

N. Russell
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 14 MAR 1944**

Assigned **1- LMC 3, 44 Oil Eng IM**
2 NB. 120 lb.

