

REPORT ON OIL ENGINE MACHINERY.

15740 No. 5241 30 JUN 1926

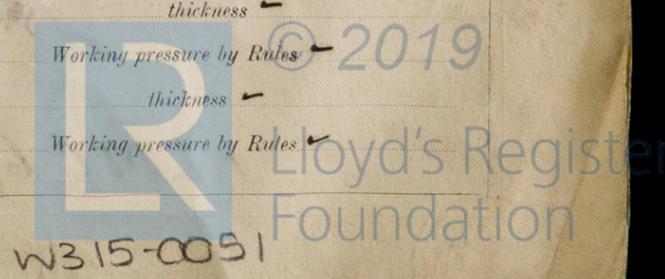
Rpt. 4b

Received at London Office

Date of writing Report 26 June 1926 When handed in at Local Office 28.6.26 Port of Glasgow
No. in Survey held at Glasgow Date, First Survey 9-2-26 Last Survey 19.6.1926
Reg. Book. on the Single Screw MOTOR YACHT 'MINGARY' Tons Gross 223 Net 102
Built at Glasgow By whom built Alexander Stephens & Sons Ltd. Card No. 511 When built 1926
Engines made at Winterthur By whom made Sulzer Bros. Engine No. 14082 When made 1926
Donkey Boilers made at Home By whom made Boiler No. When made
Brake Horse Power 450 Total Owner Kenneth M. Clark. Port belonging to Glasgow.
Nom. Horse Power as per Rule 28.5 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes.

OIL ENGINES, &c.—Type of Engines See Winterthur Rpt. No 68. 2 or 4 stroke cycle Single or double acting
Maximum pressure in cylinders No. of cylinders Diameter of cylinders No. of cranks Length of stroke
No. of bearings, adjacent to the Crank, measured from inner edge to inner edge Is there a bearing between each crank
Revolutions per minute 300 Flywheel dia. Weight Means of ignition Kind of fuel used
Crank Shaft, dia. of journals as per Rule as fitted Crank pin dia. Crank Webs Mid. length breadth Thickness parallel to axis
Flywheel Shafts, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted
Stern Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube screw shaft fitted with a continuous liner
Cylinder Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per rule as fitted Is the after end of the liner made watertight in the
Propeller boss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner
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
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
of the tube shaft Length of Bearing in Stern Bush next to and supporting propeller
Propeller, dia. 5'-0" Pitch 5'-0" No. of blades 3 Material Bronze whether Moveable Total Developed Surface 8.0 sq. feet
Method of reversing Engines Cam Is a governor or other arrangement fitted to prevent racing of the engine when decelerated
Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with
conducting material If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine
Suction Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel
Suction Pumps fitted to the Main Engines, No. 2 Diameter 4.25" Stroke 5.0" Can one be overhauled while the other is at work
Pumps connected to the Main Bilge Line No. and Size 1 Rotary 2400 gals/hour Bilge, 1 Rotary 1000 gals/hour Fire.
How driven Electric Motors
Last Pumps, No. and size None Lubricating Oil Pumps, including Spare Pump, No. and size
Two independent means arranged for circulating water through the Oil Cooler
Pumps, No. and size In Engine and Boiler Room 3 - 2 1/4 Bore
Folds, &c. Forward Suction 2 - 2 1/4 After Suction 1 - 2 1/4 Bore
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 3 - 2 1/4 Bore
Are all the Bilge Suction pipes in Holds and Tunnels fitted with strum-boxes
Are the Bilge Suctions in the Machinery Space
from easily accessible mud-boxes, placed above the level of the working floor with straight tail pipes to the bilges
Are they fitted with Valves or Cocks
Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates
Are the Overboard Discharges above or below the deep water line
Are they each fitted with a Discharge Valve always accessible on the plating of the vessel
Are the Blow Off Cocks fitted with a spigot and brass covering plate
Do the pipes pass through the bunkers How are they protected
Do the 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
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 Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from
On 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 Stroke Driven by
Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 4 3/4, 2 1/2 Stroke 3 1/2 Driven by Electric Motor
Other Auxiliary Air Compressors, No. None No. of stages Diameters Stroke Driven by
Suctioning Air Pumps, No. Diameter Stroke Driven by
Main Engines crank shafts, diameter as per Rule as fitted 2.375" 2 1/2

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule
Are the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces
Is there a drain arrangement fitted at the lowest part of each receiver
Pressure Air Receivers, No. None Cubic capacity of each Internal diameter thickness
Material Range of tensile strength Working pressure by Rules
Other Air Receivers, No. 5 Total cubic capacity Internal diameter thickness
Material Range of tensile strength Working pressure by Rules



IS A DONKEY BOILER FITTED? *No* ✓

If so, is a report now forwarded? ✓

HYDRAULIC TESTS:—

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS .....	<i>29.4.26</i>	<i>7.5 lb</i>	<i>WL</i>	<i>WL</i>	<i>See Winter Test Report No 68.</i>
COVERS .....					
JACKETS .....					
PISTON WATER PASSAGES .....					
MAIN COMPRESSORS—1st STAGE .....					
2nd .....					
3rd .....					
AIR RECEIVERS—STARTING .....					
INJECTION .....					
AIR PIPES .....					
FUEL PIPES .....					
FUEL PUMPS .....					
SILENCER .....					
WATER JACKET .....					
SEPARATE FUEL TANKS .....					

PLANS. Are approved plans forwarded herewith for Shafting *No. 20/11/15 (E)* Receivers ✓ Separate Tanks *Yes*  
 Donkey Boilers *None* General Pumping Arrangements *Yes* Oil Fuel Burning Arrangements *None*

SPARE GEAR & Fuel valve needles with guides, 8 spray plates, 8 fuel injector plates, 8 fuel pump plungers with bushes, 4 fuel pump valves, 6 valve rings for pumps, 2 screw pistons, 24 piston rings, 8 piston rings for auxiliary compressor, 500 Tender plug, 6 shaft coupling bolts, screw bolts & iron, nozzle, paper couplings & plungers, valves, packing & jointing materials, spacers for generator.

The foregoing is a correct description,  
**ALEXANDER STEPHEN & SONS, LIMITED.**  
 Manufacturer.

*John Haydock* Secretary  
 Dates of Survey while building: During progress of work in shops— 1926 Feb. 9-11-12-23-26 Mar 3-5-8-9-10-12-15-18-22-24-26-30-31 Apr 2-7-9-12-14-16-19-21-23-24-29 May 3-6  
 During erection on board vessel— 12-14-17-19-21-25-28 June 1-8-14-16-17-18-19  
 Total No. of visits *42*

Dates of Examination of principal parts—Cylinders ✓ Covers ✓ Pistons ✓ Rods ✓ Connecting rods ✓  
 Crank shaft ✓ Flywheel shaft ✓ Thrust shaft ✓ Intermediate shafts *27.4.26* Tube shaft *None*  
 Screw shafts *29.4.26* Propellers *29.4.26* Stern tubes *29.4.26* Engine seatings *25.2.26* Engines holding down bolts *12.14.5/26*  
 Completion of filling sea connections *8.6.26* Completion of pumping arrangements *19.6.26* Engines tried under working conditions *19.6.26*  
 Crank shaft, Material ✓ Identification Mark ✓ Flywheel shaft, Material ✓ Identification Mark ✓  
 Thrust shaft, Material ✓ Identification Mark ✓ Intermediate shafts, Material *S.Y.S.* Identification Marks *5/11.W.L.*  
 Tube shaft, Material *None* Identification Mark ✓ Screw shafts, Material *S.Y.S.* Identification Mark *5/11.W.L.*

Is the flash point of the oil to be used over 150° F. *Yes*  
 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.) *This machinery has been fitted in the above vessel in a satisfactory manner in accordance with the Rules. It has been examined under working conditions and found to be satisfactory. The vessel is signally in my opinion for record. + L.M.C. 6.26.*

The amount of Entry Fee ... £ : : When applied for,  
 Special ... £ : : 19  
 Donkey Boiler Fee ... £ *See Donkey* : : When received,  
 Travelling Expenses (if any) £ : : 19

*W. Lane*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 29 JUN 1926**  
 Assigned *+ LMC 6.26*

88C 26.6.26

Certificate (if required) to be sent to  
 (The Surveyors are requested not to write on or below the space for Committee's Minutes.)

CERTIFICATE WRITTEN  
 12.7.26

