

YACHT.

REPORT ON OIL ENGINE MACHINERY.

No. 14376

No. 11316

WED. 9 AUG. 1922

t. 4b

Received at London Office

of writing Report 28 July 1922 When handed in at Local Office 8th Aug. 1922 Port of Southampton

in Survey held at Southampton Date, First Survey 31st Oct. 1922 Last Survey 22nd July 1922

Book. Single on the Twin Screw vessels M.Y. "SONA" Number of Visits 27

Tons { Gross 519
Net 248

Built at Southampton By whom built Camp & Nicholson No. 307 When built 1922

Engines made at Swanwich By whom made Vickers-Petters Ltd Engine Nos. 251 When made 1922

Boilers made at Swanwich By whom made Swanwich Boiler No. — When made —

Indicated Horse Power 500 each Owners The Earl of Dunraven K.P. Port belonging to Southampton

Indicated Horse Power as per Rule 286 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes

ENGINES, &c.—Type of Engines

2 or 4 stroke cycle — Single or double acting —

Maximum pressure in cylinders — No. of cylinders — No. of cranks — Diameter of cylinders —

Length of stroke — Revolutions per minute — Means of ignition — Kind of fuel used —

Clearance between each crank — Span of bearings (Page 92, Section 2, par. 7 of Rules) —

Distance between centres of main bearings — Is a flywheel fitted — Diameter of crank shaft journals — as per Rule — as fitted —

Diameter of crank pins — Breadth of crank webs — as per Rule — as fitted — Thickness of ditto — as per Rule — as fitted —

Diameter of flywheel shaft — as per Rule — as fitted — Diameter of tunnel shaft — as per Rule — as fitted — Diameter of thrust shaft — as per Rule — as fitted —

Diameter of screw shaft — as per Rule — as fitted — Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes

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 joints burned —

Is a 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 —

Are liners are fitted, is the shaft lapped or protected between the liners — If without liners, is the shaft arranged to run in oil —

Length of outer gland fitted to stern tube NONE Length of stern bush INNER = 1'-0 3/4" OUTER = 2'-1 1/2" Diameter of propeller 6'-0"

Diameter of propeller 7'-0" No. of blades 4 state whether moveable No Total surface 11 square feet

Method of reversing — Is a governor or other arrangement fitted to prevent racing of the engine when declutched — Thickness of cylinder liners —

Are the cylinders fitted with safety valves — Means of lubrication — 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 —

Is exhaust led up funnel yes No. of cooling water pumps — Is the sea suction provided with an efficient strainer which can be cleared —

Can the vessel be overhauled while the other is at work yes No. of bilge pumps fitted to the main engines — Diameter of ditto — Stroke —

No. of pumps 2 No. and sizes of suction connected to both main bilge pumps and auxiliary bilge pumps:—In engine room 4'-2"

Are the holds, etc. fitted with a direct suction from the engine room bilges — State size — Is a separate auxiliary pump suction fitted in —

Are the room and size yes. 223" Are all the bilge suction pipes fitted with roses yes Are the roses in Engine Room always accessible yes

Are the sluices on Engine Room bulkheads always accessible — Are all connections with the sea direct on the skin of the ship yes

Are the valves or cocks Valves Are they fixed sufficiently high on the ship's side to be seen without lifting the floor plates yes

Are the discharge pipes above or below the deep water line Above Are they each fitted with a discharge valve always accessible on the plating of the vessel yes

Are all pipes, cocks, valves and pumps in connection with the machinery accessible at all times yes Are the bilge suction pipes, cocks and valves arranged so as to prevent any —

Communication between the sea and the bilges yes Is the screw shaft tunnel watertight — Is it fitted with a watertight door —

Is it fitted with a watertight door — If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork —

No. of main air compressors — No. of stages — Diameters — Stroke — Driven by —

No. of auxiliary air compressors 1 No. of stages 2 Diameters { H.P. = 3 3/4" L.P. = 3 1/2" Stroke 5" Driven by Motor

No. of small auxiliary air compressors 1 No. of stages 2 Diameters { H.P. = 3" L.P. = 6" Stroke 4" Driven by Puffin Engine

No. of scavenging air pumps — Diameter — Stroke — Driven by —

Diameter of auxiliary Diesel Engine crank shafts — as per Rule — as fitted — Are the air compressors and their coolers made so as to be easy of access yes

RECEIVERS:—No of high pressure air receivers

Internal diameter 24" Cubic capacity of each 24 ft

Seamless, lap welded or riveted longitudinal joint Riveted Range of tensile strength —

Working pressure by Rules 200 No. of starting air receivers — Internal diameter —

Material — Seamless, lap welded or riveted longitudinal joint —

Thickness — Working pressure by rules — Is each receiver, which can be isolated, —

Can the internal surfaces of the receivers be examined yes What means are provided for cleaning their —

Is there a drain arrangement fitted at the lowest part of each receiver —

W319-0161

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					
" " 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
(If not, state date of approval)

Receivers

Separate Tanks

SPARE GEAR

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 31 24.31 1.5.13 11.20.24.26 2.3 3.4.6.14.27.30 3.21.28 29 10.12.13.14.22
During erection on board vessel - - 10 11 12 1921 1 2 3 4 6 7
Total No. of visits 27

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

Crank shaft L Thrust shaft L Tunnel shafts 1-12-21 Screw shaft 1-12-21 Propeller 3-3-22 Stern tube 31-10-21 Engine seatings 24-

Engines holding down bolts P=14-3-22 S=27-3-22 Completion of pumping arrangements 27-3-22 Engines tried under working conditions 12-7-2

Completion of fitting sea connections 2-2-22 Stern tube { P=11-1-22 S=24-1-22 Screw shaft and propeller 27-3-22

Material of crank shaft L Identification Mark on Do. L Material of thrust shaft L Identification Mark on Do. L

Material of tunnel shafts Steel Identification Marks on Do S=13781 H. Material of screw shafts Steel Identification Marks on Do { P=13782 S=13781

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 L

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

The engines as per Ipswich Report N° 85486, have been efficient fitted on board the vessel, and on trial proved satisfactory. Eligible in my opinion to have notation +L.M.C.7.22.

It is submitted that this vessel is eligible for THE RECORD. +L.M.C. 7.22 Oil Engines. 2 L.C. 1A

1264. 16 1/2 - 18. N.H.P. 286. C.L. Tickers Peters & Co. (Annual Survey)

The amount of Entry Fee ... £ : : When applied for, Special 1/5 of Total £ 14 : 7 : 8 8/8/22 1922. Donkey Boiler Fee ... £ : : When received, ELECTRICAL INSTALLATION 25 : 0 : 0 8/9/22 1922. Travelling Expenses (if any) £ : : 7/9

Committee's Minute

Assigned

MACHINERY CERT. WRITTEN

+L.M.C. 7.22 Oil engines



© 2019

Lloyd's Register Foundation

C. A. Boyle
Engineer Surveyor to Lloyd's Register of Shipping.