

REPORT ON OIL ENGINE MACHINERY.

No. ~~45491~~ 15646
7 JUL 1926

Date of writing Report June 30th 1926 When handed in at Local Office July 3rd 1926 Port of GLASGOW.
 No. in Survey held at Yroon Date, First Survey 21st Jan'y 1926 Last Survey June 28th 1926
 Reg. Book, Yroon Number of Visits 27
 on the YACHT "CHELSEA"
 Tons { Gross 280
 Net 102
 Built at Yroon By whom built Ailsa S.B. Co. Ltd Yard No. 398 When built 1926
 Engines made at Stockholm By whom made Aktieb Atlas - Diesel Engine No. 50046 When made 1925
 Donkey Boilers made at _____ By whom made _____ Boiler No. _____ When made _____
 Brake Horse Power _____ Owners John F. Harris Port belonging to Glasgow.
 Nom. Horse Power as per Rule _____ Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.

MAIN ENGINES, &c.—Type of Engines _____ 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 _____
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge _____ Is there a bearing between each crank _____
 revolutions per minute _____ Flywheel dia. _____ Weight _____ Means of ignition _____ Kind of fuel used _____
 Crank Shaft, dia. of journals as per Rule _____ Crank pin dia. _____ Crank Webs Mid. length breadth _____ Thickness parallel to axis _____
 as fitted _____ Mid. length thickness _____ Thickness around eyehole _____
 Flywheel Shafts, diameter as per Rule _____ Intermediate Shafts, diameter as per Rule 4.43" Thrust Shaft, diameter at collars as per Rule _____
 as fitted _____ as fitted 5 1/2" as fitted _____
 Propeller Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 5.19" Is the tube shaft fitted with a continuous liner? Yes.
 as fitted _____ as fitted 5 7/8" as fitted _____
 Bronze Liners, thickness in way of bushes as per Rule .45" Thickness between bushes as per rule .34" Is the after end of the liner made watertight in the
 as fitted 1/2" as fitted 3/32" _____
 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 _____
 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. Close fit
 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 Yes. Vickers Gland Length of Bearing in Stern Bush next to and supporting propeller 3'
 Propeller, dia. 5'-6" Pitch 5'-9" No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 9.28 sq. feet
 Method of reversing Engines _____ Is a governor or other arrangement fitted to prevent racing of the engine when declutched _____ Means of lubrication _____
 Thickness of cylinder liners _____ Are the cylinders fitted with safety valves _____ Are the exhaust pipes and silencers water cooled or lagged with
 non-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 Led to top of funnel
 Cooling Water Pumps, No. _____ Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes.
 Bilge Pumps fitted to the Main Engines, No. _____ Diameter _____ Stroke _____ Can one be overhauled while the other is at work _____
 Pumps connected to the Main Bilge Line { No. and Size 2. General Service & Bilge each 5" x 4" Vertical D. Acting
 How driven Motor driven
 Blast Pumps, No. and size _____ Lubricating Oil Pumps, including Spare Pump, No. and size 1 on each engine, 2 spare & 1 hand pump gravity oil system.
 Two independent means arranged for circulating water through the Oil Cooler None Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
 Pumps, No. and size:—In Engine and Boiler Room 1 @ 2 1/4" F. Eng Room 1 @ 2 1/4" A. Eng. Room.
 Holds, &c. 1 @ 2" Aft Hold. 1 @ 2 1/4" in Fore Hold. 1 @ 2" in Coffin Dam.
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 2 1/4"
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes. Yes 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 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 Below.
 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 _____
 How are they protected _____
 Are all pipes pass through the bunkers _____ Have they been tested as per Rule _____
 Are all pipes pass through the deep tanks _____
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times. Yes
 Is there an 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 No Tunnel 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 _____
 Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____
 Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____
 Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____
 Ventilating Air Pumps, No. _____ Diameter _____ Stroke _____ Driven by _____
 Auxiliary Engines crank shafts, diameter as per Rule _____
 as fitted _____

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 _____
 Are there a drain arrangement fitted at the lowest part of each receiver _____
 Pressure Air Receivers, No. _____ Cubic capacity of each _____ Internal diameter _____ thickness _____
 unless, lap welded or riveted longitudinal joint _____ Material _____ Range of tensile strength _____ Working pressure by Rules _____
 Starting Air Receivers, No. _____ Total cubic capacity _____ Internal diameter _____ thickness _____
 unless, lap welded or riveted longitudinal joint _____ Material _____ Range of tensile strength _____ Working pressure by Rules _____



IS A DONKEY BOLLER FITTED?

If so, is a report now forwarded?

Rpt.

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 Receivers Separate Tanks
 (If not, state date of approval)
 Donkey Boilers General Pumping Arrangements Oil Fuel Burning Arrangements

SPARE GEAR 1 Tail Shaft.
 List of spare gear approved on 18th Dec^r 1918 placed on board.

The foregoing is a correct description
 FOR AILSA SHIPBUILDING CO., LIMITED.

McNaughton
 MANUFACTURER.
 ENGINEER MANAGER

Dates of Survey while building
 During progress of work in shops -
 During erection on board vessel - 1926 Jan 21 Feb 4 16 Mar 4 10 11 12 15 18 25 29 31 Apr 2 9 13 20 26 28 May 3 17 20 28 June 16 18 21
 Total No. of visits 27

Dates of Examination of principal parts—Cylinders Covers Pistons Rods Connecting rods
 Crank shaft Flywheel shaft Thrust shaft Intermediate shafts 16-2-26 Tube shaft
 Screw shaft } 4-3-26 Propeller 15-3-26 Stern tube 4-3-26 Engine seatings 15-3-26 Engines holding down bolts 2-4-26
 10-3-26
 Completion of fitting sea connections 12-3-26 Completion of pumping arrangements 4-6-26 Engines tried under working conditions 20-5-26

Crank shaft, Material Identification Mark Flywheel shaft, Material Identification Mark
 Thrust shaft, Material Identification Mark Intermediate shafts, Material S Identification Marks
 Tube shaft, Material Identification Mark Screw shaft, Material S Identification Mark

16-2-26 DC
NO 1364 LLOY
4-3-26 DC
NO 1364 LLOY
10-3-26 J.F.

Is the flash point of the oil to be used over 150° F.
 Is this machinery duplicate of a previous case If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. The engines N^{os} 50046 and 50080 Stockholm Reports N^{os} 2649 and 2650 have been securely fitted on board the above vessel and tried under working conditions with satisfactory results. It is submitted that this vessel is eligible to be classed ~~S~~ LMC 6-2 as recommended in Stockholm Reports N^{os} 2649 & 2650

a.g.
 5/7/26

The amount of Entry Fee ... £ : :
 Special ... £ : :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ 5 : 5 :
 When applied for, 5/7/26.
 When received, 8.7.26

David C Barr
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 6 - JUL 1926
 Assigned + LMC 6.26
 CERTIFICATE WRITTEN 14.7.26 CW

