

REPORT ON OIL ENGINE MACHINERY.

No. 57496

28 OCT 1936

Received at London Office

Date of writing Report 19... When handed in at Local Office 24. 10. 1936 Port of Glasgow

No. in Survey held at Ardrossan Reg. Book. Date, First Survey 19. 6. 36 Last Survey 23. 10. 1936 Number of Visits 11

87953 on the ^{Single} ~~Twin~~ ~~Triple~~ ~~Quadruple~~ Screw vessel M. V. "DORSET COAST" Tons Gross 646 Net 244

Built at Ardrossan By whom built Ardrossan Dockyard Ltd Yard No. 363. When built 1936

Engines made at Gurnock By whom made John G. Kincaid & Co. Ltd Engine No. K102 When made 1936

Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓

Brake Horse Power 1000 Owners Coast Lines Ltd Port belonging to Liverpool

Nom. Horse Power as per Rule 224 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes

Trade for which vessel is intended Coasting

II ENGINES, &c.—Type of Engines 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks

Mean Indicated Pressure 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 as fitted Crank pin dia. Crank Webs Mid. length breadth Mid. length thickness Thickness parallel to axis Thickness around eyehole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube screw shaft fitted with a continuous liner

Bronze 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

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

If so, state type Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch No. of blades Material whether Moveable Total Developed Surface 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

Cooling Water Pumps, No. Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from 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 How driven

Is the cooling water led to the bilges 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 Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size

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 2 off 2 1/4" Forward 1 off 3" aft 1 off 2 1/4" In Pump Room ✓

In Holds, &c. 2 off 2" Bilge well 1 off 3" 1 off 3"

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 above ✓

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 ✓

What pipes pass through the bunkers none ✓ How are they protected ✓

What 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 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 ✓ Is it fitted with a watertight door ✓ 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 ✓ Stroke ✓ Driven by ✓

Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓

Small Auxiliary Air Compressors, No. 2 off. No. of stages 2. Diameters 2 1/4"-5" Stroke 3 1/2" Driven by Electric

Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

Auxiliary Engines crank shafts, diameter as per Rule as fitted Please see Special report No. 103053

Please see Special report No. 20255

Hand Starting

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule

Can the internal surfaces of the receivers be examined and cleaned. Is a drain fitted at the lowest part of each receiver

High Pressure 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. Total cubic capacity Internal diameter thickness
 Seamless, lap welded or riveted longitudinal joint. Material Range of tensile strength Working pressure by Rules
Actual

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

PLANS. Are approved plans forwarded herewith for Shafting ✓ Receivers ✓ Separate Tanks ✓
 (If not, state date of approval) Donkey Boilers ✓ General Pumping Arrangements 13-2-36 Oil Fuel Burning Arrangements ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes
 State the principal additional spare gear supplied see attached sheets 2ff

The foregoing is a correct description,
 For JOHN G. KINCAID & CO. LIMITED
Director. Manufacturer.

Dates of Survey while building
 During progress of work in shops - -
 During erection on board vessel - -
 Total No. of visits 11
 1936 June: 19 July: 15-29 Aug: 31-31 Sep: 16-30 Oct: 5-19 22-23

Dates of Examination of principal parts—Cylinders ✓ Covers ✓ Pistons ✓ Rods ✓ Connecting rods ✓
 Crank shaft ✓ Flywheel shaft ✓ Thrust shaft ✓ Intermediate shafts ✓ Tube shaft ✓
 Screw shaft ✓ Propeller ✓ Stern tube ✓ Engine seatings 21-8-36 Engines holding down bolts 5-10-36
 Completion of fitting sea connections 16-9-36 Completion of pumping arrangements 23-10-36 Engines tried under working conditions 23-10-36
 Crank shaft, Material ✓ Identification Mark ✓ Flywheel shaft, Material ✓ Identification Mark ✓
 Thrust shaft, Material ✓ Identification Mark ✓ Intermediate shafts, Material ✓ Identification Marks ✓
 Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material ✓ Identification Mark ✓

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 ✓
 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. Devon Coast
General Remarks (State quality of workmanship, opinions as to class, &c. *These engines (Main and Auxiliary) have been properly fitted on board tried under full working conditions and found satisfactory, and eligible in my opinion for the record in the Register Book + L.M.C. 10-36 and T.S. O.B.*
 24/10/36

GLASGOW

The amount of Entry Fee .. £ : :
 Special £ 11-4-0
 Donkey Boiler Fee £ 11-4-0
 Travelling Expenses (if any) £ 2 : 0 : 0
 Committee's Minute GLASGOW 27 OCT 1936 30/10

G. E. Murdoch
 Engineer Surveyor to Lloyd's Register of Shipping.

Assigned + L.M.C. 10-36

