

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office MAY - 1 1941

Date of writing Report 10 When handed in at Local Office 28: 4: 10⁴¹ Port of GLASGOW
 No. in Survey held at GLASGOW Date, First Survey 20th June 1940 Last Survey 22nd Apr. 1941
 Reg. Book. on the S/S "EMPIRE ZEPHYR" (Number of Visits 56) Tons ^{Gross} 6327 _{Net} 4592
 Built at GLASGOW By whom built CHAS. CONNELL & CO. LD. Yard No. 432 When built 1941
 Engines made at -Do- By whom made DAVID ROWAN & CO. LD. Engine No. 1066 When made 1941
 Boilers made at -Do- By whom made -Do- Boiler No. 1066 When made 1941
 Registered Horse Power ✓ Owners MINISTRY OF SHIPPING Port belonging to _____
 Nom. Horse Power as per Rule 439 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES
 Trade for which Vessel is intended _____

ENGINES, &c.—Description of Engines TRIPLE EXPANSION Revs. per minute _____
 Dia. of Cylinders 23 1/2"-37 1/2"-68" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 13.634" Crank pin dia. 13 3/4" Crank webs Mid. length breadth 26 3/4" Thickness parallel to axis 8 3/4"
 as fitted 13 3/4" Mid. length thickness 8 3/4" shrunk Thickness around eye-hole 6 1/2"
 Intermediate Shafts, diameter as per Rule 12.985" Thrust shaft, diameter at collars as per Rule 13.634"
 as fitted 13" as fitted 13 3/4"
 Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 14.465" Is the ^{tube} shaft fitted with a continuous liner Yes
 as fitted _____ as fitted 14 3/4" as fitted _____
 Bronze Liners, thickness in way of bushes as per Rule .74" Thickness between bushes as per Rule .55" Is the after end of the liner made watertight in the
 as fitted 3/4" as fitted 1 1/16" 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 Yes
 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' 11"
 Propeller, dia. 17' 9" Pitch 17' 3" No. of Blades 4 Material C. S. whether Moveable No Total Developed Surface 107 sq. feet
 Feed Pumps worked from the Main Engines, No. None Diameter _____ Stroke _____ Can one be overhauled while the other is at work ✓
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 24" Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size 20 9/16" x 7" x 21" Pumps connected to the Main Bilge Line { No. and size 10 8" x 5" x 8" 4 Ballast Pumps
 How driven Steam How driven Steam
 Ballast Pumps, No. and size 10 9" x 12" x 12" Lubricating Oil Pumps, including Spare Pump, No. and size _____
 Are two independent means arranged for circulating water through the Oil Cooler _____ Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room 20 3" in E.R. 20 3" in B.R.
 In Pump Room _____ In Holds, &c. Nos 1, 4 & 5 Holds 20 3" Nos 2 & 3 Holds
20 4" Tunnel well 10 2 1/2" Holds well 10 2 1/2"
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 10 8" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 10 5" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes
 Are the Bilge Suctions in the Machinery Space 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 stokehold 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 Yes
 What Pipes pass through the bunkers _____ 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 Yes Is it fitted with a watertight door No worked from _____

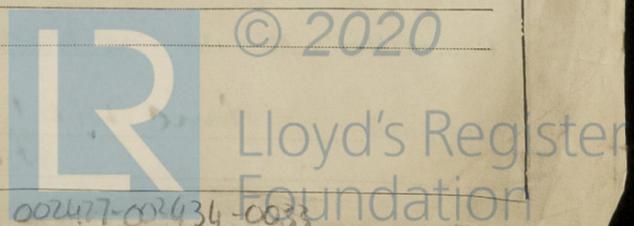
MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 5920 sq. ft.
 Is Forced Draft fitted Yes No. and Description of Boilers 2 S.E. Working Pressure 220 lb.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? _____
 Is the donkey boiler intended to be used for domestic purposes only _____
 PLANS. Are approved plans forwarded herewith for Shafting 13-3-40 Main Boilers 8-11-39 Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval)
 Superheaters _____ General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements _____

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes
 State the principal additional spare gear supplied List attached

The foregoing is a correct description,
 For David Rowan & Co. Ltd.
 Arch. N. Grierson

Manufacturer.



1-9-11-15-17-24
 25-27-29 Dec
 1-19-20-24-25
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