

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

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Date of writing Report 19 When handed in at Local Office 15. 11 1941 Port of Hull
 No. in Survey held at Thorne & Hule Date, First Survey 15-5-41 Last Survey 15-11-1941
 Reg. Book. on the V. de Jug **EMPIRE CEDAR.** (Number of Visits 10)
 Built at Thorne By whom built R. Dunston & Co. Yard No. 360 When built 1941-11
 Engines made at Parsley By whom made McKie & Baxter & Co. Engine No. 1329 When made 1941-11
 Boilers made at Glasgow By whom made John Thompson (Marine Eng.) & Co. Boiler No. 5158 When made 1941-11
 Registered Horse Power _____ Owners Ministry of Shipping Port belonging to _____
 Nom. Hors. Power as per Rule 85 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.
 Trade for which Vessel is intended Trading Services

ENGINES, &c.—Description of Engines Triple Expansion Designed Revs. per minute 140
 Dia. of Cylinders 12" - 20" - 32" Length of Stroke 22" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 6.44 Crank pin dia. 6 1/2" Crank webs Mid. length breadth _____ Thickness parallel to axis 4 1/8"
 as fitted 6 1/2" Mid. length thickness _____ shrunk Thickness around eye-holes 2 1/8" journals
 Intermediate Shafts, diameter as per Rule 6.13 Thrust shaft, diameter at collars as per Rule 6.44
 as fitted 6 1/4" as fitted 6 1/2"
 Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 7.12 Is the { tube } shaft fitted with a continuous liner { Yes.
 as fitted _____ as fitted 7 1/8" { screw } No.
 Bronze Liners, thickness in way of bushes as per Rule _____ Thickness between bushes as per Rule _____ Is the after end of the liner made watertight in the
 as fitted _____ as fitted _____ 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
 a t Yes. If so, state type Newark type Length of Bearing in Stern Bush next to and supporting propeller 29"
 Propeller, dia. 8' 3" Pitch 10' 0" No. of Blades 4 Material C.I. whether Moveable Solid Total Developed Surface 24 sq. feet
 Feed Pumps worked from the Main Engines, No. One Diameter 2 1/2" Stroke 12" Can one be overhauled while the other is at work Yes.
 Bilge Pumps worked from the Main Engines, No. One Diameter 2 1/2" Stroke 12" Can one be overhauled while the other is at work Yes.
 Feed Pumps { No. and size 6 x 4 1/2 x 10 Pumps connected to the { No. and size 5 x 3 1/2 x 6
 { How driven Steam Main Bilge Line { How driven Steam
 Ballast Pumps, No. and size None 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 Eng Rm & B.P. Rm 1 each 2 1/2" dia Also direct suction See below
 In Pump Room Bunker Tunnel 1 2 1/2" dia In Holds, &c. _____ Fore & Aft Compartments
one each 2 1/2" dia Peaks fitted with drain valves controlled from upper deck.

MAIN WATER CIRCULATING PUMP DIRECT BILGE SUCTIONS, No. and size One - 3 1/2" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size Eng & B.P. Rooms. 1 each 2 1/2" dia 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 Yes.
 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 at W.L.
 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 _____ worked from _____

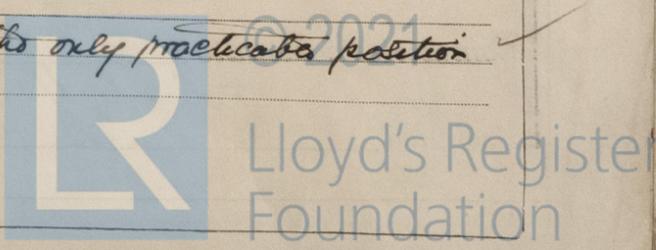
MAIN BOILERS, &c.—(Letter for record IS) Total Heating Surface of Boilers 1356 sq. ft.
 Which Boilers are fitted with Forced Draft Yes. Which Boilers are fitted with Superheaters No.
 No. and Description of Boilers 1. S.B. Working Pressure 200 lbs/sq. in.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? _____
 Can the donkey boiler be used for domestic purposes only _____
 PLANS. Are approved plans forwarded herewith for Shafting 29-11-39 Main Boilers 6-11-39 Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval)
 Superheaters _____ General Pumping Arrangements 17-3-41 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 See list attached to Gls Rpt.

* Stoke hold mud boxes are under removable flood plates. This is the only practicable position

The foregoing is a correct description.

Manufacturer.



Dates of Survey while building
 During progress of work in shops --
 1941 May 15 Jun 5 17 July 20 Sep 4 Oct 16 Nov 5 6 10 15
 During erection on board vessel ---
 Total No. of visits 10

Dates of Examination of principal parts—Cylinders G/L Rpt Slides G/L Rpt Covers G/L Rpt
 Pistons G/L Rpt Piston Rods G/L Rpt Connecting rods G/L Rpt
 Crank shaft G/L Rpt Thrust shaft G/L Rpt Intermediate shafts G/L Rpt 4. 16. 10. 41
 Tube shaft ✓ Screw shaft G/L Rpt 7. 17. 6. 41 Propeller 17. 6. 41
 Stern tube 17. 6. 41 Engine and boiler seatings 17. 6. 41 Engines holding down bolts 16. 10. 41
 Completion of fitting sea connections 20- 7. 41
 Completion of pumping arrangements 10. 11. 41 Boilers fixed 16. 10. 41 Engines tried under steam 10. 11. 41
 Main boiler safety valves adjusted 10. 11. 41 Thickness of adjusting washers 13/32" box
 Crank shaft material Steel Identification Mark 9924 T.P.G. Thrust shaft material Steel Identification Mark 5566 GAL.
 Intermediate shafts, material Steel Identification Marks 5564 GAL. Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material Steel Identification Mark 5566 GAL. Steam Pipes, material Steel Test pressure 600 lbs/sq Date of Test
 Is an installation fitted for burning oil fuel No ✓ Is the flash point of the oil to be used over 150°F. ✓
 Have the requirements of the Rules for the use of oil as fuel 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 No required
 Is this machinery duplicate of a previous case No. If so, state name of vessel EMPIRE MAPLE.

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The Machinery of this vessel has been constructed & fitted on board under Special Survey in accordance with the approved plans, the Society's rules & the specifications. The workmanship & materials are good & when tried under working conditions it was found satisfactory in every respect.
 It is eligible, in my opinion, when the vessel is classed to have the records of D.G.L.M.C 11. 41. 09. & the notations T. 3 Cy. 12, 20, 32" - 22" 85 N.H. 200 lbs/sq I.S.B. 2 Cf G.S 37 H.S 1356 F.D.

The amount of Entry Fee ... £ : : When applied for,
 1/5 Special ... £ 4 : 8 : 1. 12. 19. 41
 Balance of 25% of Tonnage Fee ... £ 3 : 6/3 :
 Donkey Boiler Fee for Specials.
 Travelling Expenses (if any) £ : : 19.

Richard J. Johnson
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned T. D. O'G.

TUE 9 DEC 1941



For S.O.F. see Empire Maple, Hull reports No. 51326

The Surveyors are requested not to write on or below the space for Committee's Minute.