

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office - 3 DEC 1941

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)

Gross 129 Tons Net 112

Built at Thorne By whom built R. Dunston & Co. Yard No. 360 When built 1941. 11

Engines made at Paisley By whom made McHie & 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. Horse Power as per Rule 85 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.

Trade for which Vessel is intended Towing Services

ENGINES, &c.—Description of Engines Triple Expansion

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" as fitted 6.5" Crank pin dia. 6.5" Crank webs Mid. length breadth shrunk Thickness parallel to axis 4.5" Mid. length thickness shrunk Thickness around eye-hole 2 13/16" journals 2 1/8" pins.

Intermediate Shafts, diameter as per Rule 6.13" as fitted 6.14" Thrust shaft, diameter at collars as per Rule 6.44" as fitted 6.5"

Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 7.12" as fitted 7 1/8" Is the tube screw shaft fitted with a continuous liner Yes.

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 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.

If two liners are fitted, is the shaft lapped or protected between the liners Yes. Is an approved Oil Gland or other appliance fitted at the after end of the tube a t. 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 How driven Steam Pumps connected to the Main Bilge Line No. and size 5 x 3 1/2 x 6. How driven Steam.

Ballast Pumps, No. and size One Lubricating Oil Pumps, including Spare Pump, No. and size

Are two independent means arranged for circulating water through the Oil Cooler

Bilge Pumps;—In Engine and Boiler Room One Pm & Bp Pm 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 One & Bp Pms. 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 None How are they protected

What pipes pass through the deep tanks None 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 15) 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.

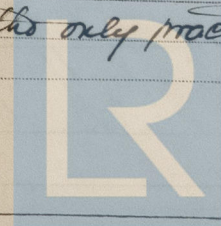
Has the spare gear required by the Rules been supplied Yes

State the principal additional spare gear supplied See list attached to Gls Rpt.

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

The foregoing is a correct description.

Manufacturer.



Lloyd's Register
Foundation

010953-010960-0047

During progress of work in shops --

Dates of Survey while building

During erection on board vessel --

Total No. of visits

1941 May 15 Jun 5 17 July 20 Sep 4 Oct 16 Nov 5 6 10 15

Dates of Examination of principal parts—Cylinders *G/R Rpt* Slides *G/R Rpt* Covers *G/R Rpt*

Pistons *G/R Rpt* Piston Rods *G/R Rpt* Connecting rods *G/R Rpt*

Crank shaft *G/R Rpt* Thrust shaft *G/R Rpt* Intermediate shafts *G/R Rpt* 4. 16. 10. 41

Tube shaft *✓* Screw shaft *G/R 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 *5362 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/p* 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 *NOT 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 Specification. 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 NHP. 200 lbs/p* *1.S.B. 2 cf G.S 37 H.S 1356 F.R.*

The amount of Entry Fee ... £ : : When applied for, *1. 12. 19. 41*

1/5 Special Balance of 25% of *Tuition Fee* ... £ 4 : 8 : When received, *6/3*

Donkey Boiler Fee ... £ 3 : 6/3 : *for Specification.*

Travelling Expenses (if any) £ : : 19.

Committee's Minute

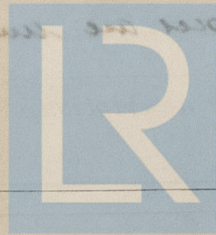
Assigned

Lyth J. J. Johnson

Engineer Surveyor to Lloyd's Register of Shipping.

TUE 9 DEC 1941

Adm. 11. 41
J.D. 09.



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