

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 1 JUL 1943

Date of writing Report 15<sup>th</sup> JUNE 1943. When handed in at Local Office 23<sup>rd</sup> JUNE 1943. Port of GREENOCK  
 No. in Survey held at PORT GLASGOW Date, First Survey 4<sup>th</sup> MARCH 1943. Last Survey 21-6-1943  
 Reg. Book (Number of Visits 23)  
 on the S/S EMPIRE FLORIZEL  
 Built at PORT GLASGOW By whom built LITHGOW'S LTD. Yard No. 990 Tons { Gross 7055.78  
 Engines made at GLASGOW By whom made JOHN BROWN & CO. LTD. Engine No. 955 When built 1943  
 Boilers made at GLASGOW By whom made J. THOMPSON (MARINE) LTD. Boiler No. 5176 When made 1942  
 Registered Horse Power 520 Owners MINISTRY OF WAR TRANSPORT. Port belonging to GREENOCK  
 Nom. Horse Power as per Rule 520 Is Refrigerating Machinery fitted for cargo purposes N. Is Electric Light fitted Y  
 Trade for which vessel is intended OPEN SEA SERVICE

ENGINES, &c.—Description of Engines  
 Dia. of Cylinders Length of Stroke No. of Cylinders No. of Cranks  
 as per Rule as fitted  
 Crank shaft, dia. of journals Crank pin dia. Crank webs Mid. length breadth Thickness parallel to axis  
 as fitted Mid. length thickness shrunk Thickness around eye-hole  
 Intermediate Shafts, diameter as per Rule as fitted Thrust shaft, diameter at collars as per Rule as fitted  
 Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the { tube } shaft fitted with a continuous liner { screw }  
 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  
 at 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  
 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. Two Diameter 4" Stroke 24 Can one be overhauled while the other is at work Y  
 Feed { No. and size Two 9 1/2 x 7 1/2 Pumps connected to the { No. and size Two 3 1/2 x 4 One 10 x 12 One 8 x 5 Y  
 Pumps How driven Steam Main Bilge Line How driven Main Eng Steam  
 Ballast Pumps, No. and size One 10 x 12 Lubricating Oil Pumps, including Spare Pump, No. and size Y  
 Are two independent means arranged for circulating water through the Oil Cooler Y  
 Bilge Pumps:—In Engine and Boiler Room Three @ 3" Two @ 2" Suctions, connected to both Main Bilge Pumps and Auxiliary  
 In Pump Room In Holds, &c. Tunnel well One 2 1/2" Six @ 3" Two @ 3 1/2" Two @ 2 1/2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size One @ 8" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One @ 5"  
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Y  
 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 Y  
 Are all Sea Connections fitted direct on the skin of the ship Y or in recesses Are they fitted with Valves or Cocks Y  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Y 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 Y Are the Blow Off Cocks fitted with a spigot and brass covering plate Y  
 What Pipes pass through the bunkers Four hold suction How are they protected Wood casing  
 What pipes pass through the deep tanks Have they been tested as per Rule Y  
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Y  
 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 Y Is the Shaft Tunnel watertight Y Is it fitted with a watertight door No worked from Access from U.O.

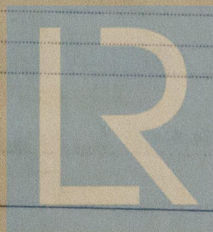
MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 7706 sq. ft.  
 Which Boilers are fitted with Forced Draft All boiler 358 sq. ft. / Aux. 58. Which Boilers are fitted with Superheaters None  
 No. and Description of Boilers Three single ended Working Pressure 220 lb./sq. in.  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Y Glasgow Opt N° 65918 & 66035  
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded?  
 Can the donkey boiler be used for domestic purposes only Y  
 PLANS. Are approved plans forwarded herewith for Shafting 5496 opt Main Boilers 546 opt Auxiliary Boilers Y Donkey Boilers Y  
 (If not state date of approval)  
 Superheaters Y General Pumping Arrangements 22-4-42 Oil fuel Burning Piping Arrangements Y

## SPARE GEAR.

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

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

Director. Manufacturer.



© 2020

Lloyd's Register Foundation

W1169-0013

During progress of work in shops - - - SEE GLS 211N° 64770

Dates of Survey while building { During erection on board vessel - - - GREENOCK (1943) MAR. 4. 5. 10. APR. 23. 27. 29. MAY 3. 4. 10. 12. 13. 14. 17. 18. 20. 21. 23. 26. 27. 28. JUNE 1. 4. 21.

Total No. of visits 23.

Dates of Examination of principal parts - Cylinders Slides Covers

Pistons Piston Rods Connecting rods

Crank shaft Thrust shaft GLASGOW Intermediate shafts

Tube shaft Screw shaft Propeller

Stern tube Engine and boiler seatings 23-4-43 Engines holding down bolts 25-5-43

Completion of fitting sea connections 4-3-43

Completion of pumping arrangements 31-5-42 Boilers fixed 3-5-43 Engines tried under steam 31-5-43

Main boiler safety valves adjusted 27-5-43 Thickness of adjusting washers 11/32 3/8 5/32 9/64 5/32 9/64 20866C

Crank shaft material S Identification Mark A68 Thrust shaft material S Identification Mark 52211

Intermediate shafts, material S Identification Marks 3243, 2915, 3362 (Glasgow 65362) Tube shaft, material S Identification Mark 20651

Screw shaft, material S Identification Mark 51534 Steam Pipes, material SOS Test pressure 660 Date of Test 26.25/5/43

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 - 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 - If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, &c.)

For information not on their report please see Glasgow op' N° 64770

These engines & boilers have been efficiently installed in the vessel in accordance with the Rules & approved plans and tested under working conditions on a short sea trial with satisfactory results. The boiler safety valves have been adjusted under steam 220 lbs/sq. The plans & specification have been supervised, a copy of certificate issued is attached.

This machinery is eligible in my opinion to be classed in the Society's Register Book with record

+ LMC 6-43 and Notation Screw Shaft CL. 3 SB: 220 lbs/sq. FD

2 SB 21 Aux SB

Intermediate Shafting

F 10226 988

F 10248 10016

211029 52387

2066281 51602

212069 52909

2068791 51771

20595B 51379

Main & Aux Steam pipes "Open Hearth"

Deck steam pipes "Bessemer"

The amount of Entry Fee ... £ 6 : : When applied for, 23<sup>RD</sup> JUNE 1943.

Special ... £ 22 : 14 : : When received, 10

+ 1/5 in Specification

Donkey Boiler Fee ... £ : : : 10

Travelling Expenses (if any) £ : : : 10

Committee's Minute GLASGOW 22 JUN 1943

Assigned -1- June 6. 43 20

Charles J. Hunter

Engineer Surveyor to Lloyd's Register of Shipping.

