

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 5 MAY 1948

Date of writing Report 26 April 1948 When handed in at Local Office Penarth 19 48 Port of BARRY
 No. in Survey held at Penarth Date, First Survey 1st Jan 48 Last Survey 21st April 1948
 Reg. Book 33552 on the steel screw "Southern Island" (Number of Visits) Tons ^{Gross} 1391 _{Net} 808
 Built at Kinderdijk By whom built L. Smit + Zaan Yard No. When built 1914
 Engines made at Kinderdijk By whom made L. Smit + Zaan Engine No. When made 1914
 Boilers made at Kinderdijk By whom made L. Smit + Zaan Boiler No. When made 1914
 Registered Horse Power Owners Southern Shipping + Finance Ltd. Port belonging to London
 Nom. Horse Power as per Rule 184 Is Refrigerating Machinery fitted for cargo purposes no. Is Electric Light fitted yes.
 Trade for which vessel is intended Ocean going.

ENGINES, &c.—Description of Engines Reciprocating - triple expansion. Revs. per minute
 Dia. of Cylinders 18 3/32" x 29 1/4" x 46 3/4" Length of Stroke 36" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 9 3/16" Crank pin dia. 9 5/8" Crank webs Mid. length breadth 14 1/2" Thickness parallel to axis 6 5/16"
as fitted 9 5/8" 9 5/8" Mid. length thickness 6 5/16" shrunk Thickness around eye-hole 4 5/8"
 Intermediate Shafts, diameter as per Rule 9 1/8" Thrust shaft, diameter at collars as per Rule 9 3/16"
as fitted 9 1/4" as fitted 9 5/8"
 Tube Shafts, diameter as per Rule none. Screw Shaft, diameter as per Rule 10 7/16" Is the ^{tube} shaft fitted with a continuous liner yes.
as fitted as fitted 10 9/16" screw
 Bronze Liners, thickness in way of bushes as per Rule 5/8" Thickness between bushes as per Rule 5/8" 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 none
 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 none
 If two liners are fitted, is the shaft lapped or protected between the liners none. Is an approved Oil Gland or other appliance fitted at the after end of the tube
 at none If so, state type none Length of Bearing in Stern Bush next to and supporting propeller 42"
 Propeller, dia. 11'10" Pitch 13'9" No. of Blades 4 Material 6. Iron whether Moveable no Total Developed Surface 56 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 2 15/16" Stroke 14 1/2" Can one be overhauled while the other is at work yes.
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 9/16" Stroke 14 1/2" Can one be overhauled while the other is at work yes.
 Aux. Feed Pumps } No. and size (1) Horizontal duplex 4 1/2" x 5" x 6" Pumps connected to the } No. and size (1) 4" x 8" x 9"
 } How driven steam (also injector) Main Bilge Line } How driven steam
 Ballast Pumps, No. and size (1) Horizontal duplex 4" x 8" x 9" Lubricating Oil Pumps, including Spare Pump, No. and size none
 Are two independent means arranged for circulating water through the Oil Cooler none Suctions, connected both to Main Bilge Pumps and Auxiliary
 Bilge Pumps:—In Engine and Boiler Room Engine Room 3 @ 3" bore Boiler Room 1 @ 3" bore
 In Pump Room none In Holds, &c. Fore Hold 2 @ 3" bore Aft Hold 1 @ 3" bore

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 5" bore Independent Power Pump Direct Suctions to the Engine and/or Boiler Room Bilges,
 No. and size 1 @ 3" bore 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 manifolds, 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 2 Valves + 2 Cocks.
 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 about
 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 Bilge suction to fore hold How are they protected
 What pipes pass through the deep tanks Have they been tested as per Rule Wood ceiling
 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 yes. worked from top of Eng. Room.

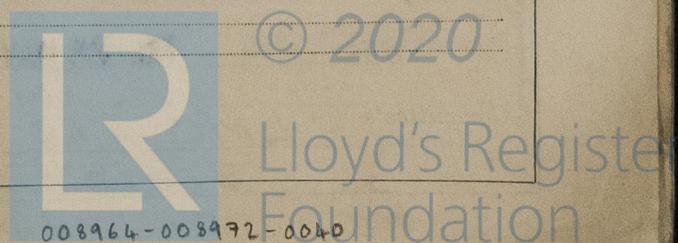
MAIN BOILERS, &c.—(Letter for record) Total Heating Surface of Boilers 3488 sq. ft.
 Which Boilers are fitted with Forced Draft none Which Boilers are fitted with Superheaters none
 No. and Description of Boilers Two - multitubular. Working Pressure 180#d.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes.
 IS A DONKEY BOILER FITTED? no. If so, is a report now forwarded?
 Can the donkey boiler be used for other than domestic purposes
 PLANS. Are approved plans forwarded herewith for Shafting yes Main Boilers yes Auxiliary Boilers none Donkey Boilers none
 (If not state date of approval)
 Superheaters none General Pumping Arrangements yes. Oil fuel Burning Piping Arrangements none.

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes
 State the principal additional spare gear supplied none.

The foregoing is a correct description.

Manufacturer.



008964-008972-0040

NOTE.—THE WORDS WHICH ARE NOT PRINTED IN THIS FORM ARE TO BE SUPPLIED BY THE USER.

Dates of Survey while building {
 During progress of work in shops - - -
 During erection on board vessel - - -
 Total No. of visits

Dates of Examination of principal parts—Cylinders Slides Covers
 Pistons Piston Rods Connecting rods
 Crank shaft Thrust shaft Intermediate shafts
 Tube shaft Screw shaft Propeller
 Stern tube Engine and boiler seatings Engines holding down bolts
 Completion of fitting sea connections
 Completion of pumping arrangements Boilers fixed Engines tried under steam
 Main boiler safety valves adjusted Thickness of adjusting washers
 Crank shaft material Identification Mark Thrust shaft material Identification Mark
 Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark
 Screw shaft, material Identification Mark Steam Pipes, material Test pressure 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. *none*
 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 *none*
 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.) *This machinery is an existing installation and has now been examined for classification in accordance with the approved plans and Secretary's letter "E" 13.2.48. The main and auxiliary machinery now placed in good condition and tried under working conditions. Eligible in my opinion, to be classed. Please see Barry Report No 25803.*

Fee charged on Rpt 9.

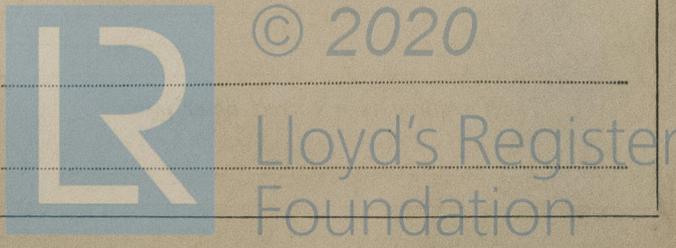
The amount of Entry Fee	£	:	:	When applied for,
Special	£	:	:	19
Donkey Boiler Fee	£	:	:	When received,
Travelling Expenses (if any)	£	:	:	19

S. Moffatt
 Engineer Surveyor to Lloyd's Register of Shipping.

Date **FRI. 23 MAY 1949**

Committee's Minute

LMC 4.48 Subject
S 3.48
C.L. 2 SB 180/11



Certificate to be sent to (The Surveyors are requested not to write on or below the space for Committee's Minute.)