

28 JUL 1930

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? **GENERATOR** FORWARDED WITH **MOTOR** N.Y. REP. 31406 Receivers Separate Tanks
PLANS. Are approved plans forwarded herewith for shifting (If not, state date of approval) General Pumping Arrangements YES Oil Fuel Burning Arrangements

Donkey Boilers General Pumping Arrangements YES Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied

State the principal additional spare gear supplied

FOR GENERAL DESCRIPTION OF ELECTRIC APPARATUS FOR PROPULSION OF VESSEL, PLEASE SEE FOLLOWER SHEET HEREWITH.

The foregoing is a correct description, General Electric Company

By W.D. Miller Manufacturer.

Manager, Federal & Marine Dept

Dates of Survey while building { During progress of work in shops -- } 1930 Feb 24 Mar 8, 11, 19, APR 23 MAY 3
{ During erection on board vessel -- } MAR 3, AP. 24, MAY 20, 23, 28, JUNE, 3, 5, 9, 10, 12, 16, 21, 24, 30, 1930
Total No. of visits 6 + 14

Dates of Examination of principal parts—Cylinders Covers Pistons Rods Connecting rods
GENERATOR 19/3/30 Flywheel shaft 19/3/30 Intermediate shafts 19/3/30 Tube shaft 19/3/30

Screw shaft 3-3-30 Propeller 24-4-30 Stern tube 29-4-30 Engine seatings 23-5-30 Engines holding down bolts 16-6-30

Completion of fitting sea connections 9-6-30 Completion of pumping arrangements 16-6-30 Engines tried under working conditions 30-6-30

GENERATOR Shaft Material Steel Identification Mark LLOYDS JSH 3-19-30 Flywheel shaft, Material Steel Identification Mark LLOYDS JSH 3-19-30
MOTOR Shaft, Material Steel Identification Mark LLOYDS JSH 3-19-30 Intermediate shafts, Material Steel Identification Marks LLOYDS NO 1046
Tube shaft, Material Steel Identification Mark OH STEEL Screw shaft, Material OH STEEL Identification Mark EW, 17.1.30

Is the flash point of the oil to be used over 150° F. YES

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with YES

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 yes If so, state name of vessel Please see N.Y. Rpts 31405 + 31406

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

The Main + Auxiliary Generators, the double armature Motor, + the Control Board have been built under Special Survey in accordance with the Rules + approved plans, + the workmanship + material are good.

They have been forwarded to Quincy to be fitted on board, + when this has been done in accordance with the Rules + to the satisfaction of the Surveyor, + the machinery has been satisfactorily tried at full power, it will be eligible, in my opinion, to received the record + LMC (with date) + the notation "2 OIL ENGINES CONNECTED TO ELEC. MOTOR & SC. SHAFT." THE MAIN AUX GENERATORS, AND MOTOR HAVE BEEN FITTED IN THE VESSEL, QUALITY OF WORKMANSHIP + MATERIALS IS GOOD THE ENGINES HAVE BEEN EXAMINED UNDER WORKING CONDITIONS AND FOUND SATISFACTORY. IN THE OPINION OF THE

UNDER SIGNED THEY ARE ELIGIBLE TO HAVE THE RECORD OF LMC 630 WITH NOTATION "2 OIL ENGINES, CONNECTED TO ELECTRIC MOTOR + SC. SHAFT"

The amount of Entry Fee BOSTON \$100 Special ... NY \$100 Donkey Boiler Fee ... 75 Travelling Expenses (if any) 0
When applied for, May 9th 1930
When received, 29.5.30
NEW YORK JUL 16 1930

Assigned + LMC. 6-30, 2 oil engs. connected to Elec. Motor + Sc. Shaft

ELECTRICAL MACHINERY FOR PROPULSION

(BETHLEHEM S. B. CORP # 1442)

The propulsion equipment consists of two Winton Diesel engines, each direct connected to a General Electric Co. generator rated LDRM 7-A - 6 Pole - 210 k.w. - 375 R.P.M., 250 volt, shunt wound. These two generators supply power to the main motor, which is of the double armature type and each motor is rated LDRM-9-A - 8 Poles - 250 H.P. - 200 R.P.M., 240 volts, total 500 H.P. 500 volts.

The two main generators are operated in series with the two armatures of the double motor. The generators are operated at constant speed, the speed of the motor being obtained by varying the voltage of the generator, this being the variable voltage system of control.

Reversal is obtained by reversing the fields of the main generator.

In addition to the above, there are two auxiliary generators or exciters, rated MPC 6 - 20 k.w. - 375 R.P.M. 125 volts; one of each of these is mounted on the shaft extension of each main generator. These auxiliary generators are exciters operating at constant speed and constant voltage, and provide excitation for the main generators and motors and power for the various motor driven auxiliaries.

The forgings have been tested as per Rules, the generators and motors examined during construction and the workmanship and material found good.

The generators and electric motor have been tested at the works by being run against each other and under these conditions were found good.

John S. Heck

Engineer Surveyor to Lloyd's Register of Shipping.

