

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 11913

Received at London Office

Writing Report 1. 8. 1944 When handed in at Local Office 8. 8. 1944 Port of **MANCHESTER.** 11 AUG 1944
 in Survey held at **ASHTON UNDER LYNE.** Date, First Survey **21.6.44.** Last Survey **4. 8. 19 44.**
 Book. Number of Visits **Three.**

on the ^{Single} ~~Twin~~ ~~Triple~~ Screw vessel **"EMPIRE DYNASTY"** Tons ^{Gross}
~~Quadruple~~ ~~Sunderland~~ ~~TYNE.~~ By whom built **J.L. THOMPSON & CO. LTD** YARD N°631.
 (an Engineer (Marines) By whom built **Richardsons Westgarth Ltd.** ENG No. 2744 When built **1944.**

Engines made at **ASHTON U LYNE.** By whom made **National Gas & O.E.Co.** ~~Contract~~ No. **57460** When made **1944.**
 Generators made at **Stockport** By whom made **McCure & Whitfield** Contract No. **87428/S.M.** When made **1943 August.**
 of Sets **One** Engine Brake Horse Power **20** Nom. Horse Power as per Rule **5.7** Total Capacity of Generators **10** Kilowatts.

ENGINES, &c.—Type of Engines **Vertical Solid Injection.** 2 or 4 stroke cycle **4** Single or double acting **Single.**
 Maximum pressure in cylinders **750** ✓ Diameter of cylinders **4 1/2"** ✓ Length of stroke **6"** ✓ No. of cylinders **Two** No. of cranks **Two** ✓
 Distance of bearings, adjacent to the Crank, measured from inner edge to inner edge **5 1/2"** ✓ Is there a bearing between each crank **Yes.**
 Revolutions per minute **1000** ✓ Flywheel dia. **25"** ✓ Weight **337 lbs.** Means of ignition **Compression** Kind of fuel used **Direct Oil.** ✓
 Crank Shaft, dia. of journals as per Rule **Approved.** Crank pin dia. **2 3/8"** ✓ Crank Webs Mid. length breadth **3 1/4"** ✓ Thickness parallel to axis **Solid.** ✓
 as fitted **2 3/8"** ✓ Mid. length thickness **1.5/16"** ^{shrunk} Thickness around eye-hole **Solid.** ✓
 Crank Shaft, diameter as per Rule **Intermediate Shafts, diameter** as per Rule **Thickness of cylinder liners** **3/8"**
 as fitted **Intermediate Shafts, diameter** as fitted **Thickness of cylinder liners** **3/8"**
 Governor or other arrangement fitted to prevent racing of the engine when declutched **Yes** Means of lubrication **Forced.**
 Are the cylinders fitted with safety valves **No.** Are the exhaust pipes and silencers water cooled or lagged with non-conducting material **-**
 Cooling Water Pumps, No. **1 Centrifugal Type.** Is the sea suction provided with an efficient strainer which can be cleared within the vessel **-**
 Heating Oil Pumps, No. and size **One - Incorporated in Engine.**
 Compressors, No. **-** No. of stages **-** Diameters **-** Stroke **-** Driven by **-**
 Suction Air Pumps, No. **-** Diameter **-** Stroke **-** Driven by **-**

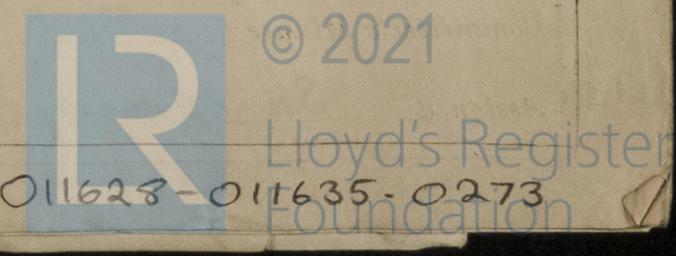
RECEIVERS:—Have they been made under Survey **State No. of Report or Certificate**
 Each receiver, which can be isolated, fitted with a safety valve as per Rule **-**
 Are the internal surfaces of the receivers be examined **What means are provided for cleaning their inner surfaces**
 Are there a drain arrangement fitted at the lowest part of each receiver **-**
Pressure Air Receivers, No. Cubic capacity of each **Internal diameter** **thickness**
 Material **Range of tensile strength** **Working pressure by Rules**
Storage Air Receivers, No. Total cubic capacity **Internal diameter** **thickness**
 Material **Range of tensile strength** **Working pressure by Rules**

ELECTRIC GENERATORS:—Type **-**
 Voltage of supply **volts: Full Load Current** **Amperes. Direct or Alternating Current**
 Is the automatic governing system, state the periodicity **Has the Automatic Governor been tested and found as per rule when full load is suddenly thrown on and off**
 Are the generators, are they compounded as per rule **is an adjustable regulating resistance fitted in series with each field**
 Are all terminals accessible, clearly marked, and furnished with sockets **-**
 Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched **Are the lubricating arrangements of the generators as per Rule**
 Do the generators are under 100 kw. full load rating, have the Makers supplied certificates of test **and do the results comply with the requirements**
 Do the generators are 100 kw. or over have they been built and tested under survey **-**

NS. Are approved plans forwarded herewith for Shafting **11.11.42.** Receivers **-** Separate Tanks **-**
 (If not, state date of approval)

FREE GEAR AS PER RULE REQUIREMENTS.

The foregoing is a correct description,
F. R. Conwell THE NATIONAL GAS AND OIL ENGINE Co. Ltd. Manufacturer.



Dates of Survey while building
 { During progress of work in shops - -) 21.6.44. 23.6.44.
 { During erection on board vessel - - -)
 Total No. of visits

Dates of Examination of principal parts - Cylinders 23.6.44. Covers 23.6.44. Pistons 23.6.44. Piston rods 23.6.44.
 Connecting rods 21.6.44. Crank and Flywheel shafts 24.4.44. Intermediate shafts -
 Crank and Flywheel shafts, Material O. H. Steel. Identification Marks LLOYD'S 2566 ELK. FH. 24.4.44
 Intermediate shafts, Material - Identification Marks -
 Identification marks on Air Receivers -

Is this machinery duplicate of a previous case Yes. If so, state name of vessel Richardsons Westgarth Ship 2734/5

General Remarks (State quality of workmanship, opinions as to class, &c. THIS ENGINE HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS AND IS IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND RULE REQUIREMENTS. THE MATERIALS AND WORKMANSHIP ARE GOOD AND THE ENGINE, WHEN TESTED IN SHOP FULL LOAD CONDITIONS GAVE SATISFACTORY RESULTS. IN MY OPINION THIS ENGINE IS SUITABLE TO BE PLACED ON BOARD A VESSEL CLASSED WITH THIS SOCIETY FOR THE PURPOSE INTENDED.

THIS ENGINE NO. 57460 IS INTENDED FOR RICHARDSONS WESTGARTH CONTRACT NO. 2744 - SHIPBUILDER MESSRS. J. L. THOMPSON LD., SUNDERLAND, SHIP NO. 631, TO REPLACE ENGINE NO. 56831, REPORT NO. 117 ENGINE NO. 56831 ONLY HAS BEEN TRANSFERRED TO MESSRS. N. E. MARINE ENGINE CO., LAING'S YARD SHIP NO. 751 TO REPLACE DAMAGED ENGINE NO. 56640, MANCHESTER REPORT NO. 11,378. (Empire Paragon)

This Small Oil Engine along with the 10KW Dynamo made by McClure + Whitfield Ls, Stockport No 9711. 7A. 45.5 Amps 220V. 1000 rpm and Air Compressor made by Reavell + Co Ls Job no 34871 Mach no 83364

all fitted on a Combined Bedplate have been efficiently fitted on board s/s Empire Dynasty, on English Flote on Starboard side Tested under working conditions and found satisfactory

Awatt Newcastle on Tyne 26/11/44

The amount of Fee ... £ 4 : 4 : 8.8. 19.44. When applied for,
 Travelling Expenses (if any) £ 0 : 10 : When received,
 19.....

A. G. Smith
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute FEB 5 JAN 1945

Assigned See F.E. machy opt

