

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 12556

Date of writing Report **23rd May, 1946.** When handed in at Local Office **31st May, 1946.** Port of **MANCHESTER.**

Received at London Office

JUN 1946

25 SEP 1946

No. in Survey held at **ALTRINCHAM.** Date, First Survey **11th March, 1946.** Date, Survey **8th April, 1946.**

Reg. Book. **EMPIRE FEDRITA** Number of Visits **2** Gross **800** Net **370**

Built at **Glasgow.** By whom built **A. & J. INGLIS LTD.** Yard No. **1314P.** When built **1946.**

Owners. Port belonging to **Engine**

Oil Engines made at **Altrincham.** By whom made **Russell Newbery & Co. Ltd.** Engine No. **3975.** When made **1946.**

Generators made at **Stockport.** By whom made **Mc Clure & Whitfield** Generator No. **10507.** When made

No. of Sets **1** Engine Brake Horse Power **18** Nom. Horse Power as per Rule **5.1** Total Capacity of Generators **6 1/2** Kilowatts

OIL ENGINES, &c.—Type of Engines **Vertical, Solid Injection, Heavy Oil** or 4 stroke cycle **4** Single or double acting **Single.**

Maximum pressure in cylinders **860 lbs sq. inch.** Diameter of cylinders **4 1/8"** Length of stroke **5"** No. of cylinders **2** No. of cranks **2.**

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **5 1/8"** Is there a bearing between each crank **Yes.**

Revolutions per minute **1000.** Flywheel dia. **22"** Weight **345 lbs.** Means of ignition **Compression** Kind of fuel used **Diesel Oil.**

Crank Shaft, dia. of journals **Approved.** as per Rule **2 1/2"** Crank pin dia. **2 3/8"** Crank Webs Mid. length breadth **3 1/2"** Thickness parallel to axis

Flywheel Shaft, diameter **as per Rule** Intermediate Shafts, diameter **as per Rule** Thickness of cylinder liners **11/32"**

Is a 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. **One-plunger type.** Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size **One-gear type.**

Air Compressors, No. No. of stages. Diameters. Stroke. Driven by

Scavenging Air Pumps, No. Diameter. Stroke. Driven by

AIR RECEIVERS:—Have they been made under Survey State No. of Report or Certificate

Is each receiver, which can be isolated, fitted with a safety valve as per Rule

Can the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces

Is there a drain arrangement fitted at the lowest part of each receiver

High Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

Starting Air Receivers, No. Total cubic capacity Internal diameter thickness

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

ELECTRIC GENERATORS:—Type **Compound Wound Continuous Rating V.E. Louvred type.**

Pressure of supply **110** volts. Full Load Current **59** Amperes. Direct or Alternating Current **Direct.**

If alternating current system, state the periodicity Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown on and off **Yes.** Generators, are they compounded as per Rule **Yes.** is an adjustable regulating resistance fitted in series with each shunt field **Yes.**

Are all terminals accessible, clearly marked, and furnished with sockets **Yes** Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched **Yes.** Are the lubricating arrangements of the generators as per Rule **Yes.**

If the generators are under 100 kw. full load rating, have the makers supplied certificates of test **Yes.** and do the results comply with the requirements **Yes.**

If the generators are 100 kw. or over have they been built and tested under survey

PLANS.—Are approved plans forwarded herewith for Shafting **1st September, 1944** Receivers. Separate Tanks

SPARE GEAR AS PER RULE REQUIREMENTS.

The foregoing is a correct description,
per pro. **RUSSELL NEWBERY & Co. Ltd.**

A. Bradbury
DIRECTOR

Manufacturer.



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Lloyd's Register
Foundation

014984-014996-0170

Dates of Survey while building
 During progress of work in shops - June 30, 1946, March 11, April 8.
 During erection on board vessel -
 Total No. of visits -

Dates of Examination of principal parts—Cylinders 11.3.46. Covers 11.3.46. Pistons 11.3.46. Piston rods -

Connecting rods 11 3.46. Crank and Flywheel shafts 11th March, 1946. Intermediate shafts

Crank shaft Material O.H. Steel. Tensile strength
 Elongation Identification Marks LLOYD'S J.2530 GC. 30.6.44.

Flywheel shaft, Material Identification Marks

Is this machinery duplicate of a previous case Yes Identification Marks

Identification marks on Air Receivers Generator No. 10507.

Hamworthy Centrifugal Pump No. 69340.

Is this machinery duplicate of a previous case Yes. If so, state name of vessel Manchester Report No. 12436 Same contract.

GENERAL REMARKS (State quality of workmanship, opinions as to class, etc.) This engine has been built under special survey, of tested materials, and is in accordance with Secretary's letters, approved plans and Rules Requirements. Materials and workmanship are of good quality and the engine, when tested in the shop under full load conditions, showed satisfactory results. In my opinion, this engine is suitable to be placed on board a vessel classed with this Society for the purpose intended.

The Centrifugal pump has been made under British Corporation survey and this fact is noted and approved in Secretary's letter of 3.4.46. The Secretary Glasgow has been advised.

Im.11.42.-T (MADE AND PRINTED IN ENGLAND). (The Surveyors are requested not to write on or below the space for Committee Minutes.)

The amount of Fee ... £ 4 : 4 : 0 When applied for 30th May 46
 Travelling Expenses (if any) £ : 6 : 8. When received 19

Committee's Minute
 Assigned
 GLASGOW 24 SEP 1946
 SEE ACCOMPANYING MACHINERY REPORT.

