Hull 52030.

AUXILIARY

Cpt. 4c.

REPORT ON OIL ENGINE ~~ELECTRIC GENERATOR~~ SETS.

No. 11,429.

Received at London Office 7 APR 1943

Date of writing Report 31. 3. 1943 When handed in at Local Office 3. 4. 1943 Port of MANCHESTER.

No. in Reg. Book. Survey held at ALTRINCHAM. Date, First Survey 8.3.43. Last Survey 23. 3. 1943.

Number of Visits 4.

on the Single / Twin / Triple / Quadruple Screw vessel H.M. Rescue Tug. "ALLEGIANCE" Tons Gross / Net

Built at HULL. By whom built C.D. Holmes & Co. Ltd. Yard No. J.2525 & 2527. When built

Owners Port belonging to

Oil Engines made at ALTRINCHAM. By whom made Russell Newbery & Co. Engine ~~xxxxx~~ No. 3752. When made 1943.

Generators made at - By whom made - Contract No. - When made -

No. of Sets One. Engine Brake Horse Power 14 Nom. Horse Power as per Rule 4 Total Capacity of Generators - Kilowatts.

OIL ENGINES, &c.—Type of Engines Vertical Solid Injection. 2 or 4 stroke cycle 4 Single or double acting Single.

Maximum pressure in cylinders 860 lbs/sq" Diameter of cylinders 4 1/8" Length of stroke 6" 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 800 800. Flywheel dia. 22" Weight 220 lbs. Means of ignition Compression Kind of fuel used Diesel Oil.

Crank Shaft, dia. of journals as per Rule Approved. as fitted 2 1/2" Crank pin dia. 2 3/8" Crank Webs Mid. length breadth 3 1/2" Thickness parallel to axis Mid. length thickness 1.5/16" shrunk Thickness around eyehole

Flywheel Shaft, diameter as per Rule as fitted **Intermediate Shafts**, diameter as per Rule as fitted 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 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

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

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

Generators, are they compounded as per rule is an adjustable regulating resistance fitted in series with each shunt 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

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

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

PLANS. Are approved plans forwarded herewith for Shafting 26.9.42. (If not, state date of approval) Receivers - Separate Tanks -

SPARE GEAR AS PER RULE REQUIREMENTS.

Above Auxiliary Oil Engine with attached 5" pump fitted on board in accordance with Admiralty Specification, at Hull

8/4/43.

The foregoing is a correct description,

per pro. RUSSELL, NEWBERY & Co. Ltd.

J. C. Russell

DIRECTOR.

Manufacturer.

Dates of Survey while building — *During progress of work in shops* - - - 8.3.43., 17.3.43, 18.3.43 and 23.3.43.

During erection on board vessel - - -

Total No. of visits Four.

Dates of Examination of principal parts—*Cylinders* 8.3.43. *Covers* 17 & 18.3.43 *Pistons* 8.3.43. *Piston rods* -

Connecting rods 8.3.43. *Crank and Flywheel shafts* 8.3.43. *Intermediate shafts* -

Crank and Flywheel shafts, Material O.H. Steel. *Identification Marks* LLOYD'S 1650 FH, 28.1.43.

Intermediate shafts, Material - *Identification Marks* -

Identification marks on Air Receivers -

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 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 MATERIAL AND WORKMANSHIP IS GOOD AND THE ENGINE WHEN TESTED IN SHOP UNDER FULL LOAD CONDITIONS SHEWED SATISFACTORY RESULTS. IN MY OPINION, THE ENGINE IS SUITABLE TO BE PLACED ON BOARD A VESSEL CLASSED WITH THIS SOCIETY, FOR THE PURPOSE INTENDED.

The amount of Fee ... ... £ 4 : 4 0 — When applied for, 31.3.19 43.

Travelling Expenses (if any) £ - : 10 0 — When received, ...19.....

E Knowles

Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 18 JUN 1943

Assigned All minute on Ant 52030

Ind.4,38.—Transfer. (MADE AND PRINTED IN ENGLAND)

(*The Surveyors are requested not to write on or below the space for Committee Minute.*)