Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 13792.

Received at London Office OCT-6 1937

Date of writing Report 5th Oct. 1937 When handed in at Local Office 5th Oct. 1937. Port of Bristol

No. in Reg. Book. Survey held at Dursley. Date, First Survey 20th Aug. Last Survey 23rd Sept 1937 Number of Visits two.

✓ on the Single / Twin / Triple / Quadruple Screw vessel ✓ Tons Gross / Net

Built at ✓ By whom built ✓ Yard No. ✓ When built ✓

Owners ✓ Port belonging to

Oil Engines made at Dursley By whom made R.A. Lister & Co. Contract No. M 1110 When made 1937.

Generators made at Dursley By whom made Hawdsleys Contract No. 100S/612 When made 1937.

No. of Sets one Engine Brake Horse Power 27. Nom. Horse Power as per Rule ✓ Total Capacity of Generators 12. Kilowatts.

OIL ENGINES, &c.—Type of Engines 4 o.c. S.A. airless injection 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 750 lbs/□" Diameter of cylinders 4½" Length of stroke 5½" No. of cylinders 3 No. of cranks 3.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6 11/16" Is there a bearing between each crank Yes.

Revolutions per minute 1000 Flywheel dia. 26" Weight 294 lbs Means of ignition Compression Kind of fuel used Diesel.

Crank Shaft, dia. of journals as per Rule Approved as fitted 3" Crank pin dia. 3" Crank Webs Mid. length breadth 3½ Mid. length thickness 1 11/16" shrunk Thickness parallel to axis ✓ Thickness around eyehole ✓

Flywheel Shaft, diameter as per Rule ✓ as fitted ✓ **Intermediate Shafts**, diameter as per Rule ✓ as fitted ✓ Thickness of cylinder liners ·31".

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 Yes. 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 ✓

Air Compressors, No. 39949. No. of stages two Diameters 4½" 1 5/8" Stroke 3¾" Driven by Oil engine.

Scavenging Air Pumps, No. ✓ Diameter Stroke Driven by

AIR RECEIVERS:—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 D.C. Compound wound drip proof.

Pressure of supply 220 volts. **Load** 54·5 Amperes. **Direct or Alternating Current** Direct.

If alternating current system, state frequency of periods per second ✓

Has the **Automatic Governor** been tested and found efficient when the whole load is suddenly thrown on or off Yes.

Generators, do they comply with the requirements regarding rating Yes. are they compound wound Yes.

are they over compounded 5 per cent. Yes., if not compound wound state distance between each generator ✓

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.

PLANS. Are approved plans forwarded herewith for Shafting No (If not, state date of approval) Receivers ✓ Separate Tanks ✓

SPARE GEAR ✓

The foregoing is a correct description,

Per pro. R.A. Lister (Marine Sales Dept.). Manufacturer.

011079-011088-0227

Dates of Survey while building: During progress of work in shops - - 20/8/37, 23/9/37. During erection on board vessel - - - ✓ Total No. of visits Two.

Dates of Examination of principal parts—Cylinders 20/8/37 Covers 20/8/37 Pistons 20/8/37 Piston rods ✓

Connecting rods 20/8/37 Crank and Flywheel shaft 20/8/37 Intermediate shaft ✓

Crank and Flywheel shafts, Material Steel Identification Mark 7860

ENGINE " LLOYDS TEST M 655 EM 23/9/37.

Air Compressor " LLOYDS TEST 120 x 700 164/0" R.R. 23/7/37.

Intermediate shafts, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case No If so, state name of vessel ✓

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

All parts of this engine have been examined before being assembled & found satisfactory.

The engine direct coupled to the generator & elevated coupled to the air compressor was tested on the test bed under full load & overload conditions with satisfactory results.

This generating - compressor set is stated to be for Messrs Goole Shipbuilding Co's Yard No. 330.

The amount of Fee ... ... £ 3. :3. 0 When applied for, 5 Feb 19 37. Louis E. Threll

Travelling Expenses (if any) £ — :11. 6 When received, 27.6.19 37 L.S.

E. Hallmough.
Surveyor to ~~Lloyd's Register of Shipping.~~

Committee's Minute FRI. 8 APR 1938

Assigned See Shel F.E. 48713

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

1m,6,31—Transfer.