

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 16764

Received at London Office

9 - APR 1948

Writing Report **1st Oct.** 19 **47** When handed in at Local Office **9.1.** 19 **48** Port of **BRISTOL**

Survey held at **Dursley, Glos** Date, First Survey **10th April, 47** Last Survey **17th Sept.** 19 **47**

Number of Visits **3**

on the ^{Single} Twin ^{Triple} Quadruple } Screw vessel. Tons { Gross.....
Net.....

By whom built..... Yard No..... When built.....

Port belonging to.....

Engines made at **Dursley** By whom made **R.A. Lister (Marine Sales) Ltd** Engine No. **60/29280** When made **1947**

Contract No..... When made.....

Engine Brake Horse Power **38** M.N. as per Rule..... Total Capacity of Generators..... Kilowatts.

Intended for essential services.....

ENGINES, &c.—Type of Engines **Heavy Oil, Airless Injection** 2 or 4 stroke cycle **4** Single or double acting **single**

Working pressure in cylinders **800 lbs** Diameter of cylinders **4 1/2"** Length of stroke **5 1/2"** No. of cylinders **4** No. of cranks **4**

Firing order in cylinders..... Span of bearings, adjacent to the Crank, measured from inner edge to inner edge **14.5/16"**

Distance between each crank **No. 2** Moment of inertia of flywheel (16 m² or Kg.-cm.²)..... Revolutions per minute **1100**

Weight **310 lbs** Means of ignition **compression** Kind of fuel used **heavy oil**

Shaft, dia. of journals **3"** Crank pin dia. **3"** Crank Webs Mid. length breadth **4 1/2"** Thickness parallel to axis.....

Mid. length thickness **3 1/2"** Thickness round eyehole.....

Intermediate Shafts, diameter..... General armature, moment of inertia (16 m² or Kg.-cm.²).....

Means provided to prevent racing of the engine when declutched **Yes** Means of lubrication **Forced** Kind of damper if fitted.....

Are the exhaust pipes and silencers water cooled or lagged with non-conducting material.....

Water Pumps, No. **one** Is the sea suction provided with an efficient strainer which can be cleared within the vessel.....

Oil Pumps, No. and size.....

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

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

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

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.....

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

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

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

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

Seams, lap welded or riveted longitudinal joint..... 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 an automatic current system, state the periodicity..... Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown

off..... Generators, are they compounded as per Rule..... is an adjustable regulating resistance fitted in series with each shunt field.....

Are the terminals accessible, clearly marked, and furnished with sockets..... Are they so spaced

so that they cannot be accidentally earthed, short circuited, or touched..... Are the lubricating arrangements of the generators as per Rule.....

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

Are generators 100 kw. or over have they been built and tested under survey.....

Are there any other driven machinery other than generator.....

Are approved plans forwarded herewith for Shafting..... Receivers..... Separate Tanks.....

Torsional Vibration characteristics if applicable been approved..... Armature shaft Drawing No.....

RE GEAR **In accordance with Rule requirements.**

The foregoing is a correct description,
P.P. R. A. LISTER (MARINE SALES) LTD
Manufacturer.



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Lloyd's Register
Foundation

009192-009199-0025

Dates of Survey while building { During progress of work in shops - -) 10.4.47 23.5.47 17.9.47
 { During erection on board vessel - -)
 Total No. of visits 3

Dates of Examination of principal parts—Cylinders 23.5.47 Covers..... Pistons 23.5.47 Piston rods.....

Connecting rods 23.5.47 Crank and Flywheel shafts 10.4.47 Intermediate shafts.....

Crank shaft { Material Steel Tensile strength 41.6 tons
 { Elongation 27% Identification Marks Lloyd's 99 (F) (B)

Flywheel shaft, Material..... Identification Marks.....

Identification marks on Air Receivers.....

Is this machinery duplicate of a previous case Yes If so, state name of vessel.....

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.).....

This Auxiliary Oil Engine has been built under Special Survey. Water jackets tested with hydraulic pressure 100 lbs. per sq. inch and found sound and tight. The workmanship and material have been found good. Crankshaft taken from Maker's stock, test pieces proved satisfactory. On assembly the engine examined during a full load test bed running trial of several hours during which governor tried and found satisfactory.

Identification Marks M.1713 (F) (B). Engine made to the order of Messrs. John I. Thornycroft

111,846—F. (MADE AND PRINTED IN ENGLAND)
 (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 4 : 0 : 0 When applied for 9.1.1948
 Travelling Expenses (if any) £ 1 : 0 : 0 When received 19.....

Committee's Minute Fri 20 Feb 1948

Assigned See F.E. mch. rph

J. Brooke Smith
 Surveyor to Lloyd's Register of Shipping.

