

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 10,322

Date of writing Report 28. DEC. 1940 When handed in at Local Office H-1 1941 Port of MANCHESTER Received at London Office JAN 7 1941

No. in Survey held at ALTRINCHAM Date, First Survey 25-10-40 Last Survey 24 DEC. 1940  
Reg. Book.

Single  
on the Twin }  
Triple } Screw vessel  
Quadruple }

"Michael 8"

Number of Visits 4

Tons { Gross 7628  
Net 5508

Built at PORT GLASGOW By whom built W. HAMILTON & Co. Yard No. 446 When built 1941

Owners RETHYMNIS & KULUKUNDIS Port belonging to

Oil Engines made at ALTRINCHAM By whom made RUSSELL NEWBERY & Co. LTD ENGINE Contract No. 3577 When made 1940

Generators made at STOCKPORT By whom made M'CLURE & WHITFIELD GENERATOR Contract No. 9059 When made 1940

No. of Sets ONE Engine Brake Horse Power 16 Nom. Horse Power as per Rule 4.5 Total Capacity of Generators 9 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 850 LBS/SQ IN Diameter of cylinders 4 1/25" 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 4.75" Is there a bearing between each crank YES

Revolutions per minute 1000 Flywheel dia. 25" Weight 345 LBS Means of ignition COMPRESSION Kind of fuel used HEAVY 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 1/4" Thickness parallel to axis SOLID  
Mid. length thickness 1 5/6" Thickness around eye-hole

Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thickness of cylinder liners 1/32"

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

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 110 volts. Full Load Current 82 Amperes. Direct or Alternating Current DIRECT

If alternating current system, state the periodicity Has the Automatic Governor been tested and found efficient when the whole 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

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 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 27-10-39 Receivers Separate Tanks

SHAFTING AS PER RULE REQUIREMENTS

The foregoing is a correct description,

per pro. **RUSSELL, NEWBERY & Co. Ltd.**

Manufacturer.

*J. Russell*



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Lloyd's Register Foundation

UK195-0208

*9/1/41*

Dates of Survey while building  
 During progress of work in shops - - } 1940 OCT 25, NOV 23, DEC 17, 24.  
 During erection on board vessel - - - }  
 Total No. of visits 4.

Dates of Examination of principal parts—Cylinders 25-10-40 Covers 23-11-40 Pistons 23-11-40 Piston rods —

Connecting rods 23-11-40 Crank and Flywheel shafts 23-11-40 Intermediate shafts —

Crank and Flywheel shafts, Material O.H. STEEL Identification Marks LLOYDS 255. WTM. 22.740

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.

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 OF A GOOD QUALITY AND THE ENGINE WHEN TESTED IN SHOP UNDER FULL LOAD CONDITIONS SHOWED SATISFACTORY RESULTS. IN OUR OPINION THIS ENGINE IS SUITABLE TO BE PLACED ON BOARD A VESSEL CLASSED WITH THIS SOCIETY, FOR THE PURPOSE INTENDED. COPY OF GENERATOR TEST CERTIFICATE IS ATTACHED.

1m.5.37.—Transfer. (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 4:0 When applied for, 21.12.40  
 Travelling Expenses (if any) £ 6:0 When received, 19

*[Signature]*  
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
 Assigned