

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 11751

Received at London Office

18 FEB 1944

Survey Report 28.1.44 when handed in at Local Office 14.2.44 Port of MANCHESTER.

Survey held at PATRICROFT, MANCHESTER. Date, First Survey 4.1.44. Last Survey 28.1.1944. Number of Visits Four.

on the ^{Single} Twin ^{Triple} Screw vessel "SAINT EUNAN" Tons ^{Gross} 436. ^{Net} 190. ^{Quadruple}
Troon. By whom built Ailsa S.B. Co. Ltd. Yard No. - When built 1937.

T. Heiton & Co. Ltd. Port belonging to TROON. Engine ~~xxxxxx~~ No. 60869 / When made 1944. Generator ~~xxxxxx~~ No. 21645. When made 1943.

Lines made at PATRICROFT. By whom made L. Gardner & Sons. ~~xxxxxx~~ No. 60869 / When made 1944. ~~xxxxxx~~ No. 21645. When made 1943.
rs made at BOOTLE, LIVERPOOL. By whom made Campbell & Isherwood. ~~xxxxxx~~ No. 21645. When made 1943.

1 Engine Brake Horse Power 68 Nom. Horse Power as per Rule 19.4 Total Capacity of Generators 40 Kilowatts.

GINES, &c. Type of Engines Heavy Oil. 2 or 4 stroke cycle 4 Single or double acting Single.

Pressure in cylinders 850 lbs/sq" Diameter of cylinders 5.5" Length of stroke 7.75" No. of cylinders 4 No. of cranks 4

ings, adjacent to the Crank, measured from inner edge to inner edge 6.687" Is there a bearing between each crank Yes.

per minute 800 Flywheel dia. 32" Weight 852 lbs. Means of ignition Compression Kind of fuel used Heavy Oil.

ft, dia. of journals ^{as per Rule} Approved. ^{as fitted} 4.125" Crank pin dia. 3.625" Crank Webs Mid. length breadth 5.5" Thickness parallel to axis -

Shaft, diameter ^{as per Rule} Flywheel mounted ^{as fitted} on Crankshaft Intermediate Shafts, diameter - Thickness of cylinder liners .110"

or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Forced.

inders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material stroke at 400 R.P.M. - 363 galls/hour.

Water Pumps, No. One. 1 3/4" Bore x 1 3/4" Is the sea suction provided with an efficient strainer, which can be cleared within the vessel.

ng Oil Pumps, No. and size One - Gear Type. 18.6 pints per minute.

ressors, No. - No. of stages - Diameters - Stroke - Driven by -

ng 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

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

a drain arrangement fitted at the lowest part of each receiver

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

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

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

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

TRIC GENERATORS: Type Compound Wound, drip proof.

re of supply 220 volts. Full Load Current 182 Amperes. Direct or Alternating Current Direct.

ating 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.

ators, are they compounded as per rule Yes. is an adjustable regulating resistance fitted in series with each

eld Yes. Are all terminals accessible, clearly marked, and furnished with sockets Yes.

y 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.

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.

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

C.S. Are approved plans forwarded herewith for Shafting 20.7.43. Receivers - Separate Tanks -

GE GEAR Standard Spares only have been ordered. These are less than normally required

ne Rules and Messrs. L. Gardner & Sons have approached Ardrossan Dock Yard, and requested an

for the outstanding spares.

Messrs. L. Gardner & Sons have now received an Order for the Spare Gear required by the Rules

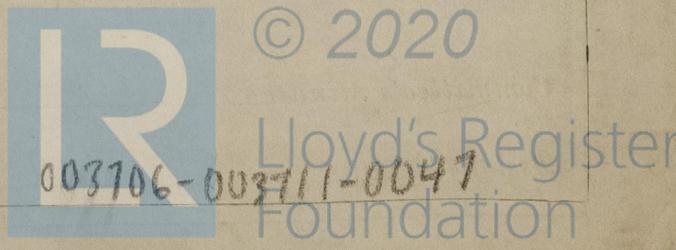
this will be forwarded in due course.

W.J.R. 14.2.44.

L.J. 25/2/44.

The foregoing is a correct description,

For, and on behalf of L. Gardner & Sons Ltd. Manufacturer. R.S. Jones



Dates of Survey while building { During progress of work in shops - - } 4.1.44, 7.1.44, 25.1.44, 28.1.44.
 { During erection on board vessel - - - }
 Total No. of visits

Dates of Examination of principal parts—Cylinders 7.1.44 Covers 7.1.44. Pistons 7.1.44. Piston rods -

Connecting rods 4.1.44. Crank and Flywheel shafts 4.1.44. Intermediate shafts -

Crank and Flywheel shafts, Material O. H. Steel. Identification Marks LLOYD'S W.1165. ELK. 26.11.43.

Intermediate shafts, Material - Identification Marks -

Identification marks on Air Receivers -

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. THIS ENGINE HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND REQUIREMENTS OF THE RULES.

THE MATERIALS AND WORKMANSHIP ARE GOOD AND THE ENGINE WAS FOUND TO BE SATISFACTORY WHEN TESTED IN SHOP UNDER FULL LOAD CONDITIONS. THE ENGINE IS SUITABLE, IN MY OPINION, FOR FITTING ON BOARD A VESSEL CLASSED WITH THE SOCIETY.

THIS ENGINE HAS BEEN SATISFACTORILY FITTED ON BOARD VESSEL AND TESTED UNDER WORKING CONDITIONS, SEE GLASGOW REPORT NO. 68153. *J. Crawford. Glasgow. 1/3/44*

Im.430.—Transfer. (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	:	4	:	0	When applied for,	14.2.1944.
Travelling Expenses (if any) £		0	:	10	:	0	When received,	
								19.....

W. J. Ferguson
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned *See Gls 68153*

