

RECEIVED

JUL 1949

R.D.C.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 17362

14 JUN 1949

Received at London Office

Date of writing Report 16th June 49 When handed in at Local Office 19 Port of BRISTOL

No. in Survey held at Dursley Date, First Survey 11th May Last Survey 15th June, 19 49

Reg. Book. 01.3.11 Number of Visits 2
on the Single Screw vessel M.V. "Balmoral" Tons Gross
Triple
Quadruple Net

Built at 1949 By whom built 1949 Yard No. 1949 When built 1949

Owners 1949 Port belonging to 1949

Oil Engines made at Dursley By whom made R.A. Lister (Marine Sales) Ltd. Engine No. 71/54276 When made 1949

Generators made at 1949 By whom made 1949 Contract No. 1949 When made 1949

No. of Sets 1949 Engine Brake Horse Power 53 M.N. as per Rule 1949 Total Capacity of Generators 1949 Kilowatts 1949

Is Set intended for essential services 1949

OIL ENGINES, &c.—Type of Engines Heavy Oil, Airless Injection 616 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 800lbs Diameter of cylinders 4 1/8" Length of stroke 5 1/2" No. of cylinders 6 No. of cranks 6

Mean indicated pressure 1949 Firing order in cylinders 1949 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 12.5/16"

Is there a bearing between each crank No Moment of inertia of flywheel (16 m² or Kg.-cm.²) 1949 Revolutions per minute 1000

Flywheel dia. 20 1/2" Weight 250lbs Means of ignition compression Kind of fuel used heavy oil

Crank Shaft, dia. of journals as per Rule Crank pin dia. 3" Crank Webs Mid. length breadth 4 1/4" Thickness parallel to axis as fitted 3" Mid. length thickness 2" Thickness round eyehole shrunken

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule General armature, moment of inertia (16 m² or Kg.-cm.²) as fitted

Are means provided to prevent racing of the engine when declutched Yes Means of lubrication Forced Kind of damper if fitted 1949

Are the cylinders fitted with safety valves 1949 Are the exhaust pipes and silencers water cooled Yes

Cooling Water Pumps, No. 1949 Is the sea suction provided with an efficient strainer which can be cleared within the vessel 1949

Lubricating Oil Pumps, No. and size 1949

Air Compressors, No. 1949 No. of stages 1949 Diameters 1949 Stroke 1949 Driven by 1949

Scavenging Air Pumps, No. 1949 Diameter 1949 Stroke 1949 Driven by 1949

AIR RECEIVERS:—Have they been made under Survey 1949 State No. of Report or Certificate 1949

Is each receiver, which can be isolated, fitted with a safety valve as per Rule 1949

Can the internal surfaces of the receivers be examined 1949 What means are provided for cleaning their inner surfaces 1949

Is there a drain arrangement fitted at the lowest part of each receiver 1949

High Pressure Air Receivers, No. 1949 Cubic capacity of each 1949 Internal diameter 1949 thickness 1949

Seamless, lap welded or riveted longitudinal joint 1949 Material 1949 Range of tensile strength 1949 Working pressure by Rules 1949

Starting Air Receivers, No. 1949 Total cubic capacity 1949 Internal diameter 1949 thickness 1949

Seamless, lap welded or riveted longitudinal joint 1949 Material 1949 Range of tensile strength 1949 Working pressure by Rules 1949

ELECTRIC GENERATORS:—Type 1949

Pressure of supply 1949 volts. Full Load Current 1949 Amperes. Direct or Alternating Current 1949

If alternating current system, state the periodicity 1949 Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown on and off 1949

Generators, are they compounded as per Rule 1949 is an adjustable regulating resistance fitted in series with each shunt field 1949

Are all terminals accessible, clearly marked, and furnished with sockets 1949 Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched 1949

Are the lubricating arrangements of the generators as per Rule 1949

If the generators are under 100 kw. full load rating, have the makers supplied certificates of test 1949 and do the results comply with the requirements 1949

If the generators are 100 kw. or over have they been built and tested under survey 1949

Details of driven machinery other than generator 1949

PLANS.—Are approved plans forwarded herewith for Shafting 1949 Receivers 1949 Separate Tanks 1949

Have Torsional Vibration characteristics if applicable been approved 1949 Armature shaft Drawing No. 1949

SPARE GEAR 1949

The foregoing is a correct description,

P.P. R. A. LISTER (MARINE SALES) LTD. Manufacturer.



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During progress of work in shops - - 11.5.49 15.6.49
 Dates of Survey while building {
 During erection on board vessel - - }
 Total No. of visits 2

Dates of Examination of principal parts—Cylinders 11.5.49 Covers 11.5.49 Pistons 11.5.49 Piston rods

Connecting rods 11.5.49 Crank and Flywheel shafts 8.1.45 Intermediate shafts

Crank shaft { Material Steel Tensile strength 46 tons
 Elongation 28% Identification Marks Lloyd's V392

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 square inch and found sound and tight. The workmanship and materials have been found good. Crankshaft taken from Makers' tested stock. After assembly the engine examined during a full load test bed running trial of several hours duration; governor tried and found satisfactory.

Identification Mark M.3145. Engine made to the order of Messrs. John Thornycroft & Co., Ltd

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 19
 Travelling Expenses (if any) £ 1 : 0 : 0 { When received 19

Committee's Minute
 Assigned In minute see J.E. P. 1950

J. Brooke Smith

Surveyor to Lloyd's Register of Shipping.



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