

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No.

Date of writing Report 17/12/1952 When handed in at Local Office 17/12/1952 Port of London
 Received at London Office _____
 No. in Survey held at London Date, First Survey 19 Novem Last Survey 5 December 1952
 Reg. Book. _____ Number of Visits 3
 on the Single Screw vessel "MARICOPA" Tons Gross 1134 1/2
Triple Net 665 1/2
 Built at Sunderland By whom built Sir Jas Lang & Sons Ltd Yard No. 494 When built 1953
 Owners as Howard Berg Port belonging to Jonsberg
 Oil Engines made at Dagenham By whom made Russell Newbery & Co Engine No. 6441 324
 Generators made at _____ By whom made _____ Contract No. 10034 When made _____
 No. of Sets 1 Engine Brake Horse Power 90 M.N. as per Rule _____ Total Capacity of Generators _____ Kilowatts.
 Is Set intended for essential services _____

OIL ENGINES, &c.—Type of Engines high speed compression ignition 2 or 4 stroke cycle 4 Single or double acting S.A
 Maximum pressure in cylinders 850 p.s.i Diameter of cylinders 5 1/8" Length of stroke 7 1/4" No. of cylinders 6 No. of cranks 6
 Mean indicated pressure 105 Firing order in cylinders 153624 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6 3/8
 Is there a bearing between each crank yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) 34525 Revolutions per minute 900
 Flywheel dia. 25" Weight 336 lbs Means of ignition Compression Kind of fuel used pool
 Crank Shaft, dia. of journals as per Rule. As approved Crank pin dia. 3 5/8" Crank Webs Mid. length breadth 4 5/8" Thickness parallel to axis _____
as fitted 3 3/4" Mid. length thickness 1 9/16" shrunk Thickness round eyehole _____
 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 as fitted

Are means provided to prevent racing of the engine when declutched yes Means of lubrication forced Kind of damper if fitted none
 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. 1 megator high lift Is the sea suction provided with an efficient strainer which can be cleared within the vessel _____
 Lubricating Oil Pumps, No. and size 1 gear pump 3 gal/min

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 _____ volts. Full Load Current _____ Amperes. Direct or Alternating Current _____

If alternating 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 _____ Generators, are they compounded as per Rule _____ 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 _____

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

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

Details of driven machinery other than generator _____

PLANS.—Are approved plans forwarded herewith for Shafting _____ Receivers _____ Separate Tanks _____
 (If not, state date of approval)

Have Torsional Vibration characteristics if applicable been approved _____ Armature shaft Drawing No. _____
 (state date of approval)

SPARE GEAR makers supply covering Rule Requirements

The foregoing is a correct description,

FOR AND ON BEHALF OF RUSSELL NEWBERY & CO. LTD.

Manufacturer.



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Lloyd's Register
Foundation

012113 - 012116 - 0014

Dates of Survey while building { During progress of work in shops - - } 19, 26 Novem 5th Decem 52
{ During erection on board vessel - - }
Total No. of visits 3 in shops

Dates of Examination of principal parts—Cylinders 19.11.52 Covers 19.11.52 Pistons 19.11.52 Piston rods ✓

Connecting rods 19.11.52 Crank and Flywheel shafts 26.11.52 Intermediate shafts

Crank shaft { Material EN8 Tensile strength 40 ton
Elongation 20% Identification Marks LLOYDS 5782J 11852JS

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 engine has been built under Special Survey & tested materials the engine was examined during erection and under full load conditions the materials and workmanship are good. The engine is coupled to 45 KW Sunderland Forge generator 46640 both secured to fabricated steel underbase.
The set is for Sunderland Forge, Sunderland 58011-2

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

The amount of Fee ... £ 9 : : : When applied for 24/12/ 19 52
Travelling Expenses (if any) £ : : : When received 19

Committee's Minute
Assigned See F.E. Walshy. r.p.b.
TUES. 21 APR 1953
Surveyor to Lloyd's Register of Shipping.