

Rpt. 4c. REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Received at London Office

Date of writing Report 13/4/52 When handed in at Local Office 13/4/52 Port of London

No. in Survey held at London Date, First Survey 28 January Last Survey 26 March 1952 Reg. Book. Number of Visits 3

on the Single Twin Triple Quadruple Screw vessel "Baker Delhi" Tons Gross 8517 Net 4808

Built at Sunderland By whom built Wm Dxford & Sons Ltd Yard No. 188 When built 1951

Owners Overseas Tankship (UK) Ltd Port belonging to London 6983

Oil Engines made at Dagenham By whom made Russell Newbery & Co Eng No 10FL6953 Contract No. When made 1952

Generators made at By whom made Contract No. When made

No. of Sets 1 Engine Brake Horse Power 9 M.N. as per Rule Total Capacity of Generators Kilowatts.

Is Set intended for essential services Auxiliary 8877

OIL ENGINES, &c. Type of Engines high speed compression ignition 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 850 p.s.i. Diameter of cylinders 4 1/2" Length of stroke 6" No. of cylinders 1 No. of cranks 1

Mean indicated pressure 105 Firing order in cylinders Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6 1/2"

Is there a bearing between each crank yes Moment of inertia of flywheel 18229 Kg-cm.2 Revolutions per minute 1000

Flywheel dia 20 1/2" Weight 264 lbs Means of ignition Compression Kind of fuel used pool

Crank Shaft, dia. of journals as per Rule as approved 2 1/2" Crank pin dia 2 5/8" Mid. length breadth 3 1/2" Thickness parallel to axis

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

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. 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 2 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

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

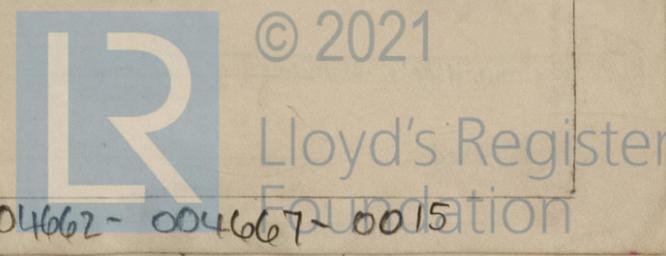
SPARE GEAR makers supply covering Rule Requirements. To be used on ship

The foregoing is a correct description,

Signature of J. H. J. J. J.

Manufacturer.

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



Dates of Survey while building  
 During progress of work in shops - - 28 January 19. 26 March 1952  
 During erection on board vessel - - - 3 (Full size)  
 Total No. of visits

Dates of Examination of principal parts—Cylinders 28.1.52 Covers 28.1.52 Pistons 28.1.52 Piston rods

Connecting rods 28.1.52 Crank and Flywheel shafts 28.1.52 Intermediate shafts

Crank shaft Material E.N8 Tensile strength 40 ton  
 Elongation 20% Identification Marks Lloyds 960 1970

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 of tested materials the engine was examined during erection and under full load conditions the engine is coupled to Hamworthy air compressor no 87591, both secured to fabricated steel underbase.

The set is for W. Duxford, Sunderland NH557 Ships 784/87/88/89.

The amount of Fee ... £ 5 : : When applied for 15/4/52  
 Travelling Expenses (if any) £ : : When received 19

Committee's Minute  
 Assigned

501.4.48.-T. (MADE AND PRINTED IN ENGLAND)  
 (The Surveyors are requested not to write on or below the space for Committee Minute.)

