

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 12772

pt. 4c.

Date of writing Report 24th January 47. When handed in at Local Office 27th January 47. Port of MANCHESTER. Received at London Office 28 JAN 1947

No. in Survey held at MANCHESTER. Date, First Survey 28th June, 1946. Last Survey 13th December 46. Number of Visits 4.

Reg. Book. 39040 on the ^{Single} Twin ^{Trip} Screw vessel M.V. SANGOLA Tons { Gross 866 Net 5053

built at Glasgow. By whom built Barclay Curle & Co. Ltd. Yard No. 707. When built 1947

owners BRITISH INDIA STEAM NAV. CO. LTD. Port belonging to LONDON.

Oil Engines made at Patricroft. By whom made L. Gardner & Sons. Engine No. 69353. When made 1946.

Generators made at Patricroft. By whom made Laurence Scott Ltd. Generator No. 200247. When made 1946.

No. of Sets 1 Engine Brake Horse Power 58. Nom. Horse Power as per Rule 14.5 Total Capacity of Generators 35. Kilowatts.

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

Maximum pressure in cylinders 900. Diameter of cylinders 4 1/4". Length of stroke 6". No. of cylinders 5 No. of cranks 5.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 4 13/16". Is there a bearing between each crank Yes.

Revolutions per minute 1200. Flywheel dia. 21 5/8" Weight 440 lbs. Means of ignition Compression Kind of fuel used Diesel Oil.

Crank Shaft, dia. of journals as per Rule Approved. 3 1/4". Crank pin dia. 2 7/8". Crank Webs Mid. length breadth 4 5/16" Thickness parallel to axis -

Flywheel Shaft, diameter as fitted - Intermediate Shafts, diameter as per Rule - Thickness of cylinder liners .096".

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 No.

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

Lubricating Oil Pumps, No. and size One integral with engine.

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 Compound Wound Continuous Rating.

Pressure of supply 220 volts. Full Load Current 159. Amperes. Direct or Alternating Current Direct 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 Yes. Generators, are they compounded as per Rule Yes. is an adjustable regulating resistance fitted in series with each shunt field Yes.

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 Yes. 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 General Approval 6.11.43. Receivers - Separate Tanks 31.10.45.

SPARE GEAR AS PER RULE REQUIREMENTS.

The foregoing is a correct description,
For and on behalf of
L. GARDNER & SONS LTD., *Refused* Manufacturer.



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Lloyd's Register Foundation

004698-004702-0264

Dates of Survey while building { During progress of work in shops - - 1946. June 28. July 8, 23. Dec. 13.
 { During erection on board vessel - - -
 Total No. of visits.....

Dates of Examination of principal parts—Cylinders 28.6.46. Covers 8.7.46. Pistons 23.7.46. Piston rods -
 Connecting rods 23.7.46. Crank ~~shafts~~ shafts 28.6.46. Intermediate shafts -

Crank shaft { Material O.H. Steel. Tensile strength 46.4
 { Elongation 29% Identification Marks LLOYD'S 3033, 28.6.46. ATR.
 Flywheel shaft, Material - Identification Marks -
 Is this machinery duplicate of a previous case - 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 Requirement of the Rules. Materials and workmanship are good and the engine when tested in the shop under full load conditions gave satisfactory results. The engine in our opinion, is suitable fitting on board a vessel to be classed with this Society.

This engine has now been satisfactorily installed on board the M.V. Sargoria, (Barney Carter 11-707), examined under full working conditions & found in good order.

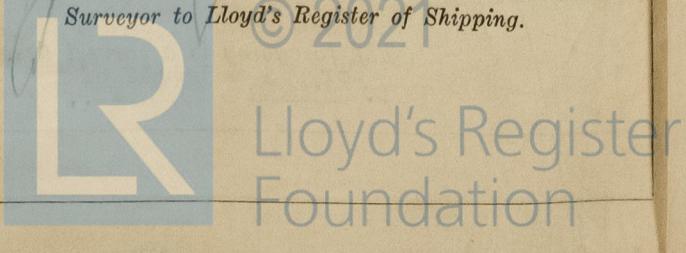
A.H. Liddon

The amount of Fee ... £ 4 : 0 : 0. { When applied for 27.1.47
 Travelling Expenses (if any) £ : : { When received 19

Johnston Surveyor to Lloyd's Register of Shipping.

GLASGOW 8 JUL 1947

Committee's Minute.....
 Assigned *See accompanying machinery report.*



ML-1
 1m, 11, 42-T (MADE AND PRINTED IN ENGLAND)
 (The Surveyors are requested not to write on or below the space for Committee Minute.)