

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 14389

Date of writing Report

10

When handed in at Local Office

10/6/47

Port of

Received at London Office

14 JUN 1947

No. in Survey held at
Reg. Book.

Belfast

Date, First Survey

Visits included in 22.47.

Last Survey

19

Number of Visits

Single
on the Twin
Triple
Screw vessel

M/V "LOCH GARTH"

Tons { Gross
Net

Built at

Belfast

By whom built

Messrs Harland & Wolff Ltd

Yard No. 1328

When built 1947

Owners

Messrs Royal Mail Lines Ltd

Port belonging to

London

Oil Engines made at

Belfast

By whom made

Messrs Harland & Wolff Ltd

Contract No. 1328

When made 1947

Generators made at

Belfast

By whom made

Messrs Harland & Wolff Ltd

Contract No. 1328

When made 1947

No. of Sets

2

Engine Brake Horse Power

870 (Metric)

Nom. Horse Power as per Rule

217.5

Total Capacity of Generators

600

Kilowatts.

OIL ENGINES, &c.—Type of Engines *Heavy oil - Trunk Piston* 2 or 4 stroke cycle *4* Single or double acting *Single*

Maximum pressure in cylinders *700 lbs/sq* Diameter of cylinders *316 mm* Length of stroke *420 mm* No. of cylinders *6* No. of cranks *6*

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *370 mm* *380* Is there a bearing between each crank *Yes*

Revolutions per minute *420 mm* Flywheel dia. *1500 mm* Weight *2448 kg* Means of ignition *Compression* Kind of fuel used *Diesel Oil*

Crank Shaft, dia. of journals *as per Rule* *250 mm* Crank pin dia. *210 mm* Mid. length breadth *275 mm* Thickness parallel to axis *as fitted* *100 mm* Thickness around eye hole *as fitted*

Flywheel Shaft, diameter *as per Rule* *as fitted* Intermediate Shafts, diameter *as per Rule* *as fitted* Thickness of cylinder liners *26 mm*

Is a governor or other arrangement fitted to prevent racing of the engine when detached *Yes* Means of lubrication *Forced*

Are the cylinders fitted with safety valves *Yes* Are the exhaust pipes and silencers water cooled or lagged with non-conducting material *Lagged*

Cooling Water Pumps, No. *As per U.E. Report* Is the sea suction provided with an efficient strainer which can be cleared within the vessel *Yes*

Lubricating Oil Pumps, No. and size *One driven off each engine 9.2 tons/hr @ 400 RPM*

Air Compressors, No. *-* No. of stages *-* Diameters *-* Stroke *-* Driven by *-*

Scavenging Air Pumps, No. *-* Diameter *-* Stroke *-* Driven by *-*

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule

Can the internal surfaces of the receivers be examined *Yes* What means are provided for cleaning their inner surfaces *Man hole fitted*

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

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. *2* Total cubic capacity *100 cu. ft* Internal diameter *2'-10 1/8"* thickness *1 1/2"*

Seamless, lap welded or riveted longitudinal joint *Fusion welded* Material *M. Steel* Range of tensile strength *29/33 tons* Working pressure by Rules *356 lbs/sq*

ELECTRIC GENERATORS:—Type *Drip-proof*

Pressure of supply *225* volts. Load *1334* Amperes. Direct or Alternating Current *Direct*

If alternating current system, state frequency of periods per second *-*

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off *Yes*

Generators, do they comply with the requirements regarding rating *Yes* are they compound wound *Yes*

are they over compounded 5 per cent. *Yes*, if not compound wound state distance between each generator *-*

is an adjustable regulating resistance fitted in series with each shunt field *Yes* Are all terminals accessible, clearly marked, and furnished with sockets *Yes*

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*

PLANS. Are approved plans forwarded herewith for Shafting *24.5.46* Receivers *4.5.46* Separate Tanks *6.11.46*

(If not, state date of approval)

SPARE GEAR*See attached list.*

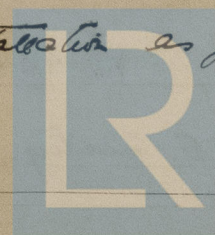
The foregoing is a correct description, and the particulars of the installation as fitted on 2021

Approved for installation characteristics

FOR HALL & WOLFE, LIMITED

Manufacturer.

Secretary

Lloyd's Register
Foundation

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

Dates of Examination of principal parts—Cylinders 26.8.46 6.9.46 Covers 26.7.46/4.9.46 26.8.46/3.10.46 Pistons 21.9.46 7.9.46 Piston rods -
 Connecting rods 1.8.46 & 3.8.46 Crank and Flywheel shaft 26.8.46 & 13.9.46 Intermediate shaft -
 Crank and Flywheel shafts, Material M. Steel 28/32 T. Identification Mark No 1 LLOYDS 52763 655
 No 2 LLOYDS 52763 655.
 Intermediate shafts, Material - Identification Marks -

Is this machinery duplicate of a previous case 2. If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.) These engines and electric generators have been constructed under Special Survey in accordance with the Rules and approved plans. The materials and workmanship are good.
 On completion these generating sets have been examined under full working conditions on the test bed (3 hours & 1/2 followed by 1 hour & 10% %) and found satisfactory.

Torsional vibration characteristic approved in London letter dated 24.5.46

These generating sets have been efficiently installed onboard the vessel and subsequently examined again under full working conditions with satisfactory results.

IDENTIFICATION MARKS ON AIR RECEIVERS: (CERTIFICATE No 21743)

2 off
 BOTH STAMPED
 No 361
 LLOYDS TEST
 584 lbs
 HP 356 hp.
 J.M.A 8.10.46.

The amount of Fee See Rpt. 4a. £ :
 Travelling Expenses (if any) £ :
 When applied for, 19...
 When received, 19...

Wm. G. Thorne & E. Grievess
 Surveyors to Lloyd's Register of Shipping.

Committee's Minute FRI. 18 JUL 1947

Assigned See F.E. mch. rpt.



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