

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Bel. 12953
No. 62917

Date of writing Report 19 When handed in at Local Office 7:10: 1940 Port of Glasgow. Received at London Office OCT 10 1940

No. in Survey held at Glasgow. Date, First Survey 21:11:39 Last Survey 1st Oct 1940

Reg. Book. on the ^{Single} ~~Triple~~ Screw vessel M.V. "PALMA" Number of Visits 33

Tons { Gross 5419
Net 3079.

Built at Belfast By whom built Harland & Wolff Ltd Yard No. 1028 When built 1940

Owners Royal Mail Line Port belonging to London

Oil Engines made at Glasgow By whom made British Auxiliaries Ltd Contract No. 361 When made 1940

Generators made at Belfast By whom made Harland & Wolff Ltd Contract No. 4108 When made 1940.

No. of Sets 3 Engine Brake Horse Power 780 Nom. Horse Power as per Rule 223 Total Capacity of Generators 525 Kilowatts.

OIL ENGINES, &c.—Type of Engines Heavy Oil Type K-43I 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 780 lb B Diameter of cylinders 250 7/8 Length of stroke 420 7/8 No. of cylinders 9 No. of cranks 9

M.I.P. 95 lb B Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 360 7/8 Is there a bearing between each crank Yes

Revolutions per minute 375 Flywheel dia. 1300 7/8 Weight 1100 Kgs Means of ignition Compression Kind of fuel used Diesel

as per Rule as approved Crank Shaft, dia. of journals 160 7/8 Crank pin dia. 160 7/8 Crank Webs Mid. length breadth 214 3/8 Mid. length thickness 90 7/8 Thickness parallel to axis Yes

as fitted Flywheel Shaft, diameter Intermediate Shafts, diameter Thickness of cylinder liners 195 7/8

Is a governor or other arrangement fitted to prevent racing of the engine when decelerated 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 Yes

Cooling Water Pumps, No. none fitted Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Lubricating Oil Pumps, No. and size One 88 litres per min. (each engine)

Air Compressors, No. none No. of stages Diameters Stroke Driven by

Scavenging Air Pumps, No. One (each engine) Diameter 500 7/8 Stroke 240 7/8 Driven by Main engines

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Supplied by Harland & Wolff Ltd

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

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

High Pressure Air Receivers, No. none 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. none Supplied 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 Drip proof Compound interpolar

Pressure of supply 222 volts. Load 790 Amperes. Direct or Alternating Current Yes

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 4-7-39 Receivers Separate Tanks

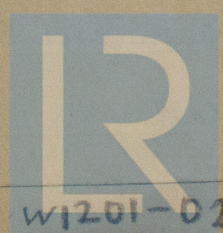
SPARE GEAR as per attached list

The foregoing is a correct description,

For BRITISH AUXILIARIES

Manufacturer.

Director and General Manager



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Lloyd's Register Foundation

W1201-0214

Dates of Survey while building { During progress of work in shops - - } 1939 Nov.: 21 Sep.: 27 Dec.: 15. 19. 21. 26 (1940) Jan.: 8. 25. 30 Feb.: 5. 12. 13. 15. 19. 20. 27 Mar.: 1. 5
 { During erection on board vessel - - } 18. 26 Apr.: 4. 9. 11. 29 May.: 3 July.: 1. 3. 8. 16. 23 Sep.: 5. 24 Oct.: 1
 Total No. of visits 33

Dates of Examination of principal parts—Cylinders 26-3-40 27-2-40 18-3-40 5-3-40 18-3-40 Pistons 19-2-40 9-4-40
 Connecting rods 9-4-40, 20-2-40. Crank and Flywheel shaft 11-4-40. 5-9-40 Intermediate shaft ✓
 Crank and Flywheel shaft, Material Stul Identification Mark 9911 W.T.M. 6-2-40 9912 W.T.M. 19-1-40 Intermediate shafts, Material ✓ Identification Marks ✓
 195 W.T.M. 14-6-40.

Is this machinery duplicate of a previous case Yes. If so, state name of vessel See Glasgow report No. 62185

General Remarks (State quality of workmanship, opinions as to class, &c.) These auxiliary engines have been built under Special Survey in accordance with the Rules and approved plans. The materials and workmanship are good. On completion they have been tried on the bench at full power with satisfactory results. These engines have been shipped to Messrs Harland & Wolff Ltd Belfast for fitting on board a vessel building at their yard under No. 1028.

26
 4/10/40

These Auxiliary engines have now been efficiently fitted on board the vessel and tried under full working conditions with satisfactory results.

K. Shaw:

The amount of Fee ... £ 22.6.0.

Travelling Expenses (if any) £ ✓

When applied for,
 OCT 1940

When received,
 21.1.41

See Sec C. 4.

G. E. Murdoch
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 8 - OCT 1940

Assigned Deferred

TUE. 22 APR 1941

See Bel. J.E. 1295

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