

## REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 60509

DEC 21 1938

Date of writing Report

19

When handed in at Local Office

19:12:38

Received at London Office

Port of Glasgow.

No. in Survey held at  
Reg. Book.

Glasgow.

Date, First Survey

23-5-38

Last Survey

16-12-1938

Number of Visits

30

Single  
Twin  
Triple  
Quadruple

Screw vessel

"ROWALLAN CASTLE".

Tons { Gross  
Net

Built at Belfast

By whom built

Harland &amp; Wolff Ltd.

Yard No. 1013

When built 1938

Owners

Union Castle Mail S.S.Co. Ltd.

Port belonging to

London

Oil Engines made at

Glasgow

By whom made

Harland &amp; Wolff Ltd.

Contract No. 1013

Engine Nos 1153-1154-1155.

When made 1938

Generators made at

Belfast

By whom made

Harland &amp; Wolff Ltd.

Contract No. 1013

When made 1938

No. of Sets

3

Engine/Brake Horse Power

440

each

Total

Nom. Horse Power as per Rule

377

Total Capacity of Generators

900

Kilowatts.

OIL ENGINES, &c.—Type of Engines *Endless trunk. Solid Injection.* 2 or 4 stroke cycle *4* Single or double acting *S.A.*Maximum pressure in cylinders *500 lb/sq in* Diameter of cylinders *330 mm.* Length of stroke *580 mm* No. of cylinders *6* No. of cranks *6*Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *400 mm.* Is there a bearing between each crank *yes*Revolutions per minute *270* Flywheel dia. *1900 mm* Weight *4.9 tons* Means of ignition *Compression* Kind of fuel used *Diesel oil*Crank Shaft, dia. of journals *as per Rule 202 mm.* *as fitted 280 "* Crank pin dia. *220 mm.* Crank Webs Mid. length breadth *288 mm.* Thickness parallel to axis *Solid*  
Mid. length thickness *115 mm.* shrunk Thickness around eye-hole *Forged*Flywheel Shaft, diameter *as per Rule* *on crank shaft* Intermediate Shafts, diameter *as per Rule* Thickness of cylinder liners *24 to 20 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. *Ship's system* Is the sea suction provided with an efficient strainer which can be cleared within the vesselLubricating Oil Pumps, No. and size *1 each engine at 6 1/2 tons per hour.*

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 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 *Open type*Pressure of supply *220* volts. Load *1350* Amperes. Direct or Alternating Current *Direct current.*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 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 *20-12-37* Receivers *✓* Separate Tanks *✓*

(If not, state date of approval)

SPARE GEAR

*As per list enclosed with Glasgow Report No 60375 on duplicate types No. 1012.*The foregoing is a correct description,  
For HARLAND AND WOLFF, LIMITED.*Wm. J. Wright.*

Manufacturer.

Finnlestone Secretary



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Lloyd's Register  
Foundation

W116-6096

*21/12/38*



Dates of Survey while building { During progress of work in shops - 1938 May: 23. 24 June: 30 July: 1. 12 Aug: 5. 8. 30. 31 Sep: 5. 22. 30 Oct: 26 Nov: 2. 3. 7. 10. 11. 16. 18. 24. 28. 30 Dec: 2. 5. 6. 9. 12. 14. 16  
 Total No. of visits 30

Dates of Examination of principal parts—Cylinders 2-11-38 11-11-38 2-12-38 Covers 2-11-38 14-12-38 Pistons 28-11-38 5-12-38 Piston rods ✓

Connecting rods 28-11-38: 5-12-38 Crank and Flywheel shaft 5-9-38. 30-6-38 Intermediate shaft ✓

Crank and Flywheel shaft, Material Steel Identification Mark 9048 P. 9 8092 P. 4 8997 GRC. Intermediate shafts, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case? No If so, state name of vessel Richmond Castle. Glasgow Rpt No. 60375

General Remarks (State quality of workmanship, opinions as to class, &c.)

These auxiliary engines have been built under Special Survey and in accordance with the approved plans and the Rules of this Society.

The materials and workmanship are good.

The engines have been tested under full load on the Wakes test bed, and are being shipped to Belfast to be fitted on board the vessel.

These engines have been efficiently installed & fastened on seats in the Main engine room. They have been tried out under full working conditions with satisfactory results. This vessel is eligible in my opinion for Classification in the Society's Register Book.

Charles H. Hunter  
 Belfast 15.3.39

The amount of Fee ... £ 37 : 14 :

Travelling Expenses (if any) £ :

When applied for,  
 20 DEC 1938

When received,  
 18.1.1939

See Sec C.4.

P. Fitzgerald.

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

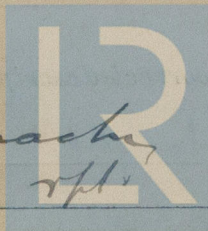
GLASGOW 20 DEC 1938

TUE. 28 MAR 1939

Assigned

Deferred.

9.5.m. // See FE machine



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