

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

OCT 28 1937

Received at London Office

Date of writing Report 18th Oct., 1937 When handed in at Local Office 24th Oct., 1937 Port of West Hartlepool
 No. in Survey held at West Hartlepool Date, First Survey 30th August Last Survey 18th October 1937
 Reg. Book. Suppl (Number of Visits Summ.)
38308 on the S.S. "G.S. LIVANOS" Tons { Gross 4836
 Net 2867
 Built at West Hartlepool By whom built Wm Gray & Co. Ltd. Yard No. 1078 When built 1937
 Owners G. S. Livanos & Livanos Maritime Ltd Port belonging to Chris
 Electric Light Installation fitted by Campbell & Ashwood Ltd. Contract No. 1078 When fitted 1937
 Is the Vessel fitted for carrying Petroleum in bulk No.

System of Distribution Double wire

Pressure of supply for Lighting 110 volts, Heating - volts, Power 110 volts.

Direct or Alternating Current, Lighting Direct Power 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 temperature rise Yes are they compound wound Yes

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

Where more than one generator is fitted are they arranged to run in parallel Only one fitted is an adjustable regulating resistance fitted in series with each shunt field No

Have certificates of test results for machines under 100 kw. been submitted and approved Yes, Cert. Kenwich

Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing -

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

Position of Generators Engine room starboard side is the ventilation in way of the generators satisfactory Yes

are they clear of all inflammable material Yes if situated near unprotected

woodwork or other combustible material, state distance of same horizontally from or vertically above the generators - and -

are the generators protected from mechanical injury and damage from water, steam or oil Yes are their axes of rotation fore and aft Yes

Earthing, are the bedplates and frames of the generating plant efficiently earthed Yes are the prime movers and their respective generators in metallic contact Yes

Main Switch Boards, where placed Engine room starboard side on stowroom casing

If the generators and main switchboard are not placed in the same compartment, is each generator provided with a fuse on each insulated pole as near as possible to the terminals of the generator, additional to that provided on the main switchboard -

Switchboards, are they placed in accessible positions, free from inflammable gases and acid fumes Yes are they protected from mechanical injury and damage from water, steam or oil Yes

if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards - and -

are they constructed wholly of durable, non-ignitable non-absorbent materials Yes

is all insulation of high dielectric strength and of permanently high insulation resistance Yes

is it of an approved type Yes if semi-insulating material is used, are all conducting parts insulated from the slab with mica or micaite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework -

is the non-hygroscopic insulating material of an approved type - and is the frame effectively earthed Yes

Are the fittings as per Rule regarding:— spacing or shielding of live parts Yes

accessibility of all parts Yes absence of fuses on back of board Yes temperature rise of omnibus bars Yes

individual fuses to voltmeter, pilot or earth lamp Yes are moving parts of switches alive in the "off" position No

are all screws and nuts securing connections effectively locked Yes are any fuses fitted on the live side of switches No

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches

D.P. sw. & D.P. fuses on dynamo main; S.P. sw. & D.P. fuses on outgoing circuits.

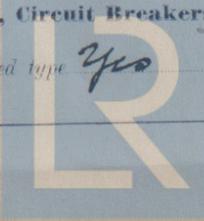
Are turbine driven generators fitted with emergency trip switch as per rule - Are cupboards or compartments containing switchboards composed of fire-resisting material or lined with approved material -

Instruments on main switchboard 1 ammeter. 1 voltmeter. - synchronising device for paralleling purposes. For compound machines is the ammeter connected on the opposite pole to equaliser connection -

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system

E lamps coupled to E through fuses Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules Yes

are the fusible cutouts of an approved type Yes have the reversed -



All Conductors are of annealed copper conforming to British Standard Specification No. 7 (or International Electro-technical Commission Publication No. 28).

The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.

The foregoing is a correct description.

CAMPBELL & ISHERWOOD, LTD

PER *Thos Meade*

Electrical Engineers.

Date *21st Oct 1937*

COMPASSES.

Distance between electric generators or motors and standard compass *132 feet*

Distance between electric generators or motors and steering compass *120 feet*

The nearest cables to the compasses are as follows:—

A cable carrying *.14* Ampères *on the* ~~foot from~~ standard compass *12* feet from steering compass.

A cable carrying *.14* Ampères *12* feet from standard compass *on the* ~~foot from~~ steering compass.

A cable carrying _____ Ampères _____ feet from standard compass _____ feet from steering compass.

Have the compasses been adjusted with and without the electric installation at work at full power *Yes*

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted *Yes*

The maximum deviation due to electric currents was found to be *nil* degrees on *every* course in the case of the standard compass, and *nil* degrees on *Every* course in the case of the steering compass.

FOR WILLIAM GRAY & CO. LIMITED.

Thos. S. Simpson

Builder's Signature.

Date

Is this installation a duplicate of a previous case *Yes* If so, state name of vessel *S.S. "Eugenie Livanos"*

General Remarks (State quality of workmanship, opinions as to class, &c. *The above installation has been fitted out under special survey. The materials used and the workmanship are good. On completion the dynamo, governor, main board, switches, fuses, cables, motors and fittings were examined and tested under working conditions and found satisfactory and suitable for a classed vessel. The insulation resistance was measured and found good. This vessel is fitted with direction finding equipment and an echo sounding device.*

Notice
L.Y.
29/10/37

Total Capacity of Generators *10* Kilowatts.

The amount of Fee ... £ *10* : - : When applied for, _____

Travelling Expenses (if any) £ : : When received, *11.11.37*

S. Anterson
Surveyor to Lloyd's Register of Shipping.

Committee's Minute *TUE 2 NOV 1937*

Assigned *See above F.C. report*

5610.20. - Transfer. The Surveys are requested not to write on or below the space for Committee's Minute.)

