

# YACHT.

Rpt. 13.

20102  
No. 36116

## REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

13 JUL 1935

Received at London Office

Date of writing Report 1st July 1935 When handed in at Local Office 1st July 1935 Port of NEW YORK

No. in Survey held at NEW YORK & STAMFORD, Conn Date, First Survey 19 Nov 1934 Last Survey 25 June 1935  
Yt Reg. Book. 924 Std.  
63 AYR. on the tw. sc. motor yacht "CAROLITA" ex RIPPLE (Number of Visits.....)

Tons { Gross 284  
Net 144

Built at Kiel By whom built F. Krupp Germania Werft Yard No. 463 When built 1923

Owners F. DONALD COSTER "OC" Port belonging to BRIDGEPORT, Conn.

Electric Light Installation fitted by KRUPP Contract No. 463 When fitted 1923

Is the Vessel fitted for carrying Petroleum in bulk No.

### System of Distribution

2 WIRE ✓

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

Direct or Alternating Current, Lighting D.C. ✓ Power D.C. ✓

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. ✓, if not compound wound state distance between each generator

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

Have certificates of test results for machines under 100 kw. been submitted and approved ✓ 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 in way of the generators satisfactory ✓ are they clear of all inflammable material YES ✓ if situated near unprotected woodwork ✓ 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 ✓

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 E.R. PORT SIDE ✓

If the generators and main switchboards 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. YES ✓

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 micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework. YES ✓, is the non-hygroscopic insulating material of an approved type ✓, and is the frame effectively earthed YES ✓

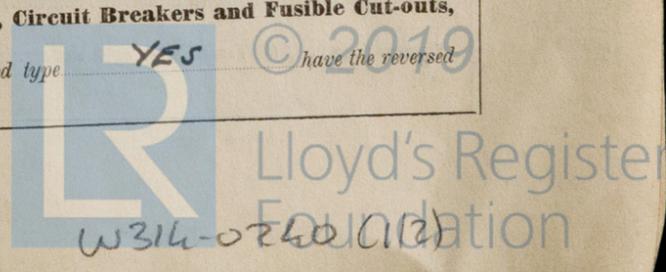
Are the fittings as per Rule regarding:— spacing or shielding of live parts YES ✓, accessibility of all parts YES ✓, absence of fuses on back of board YES ✓, temperature rise of omnibus bars ✓, individual fuses to voltmeter, pilot or earth lamp YES ✓, are moving parts of switches alive in the "off" position ✓

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 DOUBLE POLE SWITCH & 2 FUSES ON EACH CIRCUIT. ✓ NO EQUALIZERS ✓

Are turbine driven generators fitted with emergency trip switch as per rule ✓ Are cupboards containing switchboards composed of fire-resisting material or lined with approved material YES ✓ Instruments on main switchboard 3 ✓ ammeters 3 ✓

voltmeters ✓ 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 GROUND LAMPS ✓

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



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current protection devices been tested under working conditions  **Joint Boxes, Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule** YES

**Cables:** Single, twin, concentric, or multicore  are the cables insulated and protected as per Tables IV, V, X or XI of the Rules YES

If the cables are insulated otherwise than as per Rule, are they of an approved type  **Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load.**  **Cable Sockets, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets.**  **Paper Insulated and Varnished Cambric Insulated Cables.**

If conductors are paper or varnished cambric insulated, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound  or waterproof insulating tape  **Cable Runs, are the cables fixed as far as possible in accessible positions not exposed to drip or accumulation of water or oil, or to high temperature from boilers, steam pipes, uptakes or other hot objects, or to avoidable risk of mechanical damage.** YES Are cables in machinery spaces, galleys, lavatories, bathrooms and lavatories lead covered or run in conduit YES

**Support and Protection of Cables, state how the cables are supported and protected** LEADED & ARMORED

If cables are run in wood casings, are the casings and caps secured by screws , are the cap screws of brass , are the cables run in separate grooves . If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VIII YES

**Refrigerated Chambers, are the cables and fittings in accordance with the special requirements**

**Joints in Cables, state if any, and how made, insulated, and protected** all

**Watertight Glands and Deck Tubes, are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands** YES **Bushes in Beams and Non-watertight Partitions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed**  state the material of which the bushes are made

**Earthing Connections, state what earthing connections are fitted and their respective sectional areas**  are their connections made as per Rule YES

**Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule** YES **Emergency Supply, state position and method of control of the emergency supply and how the generator is driven**

**Navigation Lamps, are these separately wired** YES, controlled by separate switch and separate fuses YES, are the fuses double pole YES, are the switches and fuses grouped in a position accessible only to the officers on watch YES

has each navigation lamp an automatic indicator as per Rule YES **Secondary Batteries, are they constructed and fitted as per Rule** YES

**Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight** YES are any fittings placed in spaces in which goods are liable to be stacked in close proximity to them; if so, how are they protected NO

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected NO, how are the cables led

where are the controlling switches situated

are all fittings suitably ventilated , are all switches and lampholders constructed wholly of non-ignitable, non-absorbent materials

**Heating and Cooking Appliances, are they constructed and fitted as per Rule**  are air heaters constructed and fitted as per Rule

**Searchlight Lamps, No. of** 1, whether fixed or portable FIXED, are their fittings as per Rule YES

**Are Lamps, other than searchlight lamps, No. of** NONE, are their live parts insulated from the frame or case , are their fittings as per Rule

**Motors, are their working parts readily accessible** YES, are the coils self-contained and readily removable for replacement YES, are the brushes, brush holders, terminals and lubricating arrangements as per Rule YES, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material YES, are they protected from mechanical injury and damage from water, steam or oil YES are their axes of rotation fore and aft YES, if situated near unprotected woodwork or other combustible material, are the motors of the totally enclosed, pipe ventilated, forced draught, drip or flame proof type  if not of this type, state distance of the combustible material horizontally or vertically above the motors  and

have machines of over 100 BHP been inspected by the Surveyors during manufacture and testing  **Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed and fitted as per Rule** YES **Lightning Conductors, where lightning conductors are required, are these fitted as per Rule** YES **Ships carrying Oil having a Flash Point less than 150° F. Have the special requirements of the Rules been complied with regarding switches, joint boxes, section and distribution boards, protection of cables, method of distribution, lead of cables, lights and fittings**  are all fuses of the filled cartridge type  are they of an approved type

If portable lamps for use in dangerous spaces are supplied, are they of a self-contained, battery-fed type approved by the Home Office

**Spare Gear, if the vessel is for open sea service have spares been supplied as per Rule**

PARTICULARS OF GENERATING PLANT.									
DESCRIPTION OF GENERATOR.	No. of	RATED AT			DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.			
		Kilowatts.	Volts.	Ampères.		Revs. per Min.	Fuel Used.	Flash Point of Fuel.	
MAIN	1	7½	110	67	275	BELT FROM CRANK SHAFT			
AUXILIARY	1	20	.	180	1200	3 CYL FAIRBANKS HORSE	DIESEL OIL		
EMERGENCY	1	9	.	80	550	2 CYL MIANUS	" "		
ROTARY TRANSFORMER									

GENERATOR, LIGHTING AND HEATING CONDUCTORS.									
DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Nominal Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
MAIN GENERATOR									
EQUALISER CONNECTIONS									
AUXILIARY GENERATOR									
EMERGENCY GENERATOR									
ROTARY TRANSFORMER MOTOR GENERATOR									
ENGINE ROOM							FUSED 15 AMPS		
BOILER ROOM									
AUXILIARY SWITCHBOARDS									
1. OWNERS STATEROOM									
2. STATE ROOMS									
3. " "									
4. SMOKING ROOM									
5. " "									
6. ACCOMMODATION DINING RM.									
7. DINING ROOM									
8. PILOT HOUSE									
9. OUTSIDE LIGHTS									
14. PANTRY									
12. WIRELESS RADIO									
23. SEARCHLIGHT							35		
MASTHEAD LIGHT							15		
10. SIDE LIGHTS									
COMPASS LIGHTS									
POOP LIGHTS									
CARGO LIGHTS									
ARC LAMPS									
19. HEATERS CREWS QUARTERS							15		

MOTOR CONDUCTORS.										
DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Nominal Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
BALLAST PUMP								FUSED		
#26 MAIN BILGE LINE PUMPS								60		
GENERAL SERVICE PUMP										
24 EMERGENCY BILGE PUMP								60		
16 SANITARY PUMP										
CIRC. SEA WATER PUMPS										
CIRC. FRESH WATER PUMPS										
20 AIR COMPRESSOR								60		
17 FRESH WATER PUMP								35		
ENGINE TURNING GEAR										
ENGINE REVERSING GEAR										
LUBRICATING OIL PUMPS										
OIL FUEL TRANSFER PUMP										
21 WINDLASS								60		
WINCHES, FORWARD										
WINCHES, AFT										
STEERING GEAR—										
(a) MOTOR GENERATOR										
(b) MAIN MOTOR										
WORKSHOP MOTOR										
13 VENTILATING FANS								20		
18 Hot Water Pump								15		
22 Boat Hoists								35		
25 Ice Machine								35		

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.

Electrical Engineers. Date

COMPASSES.

Distance between electric generators or motors and standard compass alt 50 ft

Distance between electric generators or motors and steering compass " 50 "

The nearest cables to the compasses are as follows:—

A cable carrying 1/4 Ampères close to feet from standard compass close to feet from steering compass. Binnacle lights

A cable carrying 5 Ampères alt 10 feet from standard compass alt 6 feet 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 degrees on course in the case of the standard compass, and degrees on course in the case of the steering compass.

Builder's Signature. Date

Is this installation a duplicate of a previous case No. If so, state name of vessel

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

This installation was not built under Special Survey. It has however been examined & tested & as far as can be seen it is now in good & safe working condition, & it complies with the Rules.

In my opinion, this electric installation is now in good & safe working condition & eligible, to receive the notation ELEC. LIGHT

Total Capacity of Generators 36 1/2 Kilowatts.

FOR W. H. RUNHAM & SELF

The amount of Fee ... £ Charged on : When applied for, 19. Travelling Expenses (if any) £ Hull Rpt : When received, 19.

John S. Heck. Surveyor to Lloyd's Register of Shipping.

Committee's Minute: NEW YORK JUL 3 - 1935

Assigned Elec. light

2m 5.94.—Transfer. The Surveyors are requested not to write on or below the space for Committee's Minute.)



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