

# YACHT.

15818

Rpt. 13.

No. 12577

## REPORT ON ELECTRIC FITTINGS

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

23 AUG 1926

Received at London Office

Date of writing Report 20<sup>th</sup> Aug 1926 When handed in at Local Office 20<sup>th</sup> Aug 1926 Port of Southampton

No. in Survey held at Gosport Date, First Survey 29<sup>th</sup> Apr Last Survey 20<sup>th</sup> Aug 1926  
Reg. Book. (Number of Visits 5)

on the steel twin screw motor yacht VITA Tons { Gross 345.40  
Net 182.60  
Built at Southampton & Gosport by whom built Camper & Nicholsons Yard No. 337 When built 1926

Owners T.O.M. Spivich C.B.E. Port belonging to Portsmouth

Electric Light Installation fitted by Camper & Nicholsons Ltd Contract No. 337 When fitted 1926

System of Distribution Two wire insulated  
Pressure of supply for Lighting 100 volts, Heating 100 volts, Power 100 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 overload? 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? Yes, is an adjustable regulating resistance fitted in series with each shunt field? Yes

Are all terminals accessible and clearly marked? Yes, are they so spaced or shielded that they cannot be accidentally earthed, or short circuited? Yes

Position of Generators Aft End Engine Room, Are the lubricating arrangements of the generators as per Rule? Yes

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 axis 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? Aft End Engine Room

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? 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? Yes and

are they constructed wholly of durable, incombustible non-absorbent materials? Yes, is all insulation of high dielectric strength and of

permanently high insulation resistance? Yes, if semi-insulating material is used, are all conducting parts connected to one pole

insulated from the slab with mica or micanite and the slab similarly insulated from its framework? Yes, and is the

frame effectively earthed? Yes, Are the following fittings as per Rule, viz.:— spacing or shielding of live parts

accessibility of all parts? Yes, absence of fuses on back of board? Yes, proportion of omnibus

connections of switches? Yes

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

Instruments on main switchboard 2 ammeters 1 voltmeters synchronising device for paralleling purposes

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system? Earth lamps Direct & Battery

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules? Yes

Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule? Yes

**Insulation of Cables**, state type of cables, single or twin *Single* are the cables insulated and protected as per Tables III or IV of the Rules *yes*

**Fall of Pressure**, state maximum between bus bars and any point of the installation under maximum load *2 Volts*

**Cable Sockets and other connections**, are the ends of all cables having a sectional area of 0.007 square inch and above provided with soldering sockets *yes*

**Paper Insulated Cables**, If cables are paper covered, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound *✓*

**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*

**Support and Protection of Cables**, state how the cables are supported and protected *Clipped + Casings*

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

**Refrigerated Chambers**, if lights are fitted, are the cables and fittings in accordance with the special requirements *yes*

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

**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 Positions**, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed *yes* state the material of which the bushes are made *Vul. Lignum Lube*

**Earthing Connections**, state what earthing connections are fitted and their respective sectional areas *✓*

are their connections made as per Rule *✓*

**Alternative Lighting**, are the groups of lights in the propelling machinery space arranged as per Rule *✓*

**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*, are separate screens provided for the use of oil and electric side lights *no*

are separate oil lanterns provided for the mast head lights and side lights *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 *Bonded Casings*

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected *Gas tight*

**Fittings** how are the cables led *L.C.C. Clipped*

where are the controlling switches situated *Entrance*

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

**Arc Lamps**, other than searchlight lamps, No. of *✓*, 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 axis 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 *✓* and *✓*

if not of this type, state distance of the combustible material horizontally or vertically above the motors *✓*

**Control Gear and Resistances**, are the generator field and motor speed regulators, starters and controllers constructed as per Rule *yes*

**Lightning Conductors**, where lightning conductors are required, are these fitted as per Rule *✓*

**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 *✓*

If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office *✓*

**PARTICULARS OF GENERATING PLANT.**

DESCRIPTION OF GENERATOR	No of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE	
		Kilowatts	Volts	Amps.	Revs. per Min.		Fuel Used	Flash Point of Fuel
MAIN	1	16	100/152	160-105	500	Gardner	Paraffin	
AUXILIARY								
EMERGENCY								
ROTARY TRANSFORMER								

**LIGHTING AND HEATING CONDUCTORS.**

Ref. No.	DESCRIPTION	No. of Conductors	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND		Total Maximum Current Amps.	Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED
				No.	Diameter.				
	MAIN GENERATOR	2	2000	37	083	160	10	VJR	Lead Covered
	AUXILIARY GENERATOR								
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER								
	AUXILIARY SWITCHBOARDS	2	0070	7	036	3	20	VJR	"
	ENGINE ROOM								
	BOILER ROOM								
	WIRELESS								
	SEARCHLIGHT	2	0030	3	036	5	200	VJR	Zinking
	MASTHEAD LIGHT	2	0030	3	036	5	80	VJR	Cased
	SIDE LIGHTS	2	0030	3	036	5	30	VJR	Cased
	COMPASS LIGHTS								
	POOP LIGHTS								
	CARGO LIGHTS								
	ARC LAMPS	2	0750	19	072	85	160	VJR	Lead Covered
	HEATERS								

**MOTOR CONDUCTORS.**

Ref. No.	DESCRIPTION	No. of Motors	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND		Total Maximum Current Amps.	Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED
				No.	Diameter.				
	BALLAST PUMP	1	0100	7	044	14		VJR	Lead Covered
	MAIN BILGE LINE PUMPS								
	GENERAL SERVICE PUMP								
	EMERGENCY BILGE PUMP								
	SANITARY PUMP	1	0100	7	044	14		VJR	Lead Covered
	CIRC. SEA WATER PUMPS								
	CIRC. FRESH WATER PUMPS								
	AIR COMPRESSOR	1	0600	19	064	83		VJR	" "
	FRESH WATER PUMP	1	0070	7	036	7		VJR	" "
	ENGINE TURNING GEAR								
	ENGINE REVERSING GEAR								
	LUBRICATING OIL PUMPS								
	OIL FUEL TRANSFER PUMP	1	0070	7	036	7		VJR	" "
	WINDLASS	1	0300	19	044	35		VJR	" "
	WINCHES, FORWARD								
	WINCHES, AFT								
	STEERING GEAR								
	WORKSHOP MOTOR								
	VENTILATING FANS								
	Ice Plant	1	0070	7	036	7		VJR	" "
	Boat Hoist	1	0300	19	044	35		VJR	" "

being held to replace  
See correspondence with T. Dept.

All Conductors are of annealed copper conforming to British Standard Specification No. 7.  
 The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.  
 The foregoing is a correct description.

For CAMPER & NICHOLSONS, LIMITED

*M. Blakely* Electrical Engineers.

Date Aug 12<sup>th</sup> 1926

COMPASSES.

Distance between electric generators or motors and standard compass   
 Distance between electric generators or motors and steering compass   
 The nearest cables to the compasses are as follows:—  
 A cable carrying \_\_\_\_\_ Amperes \_\_\_\_\_ feet from standard compass \_\_\_\_\_ feet from steering compass.  
 A cable carrying \_\_\_\_\_ Amperes \_\_\_\_\_ feet from standard compass \_\_\_\_\_ feet from steering compass.  
 A cable carrying \_\_\_\_\_ Amperes \_\_\_\_\_ feet from standard compass \_\_\_\_\_ feet from steering compass.  
 Have the compasses been adjusted with and without the electric installation at work at full power \_\_\_\_\_  
 Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted \_\_\_\_\_  
 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.

For CAMPER & NICHOLSONS, LIMITED

*M. Blakely* Builder's Signature. Date Aug 12<sup>th</sup> 1926

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.) *The electrical installation of this vessel has been fitted under special survey in accordance with the requirements of the Rules, and afterwards tested under full working conditions with satisfactory results. The vessel is eligible, in my opinion, to have a record of ELECTRIC LIGHT.*

It is submitted that this vessel is eligible for THE RECORD. Elec. light.

*J.W.D.*  
27/8/26

Total Capacity of Generators 16 Kilowatts

The amount of Fee ... £ 15-10-0 When applied for, 21.8.1926  
 Travelling Expenses (if any) £ : : When received, 28/8/26

*H. Garnett* for *A.H. Boyle*  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 31 AUG 1926

Assigned Elec Light

5c.12.13.—Transfer.  
 (The Surrogates are requested not to write on or below the space for Committee's Minute.)

*being added to repairs ... see correspondence with T. Dept.*

