

YACHT.

17501
20 JUL 1929

REMARKS. 13.

No. 13625

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Writing Report 19/7/29 When handed in at Local Office 19/7/29 Port of Southampton

Survey held at Southampton Date, First Survey 29/4/29 Last Survey 17 July 1929

Book. 41 on the t.s. motor sch. yacht. RHODORA (Number of Visits 7)

at Southampton By whom built Camper & Nicholson Yard No. 363 When built 1929

ers L. ROTHSCHILD Port belonging to Southampton

Electric Light Installation fitted by Camper & Nicholson Contract No. 363 When fitted 1929

System of Distribution

Measure of supply for Lighting 110 volts, Heating 110 volts, Power 110 volts.

Direct or Alternating Current, Lighting P.C. Power P.C.

14/3/29 Alternating current system, state frequency of periods per second

the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off

generators, do they comply with the requirements regarding rating yes, are they compound wound yes

they over compounded 5 per cent. yes, if not compound wound state distance between each generator

more than one generator is fitted are they arranged to run in parallel yes, is an adjustable regulating resistance fitted in

with each shunt field yes

All terminals accessible, clearly marked, and furnished with sockets yes, are they so spaced or shielded that they cannot be accidentally earthed,

circuited, or touched yes Are the lubricating arrangements of the generators as per Rule yes

Location of Generators Engine Room

ventilation in way of the generators satisfactory yes, are they clear of all inflammable material yes

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

18/27 their axes of rotation fore and aft yes

ing, are the bedplates and frames of the generating plant efficiently earthed yes are the prime movers and

ing rods respective generators in metallic contact yes

Switch Boards, where placed in Engine Room

If the generators and main switchboard are not placed in the same compartment, is each generator provided with

on each insulated pole as near as possible to the terminals of the generator, additional to that provided on the main switchboard

boards, are they placed in accessible positions, free from inflammable gases and acid fumes yes

2/5 they protected from mechanical injury and damage from water, steam or oil yes, if situated near unprotected

2/3 work or other combustible material, state distance of same horizontally from or vertically above the switchboards and

2/3 19/3/29 constructed wholly of durable, non-ignitable non-absorbent materials slate, is all insulation of high dielectric strength and of

2/3 19/3/29 recently high insulation resistance, if semi-insulating material is used, are all conducting parts insulated from the slab

2/3 mica or micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework yes

the frame effectively earthed yes Are the fittings as per Rule regarding:— spacing or shielding of live parts

2/3 yes, accessibility of all parts yes, absence of fuses on back of board yes, proportion of omnibus

2/3 yes, individual fuses to voltmeter, pilot or earth lamp yes, connections of switches yes

Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches one thru pole

2/3 19/3/29 2 main & equalizer, a single pole fuse & circuit breaker: and each outgoing

one change over D.P. switch and 2 S.P. fuses.

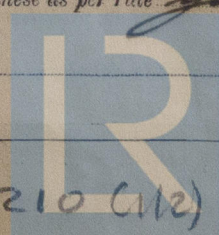
2/3 19/3/29 ments on main switchboard 4 ammeters 3 voltmeters synchronising device for paralleling purposes.

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

2/3 19/3/29 es, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules yes

2/3 19/3/29 ister of Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule yes

Wait for
*
Trial Trip



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W319-0210 (1/2)

Cables: Single, twin, concentric, or multicore single are the cables insulated and protected as per Tables IV or V of the Rules yes

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 3 mks

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.04 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 yes

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 21.5 cables in casings; 22 cables in steel channels

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 VIII yes

Refrigerated Chambers, if tight, are the cables and fittings in accordance with the special requirements yes

Joints in Cables, state if any, and how made, insulated, and protected none

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 yes state the material of which the bushes are made fibre

Earthing Connections, state what earthing connections are fitted and their respective sectional areas metal in contact with hull

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 battery

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 yes

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

how are the cables led yes

where are the controlling switches situated yes

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

Arc Lamps, other than searchlight lamps, No. of 1, are their live parts insulated from the frame or case yes, are their fittings as per Rule yes

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 yes

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

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

Lighting 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 yes

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

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 ...	2	33	110	300	400	Heavy Oil Engrs	oil	above 150° F
AUXILIARY ...	1	8	110/185	73/43	1000	S. Main engine		
EMERGENCY ...								
ROTARY TRANSFORMER	1		75	100	1000			

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	2	.4985	61	.103	300	56	VIR	L.C.
	EQUALISER CONNECTIONS ...	1	.4985	61	.103	28	28	"	"
	AUXILIARY GENERATOR ...	2	.0600	19	.064	43	150	"	"
	EMERGENCY GENERATOR ...								
	ROTARY TRANSFORMER...	4	.1168	37	.064	100	80	"	"
	AUXILIARY SWITCHBOARDS ...								
	ENGINE ROOM ...	2	.01046	7	.044	8	50	"	"
	BOILER ROOM ...								
	ACCOMMODATION ...								
	Cummers Tack	2	.02214	7	.064	15	120	"	"
	" aft	2	.02214	7	.064	15	180	"	"
	Offshore & Cruis	2	.02214	7	.064	8	180	"	"
	Food power	2	.01046	7	.044	14	120	"	"
	Off power	2	.01046	7	.044	8	180	"	"
	Navigation	2	.01046	7	.044	3	140	"	"
	Food heating	2	.1478	37	.072	75	138	"	"
	Off heating	2	.0600	19	.064	30	180	"	"
	WIRELESS ...	2	.02214	7	.064	20	160	"	"
	SEARCHLIGHT ...	2	.007005	7	.036	10	40	"	"
	MASTHEAD LIGHT...	2	.002994	3	.036	3	300	"	pipe
	SIDE LIGHTS ...	2	.002994	3	.036	3	30	"	L.C.
	COMPASS LIGHTS ...	2	.002994	3	.036	3	30	"	Chasing
	POOP LIGHTS ...								
	CARGO LIGHTS ...								
	ARC LAMPS ...								
	HEATERS in oil Tanks	2	.007005	7				"	L.C.

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP ...								
	MAIN BILGE LINE PUMPS ...	1	.01046	7	.044	18	120	VIR	L.C.
	GENERAL SERVICE PUMP ...	1	.01046	7	.044	18	110	"	"
	EMERGENCY BILGE PUMP ...								
	SANITARY PUMP ...								
	CIRC. SEA WATER PUMPS ...								
	CIRC. FRESH WATER PUMPS								
	AIR COMPRESSOR ...	1	.2465	17	.093	195	84	"	"
	FRESH WATER PUMP ...	1	.01046	7	.044	9	116	"	"
	ENGINE TURNING GEAR ...								
	ENGINE REVERSING GEAR ...								
	LUBRICATING OIL PUMPS ...								
	OIL FUEL TRANSFER PUMP	1	.02214	7	.064	35	90	"	"
	WINDLASS ...	1	.1964	37	.083	110	180	"	"
	WINCHES, FORWARD ...								
	WINCHES, AFT ...								
	STEERING GEAR								
	(a) MOTOR GENERATOR...	1	.0600	19	.064	36	290	"	"
	(b) MAIN MOTOR ...								
	WORKSHOP MOTOR ...								
	VENTILATING FANS aft...	1	.007005	7	.036	4	300	"	"
	" mid	1	.007005	7	.036	4	25	"	"
	" fore	1	.007005	7	.036	4	180	"	"
	Boat Land	1	.07572	19	.072	78	84	"	"
	Cargo Tack	1	.1478	37	.072	98	280	"	"
	Refrigerator	2	.007005	7	.036	7	30	"	"
	Secondary Motor	1	.01046	7	.044	13	250	"	"
	Battery		.1168	37	.064	90	50	"	"

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.

PER PRO

CAMPER & NICHOLSON

Electrical Engineers.

Date

18th July 1929

COMPASSES.

Distance between electric generators or motors and standard compass 32 ft.

Distance between electric generators or motors and steering compass 38 ft.

The nearest cables to the compasses are as follows:—

A cable carrying 10 Ampères 10 feet from standard compass 10 feet from steering compass.

A cable carrying 110 Ampères 24 feet from standard compass 20 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.

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.

PER PRO

CAMPER & NICHOLSONS Ltd.

Builder's Signature.

Date

17th July 1929.

Is this installation a duplicate of a previous case 70 If so, state name of vessel

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

The generators have been installed and the electric motor fitted. The fittings wiring carried out in accordance with the requirements of the Rules.

When the installation has been tested under working conditions and found satisfactory the vessel will be eligible, in my opinion, for the notation "Electric Light".

Total Capacity of Generators 74 Kilowatts.

The amount of Fee ...

£

7 : 8

:

When applied for,

19

Travelling Expenses (if any) £

:

:

When received,

93.7.19 29

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE 23 JUL 1929

WED. 7 AUG 1929

Assigned

Elec Light

1m. 127.—Transfer.

(The Surveyors are requested not to write on or below the space for Committee's Minute.)



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