

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 9-7-1926 When handed in at Local Office 9-7-1926 Port of CradleburghNo. in Survey held at Cradleburgh Date, First Survey Wile Last Survey Building
Reg. Book. (Number of Visits.....)40766 on the S/S ROBERT L. HOLTTons { Gross 2909
Net 1687.Built at South Bank By whom built Smiths Dock Co. Ltd. Yard No. 822 When built 1926Owners John Holt & Company (Liverpool) Ltd. belonging to LiverpoolElectric Light Installation fitted by RICHARD PICKERSGILL & SONS, LTD. Contract No. When fitted 1926

System of Distribution

Pressure of supply for Lighting 110 volts, Heating - volts, Power - volts.Direct or Alternating Current, Lighting D.C. Power -

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 yesGenerators, do they comply with the requirements regarding overload yes, are they compound wound yesare 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

Are all terminals accessible and clearly marked yes

, are they so spaced or shielded that they cannot be accidentally earthed,

or short circuited yesAre the lubricating arrangements of the generators as per Rule yes

Position of Generators

Starboard side of engine room.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 yesare their axis of rotation fore and aft yesEarthing, are the bedplates and frames of the generating plant efficiently earthed yes

are the prime movers and

their respective generators in metallic contact yesMain Switch Boards, where placed Starboard side 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 Same compartmentSwitchboards, are they placed in accessible positions, free from inflammable gases and acid fumes yesare 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, 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

yes, accessibility of all parts yes, absence of fuses on back of board yes

, proportion of omnibus

bars yes, individual fuses to voltmeter, pilot or earth lamp yes, connections of switches yesMain Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches Double polemain switches Double pole switches with double pole fuses to each circuitInstruments on main switchboard 1 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 2 lamps in series across main lines, middle point earthed.Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules yesSection and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule yes.

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W211 0006 (1/2)

Insulation of Cables, state type of cables, single or 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 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 Lead & Armoured cable with Iron clips - Lead covered cable with brass clips

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 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 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 Lead

Earthing Connections, state what earthing connections are fitted and their respective sectional areas 2 lamps in series across positive & negative to earth

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 yes

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 yes

are separate oil lanterns provided for the mast head lights and side lights yes

Fittings, are all fittings on weather decks, in storerooms 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 covered

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 Lead & Iron

where are the controlling switches situated Lead & Iron

Searchlight Lamps, No. of 1, whether fixed or portable fixed, 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 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 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 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 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	1	8	110	73	380	Roby Engine			
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. Amperes.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR	2	.0600	19	.064	73	16ft	V. 2 R	
	AUXILIARY GENERATOR								
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER								
	AUXILIARY SWITCHBOARDS	2	.0100	1	.044	8.1	36ft	V. 2 R	Lead & Armoured
	ENGINE ROOM	2	.0100	1	.044	8.1	36ft	V. 2 R	Lead & Armoured
	BOILER ROOM	2	.0100	1	.044	8.1	36ft	V. 2 R	Lead & Armoured
	Forward Berths	2	.0070	1	.036	4	350	20	20
	Engine Room	2	.0070	1	.036	2	100	20	20
	Boiler Room	2	.00152	1	.044	1.5	50	20	20
	Saloon Deck	2	.0010	1	.044	11.1	200	20	20
	WIRELESS	2	.0225	1	.064	15	90ft	20	Lead & Armoured
	SEARCHLIGHT	2	.00152	1	.044	.5	150ft	20	20
	MASTHEAD LIGHT	2	.00152	1	.044	.5	26ft	20	20
	SIDE LIGHTS	2	.00152	1	.044	.5	26ft	20	20
	COMPASS LIGHTS	2	.0010	1	.036	9	130ft	20	20
	POOP LIGHTS								
	CARGO LIGHTS								
	ARC LAMPS								
	HEATERS								

MOTOR CONDUCTORS.									
Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP								
	MAIN BILGE LINE PUMPS								
	GENERAL SERVICE PUMP								
	EMERGENCY BILGE PUMP								
	SANITARY PUMP								
	CIRC. SEA WATER PUMPS								
	CIRC. FRESH WATER PUMPS								
	AIR COMPRESSOR								
	FRESH WATER PUMP								
	ENGINE TURNING GEAR								
	ENGINE REVERSING GEAR								
	LUBRICATING OIL PUMPS								
	OIL FUEL TRANSFER PUMP								
	WINDLASS								
	WINCHES, FORWARD								
	WINCHES, AFT								
	STEERING GEAR								
	WORKSHOP MOTOR								
	VENTILATING FANS								

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.

RICHARD PICKERSGILL & SONS, LTD.

R. Ham

Electrical Engineers.

Date *June 30th 1926*

COMPASSES.

Distance between electric generators or motors and standard compass *81'-0" Horizontal* *45'-0" Vertical*

Distance between electric generators or motors and steering compass *90'-0" Horizontal* *36'-6" Vertical*

The nearest cables to the compasses are as follows:—

A cable carrying *1/2* Ampères *26* feet from standard compass *5* feet from steering compass.

A cable carrying *-* Ampères *-* feet from standard compass *-* 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.

For SMITH'S DOCK COMPANY LTD

J. W. Cairns
Shipyard Manager.

Builder's Signature.

Date *8th July 1926*

Is this installation a duplicate of a previous case *Yes* If so, state name of vessel *Jonathan C. Stolt*

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

This installation has been fitted in accordance with the Rules; is of good material and workmanship and on completion was examined under full load and found satisfactory

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

W.D.
16/7/26

Total Capacity of Generators *8* Kilowatts

The amount of Fee ... £ *8 : 0* : *23 4 26*

Travelling Expenses (if any) £ *✓* : *1 5 16*

Arthur W. Oxford
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned *Elec Light*

5c, 12, 13.—Transfer.
(The Surveyors are requested not to write on or below the space for Committee's Minute.)



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