

REPORT ON ELECTRIC LIGHTING INSTALLATION. No.

of Galveston, Texas. Date of First Survey March-1918. Date of Last Survey Aug-1918. No. of Visits 24
 on the ~~Iron~~ Steel Wood Screw Steamer "WAR MARVEL" Port belonging to London
 Built at Orange, Texas. By whom National Shipbuilding Co. When built 1918.
Cunard Line. Owners' Address Liverpool & London.
 No. 7 Electric Light Installation fitted by Lund & Miller. When fitted 1918.

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Two 5 K. W. direct connected generating sets of the General Electric
 e:- Engine made by the American Blower Co. Type A.

Volts of Dynamo 42 Amperes at 110 Volts, whether continuous or alternating current continuous.
 is Dynamo fixed On special platform above main engines. Whether single or double wire system is used Double wired system
 of Main Switch Board On bulkhead by dynamo's having switches to groups of lights, &c., as below
 ons of auxiliary switch boards and numbers of switches on each

with 70. are fitted on main switch board to the cables of main circuit Yes. and on each auxiliary switch board to the cables of auxiliary
 circuits Yes. and at each position where a cable is branched or reduced in size Yes. and to each lamp circuit Yes
2/11 is wired on the double wire system are fuses fitted to both flow and return wires or cables of all circuits including lamp circuits Yes.
23 fuses of non-oxidizable metal Yes. and constructed to fuse at an excess of 10% per cent over the normal current
March- fuses fitted in easily accessible positions Yes. Are the fuses of standard dimensions Yes. If wire fuses are used
August-191 permanent instructions fitted on or near each switch board giving particulars of proper size of fuse for each circuit Yes.
ch-1918 switches and fuses constructed of incombustible materials and fitted on incombustible bases Yes.

umber of lights provided for 100 arranged in the following groups :-

<u>14</u>	lights each of	<u>100</u>	candle power requiring a total current of	<u>3 1/4</u>	Amperes
<u>12</u>	lights each of	<u>96</u>	candle power requiring a total current of	<u>3</u>	Amperes
<u>12</u>	lights each of	<u>96</u>	candle power requiring a total current of	<u>3</u>	Amperes
<u>12</u>	lights each of	<u>96</u>	candle power requiring a total current of	<u>3</u>	Amperes
<u>14</u>	lights each of	<u>100</u>	candle power requiring a total current of	<u>3 1/4</u>	Amperes
<u>Mast head light with 2</u>	<u>lamps each of</u>	<u>8</u>	candle power requiring a total current of	<u>1/4</u>	Amperes
<u>Side light with 4</u>	<u>lamps each of</u>	<u>8</u>	candle power requiring a total current of	<u>1/4</u>	Amperes
<u>Cargo lights of</u>	<u>40</u>		candle power, whether incandescent or arc lights	<u>incandescent.</u>	

lights, what protection is provided against fire, sparks, &c.

are the switches controlling the masthead and side lights placed In wheel house.

DESCRIPTION OF CABLES.

carrying 65 Amperes, comprised of 2 wires, each .232" S.W.G. diameter 41070.M. square inches total sectional area
232 mils dia = 53.824 Cir mils = 67 amperes
 cables carrying 14 Amperes, comprised of 2 wires, each .0800 S.W.G. diameter 417400.M. square inches total sectional area
80 mils dia = 6400 Cir mils = 19 amperes
 Survey cables carrying _____ Amperes, comprised of _____ wires, each _____ S.W.G. diameter, _____ square inches total sectional area
160 lbs. lamps carrying _____ Amperes, comprised of _____ wires, each _____ S.W.G. diameter, _____ square inches total sectional area
 work ver cables carrying _____ Amperes, comprised of _____ wires, each _____ S.W.G. diameter, _____ square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Two black threads woven in parallel braids and rubber covered.

cables, how made, insulated, and protected Mechanical splice made then soldered; a layer of rubber tape
layers of friction tape.

joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances Yes. Are all joints in accessible

ons, none being made in bunkers, cargo spaces, or spaces which may at any time be used for carrying cargo, stores, or baggage

of any joints in or branches from the cable leading from dynamo to main switch board No.

the cables led through the ship, and how protected All cables are lead through steel conduits.



© 2020

Lloyd's Register
 W721-0136
 Foundation

DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible Yes.

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture. They are in steel conduits and made water-tight.

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat In steel conduits.

What special protection has been provided for the cables near boiler casings In steel conduits.

What special protection has been provided for the cables in engine room In steel conduits.

How are cables carried through beams Not any through beams. through bulkheads, & Through pipes & made water tight.

How are cables carried through decks Through pipes and made water-tight. ✓

Are any cables run through coal bunkers Yes. or cargo spaces Yes or spaces which may be used for carrying cargo, stores, or baggage Yes.

If so, how are they protected By steel conduits and encased.

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coats, or baggage No.

If so, how are the lamp fittings and cable terminals specially protected

Where are the main switches and fuses for these lights fitted All switches and fuses are at switchboard.

If in the spaces, how are they specially protected

Are any switches or fuses fitted in bunkers No.

Cargo light cables, whether portable or permanently fixed Portable How fixed A watertight outlet box on deck.

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel

How are the returns from the lamps connected to the hull

Are all the joints with the hull in accessible positions

Is the installation supplied with a voltmeter Yes. and with an amperemeter Yes. fixed At switchboard.

VESSELS BUILT FOR CARRYING PETROLEUM.

In vessels built for carrying petroleum, are all switches and fuses fitted in positions not liable to the accumulation of petroleum vapour or gas

Are any switches, fuses, or joints of cables fitted in the pump room or companion

How are the lamps specially protected in places liable to the accumulation of vapour or gas

The copper used is guaranteed to have a conductivity of not less than that of the Engineering Standards Committee's standard, and the wires are protected by tinning from the sulphur compounds present in the insulating material.

Insulation of cables is guaranteed to have a resistance of not less than _____ megohms per statute mile at 60° Fahrenheit after 24 hours' immersion in water, the test being made after one minute's electrification at not less than 500 volts and while the cable is still immersed.

The foregoing statements are a correct description of the Electric Light installation fitted by us on this vessel and we declare that it is at this date in good order and safe working condition.

COMPASSES.

John Dragon Electrical Engineers Date _____

Distance between dynamo or electric motors and standard compass 30 ft.

Distance between dynamo or electric motors and steering compass 35 ft.

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<u>1</u>	<u>6"</u>	<u>6"</u>	<u>feet from steering compass</u>
<u>2</u>	<u>6'</u>	<u>2'</u>	<u>feet from steering compass</u>
<u>A cable carrying</u>	<u>Amperes</u>	<u>feet from standard compass</u>	<u>feet from steering compass</u>

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

The maximum deviation due to electric currents, etc., was found to be _____ degrees on _____ course in the case of the _____

_____ course in the case of the steering compass.

NATIONAL SHIP BUILDING CO., OF TEXAS

Class Tutschulte Builder's Signature. Date October 17 1918.

GENERAL REMARKS. The dynamo's, switchboard and all wiring were installed under inspection and when completed the dynamo's and all lights were tested out on several occasions and found to be very satisfactory.

A 2 K. W. Machine was installed for the Wireless.

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

Committee's Minute

JD
19/11/18
Elec light

J. B. Grant
Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register
Foundation

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN