

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 1362

Port of Newport News Date of First Survey Nov. 17 Date of Last Survey Dec 4 No. of Visits 5
 No. in Reg. Book NEW on the Iron or Steel S.S. "MININDIES" Port belonging to New York
 Built at Newport News By whom Newport News S.S. Co. When built 1917.12
 Owners WINSON S.S. LINES Owners' Address ✓
 Yard No. 206 Electric Light Installation fitted by Newport News S.S. Co. When fitted 1917

DESCRIPTION OF DYNAMO, ENGINE, ETC.

15 K.W. General Electric Co's Marine Type, direct connected to 8" x 6" Vertical Engine
 Capacity of Dynamo 136 Amperes at 110 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Engine Room Whether single or double wire system is used Double
 Position of Main Switch Board Near Dynamo having switches to groups 11 of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each Two in Bridge Quarters - 6 switches on each board

If fuses are fitted on main switch board to the cables of main circuit Yls and on each auxiliary switch board to the cables of auxiliary circuits Yls and at each position where a cable is branched or reduced in size Yls and to each lamp circuit Yls

If vessel is wired on the double wire system are fuses fitted to both flow and return wires or cables of all circuits including lamp circuits Yls

Are the fuses of non-oxidizable metal Yls and constructed to fuse at an excess of 50 per cent over the normal current

Are all fuses fitted in easily accessible positions Yls Are the fuses of standard dimensions Yls If wire fuses are used are permanent instructions fitted on or near each switch board giving particulars of proper size of fuse for each circuit Standard

Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases Yls

Total number of lights provided for 198 arranged in the following groups:—

A	<u>24</u> <u>35</u>	lights each of	<u>16</u> <u>"</u>	candle power requiring a total current of	<u>7.2</u> <u>10.5</u>	Amperes
B	<u>18</u> <u>75</u>	lights each of	<u>"</u> <u>"</u>	candle power requiring a total current of	<u>5.4</u> <u>2.7</u>	Amperes
C	<u>12</u> <u>11</u>	lights each of	<u>"</u> <u>"</u>	candle power requiring a total current of	<u>4.5</u> <u>3.6</u>	Amperes
D	<u>12</u> <u>44</u>	lights each of	<u>"</u> <u>"</u>	candle power requiring a total current of	<u>3.3</u> <u>3.6</u>	Amperes
E	<u>12</u> <u>6</u>	lights each of	<u>"</u> <u>"</u>	candle power requiring a total current of	<u>3.6</u> <u>1.8</u>	Amperes
	<u>1</u>	Mast head light with <u>2</u> lamps each of	<u>32</u>	candle power requiring a total current of	<u>2.0</u>	Amperes
	<u>2</u>	Side light with <u>2</u> lamps each of	<u>32</u>	candle power requiring a total current of	<u>2.0</u>	Amperes
	<u>6</u>	Cargo lights of	<u>64</u>	candle power, whether incandescent or arc lights	<u>in Candle Cuts</u>	

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

Where are the switches controlling the masthead and side lights placed Below Deck

DESCRIPTION OF CABLES.

Main cable carrying 136 Amperes, comprised of 37 wires, each #15 S.W.G. diameter, .150 square inches total sectional area
 Branch cables carrying 5.4 Amperes, comprised of 19 wires, each #14 S.W.G. diameter, .023 square inches total sectional area
 Branch cables carrying 2.7 Amperes, comprised of 7 wires, each #17 S.W.G. diameter, .017 square inches total sectional area
 Leads to lamps carrying 13.2 Amperes, comprised of 7 wires, each #16 S.W.G. diameter, .032 square inches total sectional area
 Cargo light cables carrying 2 Amperes, comprised of 1 wires, each #16 S.W.G. diameter, .032 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Rubber tape, braid, in iron conduit. Flexible work tubing and wood moulding in Cabin

Joints in cables, how made, insulated, and protected Soldered - Rubber tape, braid, in iron junction boxes

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances Yls Are all joints in accessible positions, none being made in bunkers, cargo spaces, or spaces which may at any time be used for carrying cargo, stores, or baggage Yls

Are there any joints in or branches from the cable leading from dynamo to main switch board No

How are the cables led through the ship, and how protected In Conduit - Wood moulding in Bridge & Quarters

DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible no

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture Am Conduit

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat Am Conduit

What special protection has been provided for the cables near boiler casings Am Conduit

What special protection has been provided for the cables in engine room Am Conduit

How are cables carried through beams Am Conduit through bulkheads, &c. Conduit & Stand

How are cables carried through decks W.T. Stand

Are any cables run through coal bunkers no or cargo spaces yes or spaces which may be used for carrying cargo, stores, or baggage yes

If so, how are they protected Am Conduit

Are any lamps fitted in ~~coal bunkers~~ or spaces which may at times be used for cargo, coals, or baggage yes

If so, how are the lamp fittings and cable terminals specially protected W.T. Stand Am Cables - Pass near Bulk

Where are the main switches and fuses for these lights fitted Main 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 ✓

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 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 600 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.

Newport News Shipbuilding & Dry Dock Co.

COMPASSES.

By

Assistant to the President

Electrical Engineers

Date

Dec 11-1917

Distance between dynamo or electric motors and standard compass 155 ft

Distance between dynamo or electric motors and steering compass 127 ft

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
3	6	4	
3.0	6	6	

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 standard compass and degrees on course in the case of the steering compass.

By

Assistant to the President

Builder's Signature.

Date

Dec 11-1917

GENERAL REMARKS.

The installation has been fitted in accordance with Rule Requirements. The workmanship & protection are good. The vessel is eligible, in my opinion to have the record "Electric Light".

It is submitted that this vessel is eligible for

THE RECORD. Elec. light.

JWD. 16/1/18.

Surveyor to Lloyd's Register of Shipping.

Committee's Minute.

Elec. light

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.