

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 15711

Port of New York Date of First Survey \_\_\_\_\_ Date of Last Survey 4 June 18 No. of Visits \_\_\_\_\_  
 No. in Reg. Book on the ~~Iron~~-or Steel S. S. "Passaic" Port belonging to \_\_\_\_\_  
 Built at Shooters Island, N.Y. By whom Standard S. B. Corp. When built 1918  
 Owners \_\_\_\_\_ Owners' Address \_\_\_\_\_  
 Yard No. 3 Electric Light Installation fitted by Standard Shipbuilding Corp. When fitted 1918

**DESCRIPTION OF DYNAMO, ENGINE, ETC.**

Two (2) 15 K.W. General Electric D.C. Generators direct connected to single engine forced lubrication.

Capacity of Dynamo 120 Amperes at 125 Volts, whether continuous or alternating current continuous  
 Where is Dynamo fixed Dynamo Room (Upper Engine Room) Whether single or double wire system is used double  
 Position of Main Switch Board Near Dynamo having switches to groups A-A<sup>2</sup>-B-B<sup>1&2</sup>-C-D-D<sup>2</sup> of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each A-Eng. room 4 switches A<sup>2</sup> Midship accommodations 6 switches B<sup>1&2</sup> Crews forward & aft 6 switches B<sup>3</sup> Engineers accommodations 5 switches C Navigation 5 switches C<sup>2</sup> Cargo forward & aft - D Refrigeration & Mch room 3 switches D<sup>2</sup> Searchlight 1 switches E Lathe & drill press motors 2 switches E<sup>2</sup> Wireless 1 switch -  
 If fuses 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

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 Yes  
 Are the fuses of non-oxidizable metal Yes (N.E.C. Enclosed) and constructed to fuse at an excess of 100% per cent over the normal current  
 Are all fuses fitted in easily accessible positions Yes Are the fuses of standard dimensions Yes 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 Yes  
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases Yes

Total number of lights provided for 166 arranged in the following groups:—

A - 29 & 4	lights each of 50 & 25 watt	candle power requiring a total current of	12.48	Amperes
A <sup>2</sup> B <sup>1&amp;2</sup> - 24	lights each of 25 watt	candle power requiring a total current of	5.20	Amperes
B <sup>3</sup> - 18	lights each of 25 "	candle power requiring a total current of	3.96	Amperes
C <sup>2</sup> - 5	lights each of 50 "	candle power requiring a total current of	2.00	Amperes
D - 36	lights each of 25 " cargo forward & aft	candle power requiring a total current of	7.92	Amperes
D <sup>2</sup> - 13	lights each of 25 "	candle power requiring a total current of	2.86	Amperes
E <sup>2</sup> - 2	motors lights each of 1-1/2 H.P. & 1-2 H.P.	candle power requiring a total current of	30.00	Amperes
E <sup>2</sup> - 2	Wireless		20.00	Amperes
2	Mast head light with 1 lamps each of 50 watts	candle power requiring a total current of	35.00	Amperes
2	Side light with 1 lamps each of 50 watts	candle power requiring a total current of	.8	Amperes
6	Cargo lights of 6 lamps each-25 watt	candle power, whether incandescent or arc lights	Incandescent	
6	hand portables each-25 watt		Incandescent	

If arc lights, what protection is provided against fire, sparks, &c. 1 in searchlight in case as provided by makers

Where are the switches controlling the masthead and side lights placed Central Panel in Chart Room

**DESCRIPTION OF CABLES.**

Main cable carrying 120 Amperes, comprised of 19 wires, each .0745 B&S diameter, .105 square inches total sectional area  
 Branch cables carrying wireless 35 Amperes, comprised of 7 wires, each # 14 B&S diameter, .0206 square inches total sectional area  
 Branch cables carrying searchlight 30 Amperes, comprised of 7 wires, each # 14 B&S diameter, .0206 square inches total sectional area  
 Leads to lamps carrying 2 Amperes, comprised of 1 wires, each # 16 B&S diameter, .0020 square inches total sectional area  
 Cargo light cables carrying 1.4 Amperes, comprised of 42 wires, each 31 B&S diameter, .0032 square inches total sectional area

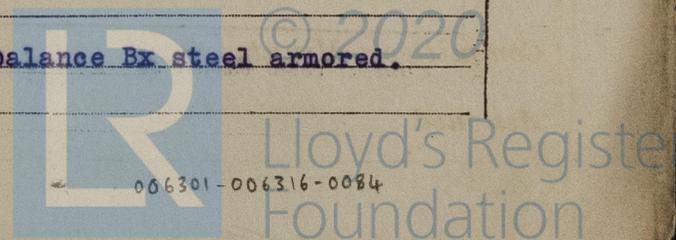
**DESCRIPTION OF INSULATION, PROTECTION, ETC.**

The cables are insulated their entire length with a Para rubber compound properly applied and vulcanized. Covered with 2 woven cotton braids impregnated with a moisture repelling compound solution wire in conduit, metal band sheathing and lead covered in accommodation.  
 Joints in cables, how made, insulated, and protected Joints all pigtailed, soldered, rubber & friction tapped.  
No joints except in Brass or Galv.iron Junction Boxes or fixture Blocks.

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

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 Some in conduit and the balance Bx steel armored.



**DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.**

Are they in places always accessible Except in Holds & Bunkers

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture galv. rigid conduit and Bx steel armored.

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat Rigid conduit & Bx steel armored

What special protection has been provided for the cables near boiler casings Conduit & Bx & lead armored

What special protection has been provided for the cables in engine room Conduit & Bx & lead armored

How are cables carried through beams Holes in Beams through bulkheads, &c. Conduit made watertight

How are cables carried through decks Conduit made watertight

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 Bx steel armored & conduit thru refrigerator quarters.

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 Hinged cover, watertight fittings.

Where are the main switches and fuses for these lights fitted Dynamo room, upper Engine room

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 Connect to plug Boxes

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 on main 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.

Standard Shipbuilding Corp. Electrical Engineers Date

**COMPASSES.**

Distance between dynamo or electric motors and standard compass

Distance between dynamo or electric motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying	<u>30</u>	Amperes	<u>6</u>	feet from standard compass	<u>4</u>	feet from steering compass
A cable carrying	<u>1/4</u>	Amperes	<u>0</u>	feet from standard compass	<u>8</u>	feet from steering compass
A cable carrying	<u>1/4</u>	Amperes	<u>8</u>	feet from standard compass	<u>0</u>	feet from steering compass

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.

Standard Shipbuilding Corp. Builder's Signature. Date

**GENERAL REMARKS.**

*The fitting of the wires throughout this vessel is as stated in this Report & appears to be in accordance with the Committee's requirements.*

*It is submitted that this vessel is eligible for*

THE RECORD. Elec. light. JUN 9/7/18 J. J. Hudson Surveyor to Lloyd's Register of Shipping.

Committee's Minute Elec. Light New York JUN 11 1918

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



1850, 16—Transfer.