

## REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 2355

at of *Baltimore* Date of First Survey \_\_\_\_\_ Date of Last Survey *1. 5. 18.* No. of Visits \_\_\_\_\_  
 in on the ~~Iron~~ or Steel *S. S. Ampetco* Port belonging to *Baltimore, Md.*  
 Book Built at *Spanow's Point Md.* By whom *Bethlehem Shipbuilding Corp.* When built *4-18.*  
*U.S. Shipping Board Emergency Fleet Corp.* Owners' Address *Washington D. C.*  
 No. *172.* Electric Light Installation fitted by *Bethlehem Shipbuilding Corporation* When fitted \_\_\_\_\_

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

*1 9" x 7" Direct connected engine 400 R.P.M. to General Electric Multipolar Generator*  
 Capacity of Dynamo *160* Amperes at *125* 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 *Engine Room* having switches to groups *Four* of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each *Bridge Deck house Passage.*  
*Engine Room, Upper Deck Passage.*

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*.  
 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* and constructed to fuse at an excess of *30* 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 \_\_\_\_\_ arranged in the following groups:—

<i>103</i>	lights each of	<i>20</i>	candle power requiring a total current of	<i>23.4</i>	Amperes
<i>81</i>	lights each of	<i>20</i>	candle power requiring a total current of	<i>18.4</i>	Amperes
<i>49</i>	lights each of	<i>20</i>	candle power requiring a total current of	<i>11.1</i>	Amperes
<i>Search-light</i>	lights each of		candle power requiring a total current of	<i>35</i>	Amperes
<i>13</i>	lights each of	<i>20</i>	candle power requiring a total current of	<i>2.9</i>	Amperes
<i>1</i>	Mast head light with	<i>2</i> lamps each of <i>8</i>	candle power requiring a total current of		Amperes
<i>2</i>	Side light with	<i>2</i> lamps each of <i>8</i>	candle power requiring a total current of		Amperes
Cargo lights of			candle power, whether incandescent or arc lights		

Are lights, what protection is provided against fire, sparks, &c. *Search light in Metal case.*

Where are the switches controlling the masthead and side lights placed *Pilot house.*

## DESCRIPTION OF CABLES.

Main cable carrying *113.8* Amperes, comprised of *19* wires, each *.0087* S.W.G. diameter, *.1662* square inches total sectional area  
 Each cables carrying *23.4* Amperes, comprised of *19* wires, each *.0087* S.W.G. diameter, *.1662* square inches total sectional area  
 Each cables carrying *18.4* Amperes, comprised of *7* wires, each *.0037* S.W.G. diameter, *.0259* square inches total sectional area  
 Cables to lamps carrying *0.2* Amperes, comprised of *1* wires, each *.0032* S.W.G. diameter, *.0032* square inches total sectional area  
 No light cables carrying *0.8* Amperes, comprised of *37* wires, each *.00087* S.W.G. diameter, *.0032* square inches total sectional area

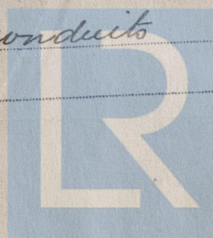
## DESCRIPTION OF INSULATION, PROTECTION, ETC.

*Copper conductors tinned. 3/64" rubber wall and covered with double braid, run in enameled and galvanized steel conduits*

How are joints in cables, how made, insulated, and protected *Joints in cables made in junction boxes with junction box fittings and brass screws. These joints are spliced they are soldered covered with rubber and linen tapes and shellaced*

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 *Through galvanized steel conduits*



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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 *Cables run through galvanized steel conduits*

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

What special protection has been provided for the cables near boiler casings *Galvanized steel conduits*

What special protection has been provided for the cables in engine room *Galvanized steel conduits*

How are cables carried through beams *Galvanized steel conduits* through bulkheads, &c. *Galvanized steel conduits*

How are cables carried through decks *Galvanized steel conduits*

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 *Galvanized steel conduits*

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 *In composition boxes. Lamps guarded with wire cages*

Where are the main switches and fuses for these lights fitted *Engine room and upper deck panels*

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 *yes*

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 *yes*

Are any switches, fuses, or joints of cables fitted in the pump room or companion *no*

How are the lamps specially protected in places liable to the accumulation of vapour or gas *Vapour proof globes*

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.

BETHLEHEM SHIPBUILDING CORP., LTD.

SPARROWS POINT PLANT

ASS'T GENERAL MANAGER

Electrical Engineers

Date

COMPASSES.

Distance between dynamo or electric motors and standard compass

275 feet

Distance between dynamo or electric motors and steering compass

270 feet

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
30	8	8	8
0.1	0.5	0.5	0.5
0.5	10	8	8

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

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

*nil* degrees on course in the case of the steering compass.

BETHLEHEM SHIPBUILDING CORP., LTD.

SPARROWS POINT PLANT

ASS'T GENERAL MANAGER

Builder's Signature.

Date

GENERAL REMARKS.

*Installation tested under varying loads and found to work in satisfactory manner.*

It is submitted that this vessel is eligible for

THE RECORD Elec. light.

*W.D. 27/18*

*John M. Sheuff*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

*Elec. Light*

New York JUN 4 1918