

# REPORT ON ELECTRIC LIGHTING INSTALLATION, No. 2814

Port of Philadelphia Date of First Survey 14 Feb 1918 Date of Last Survey 29<sup>th</sup> March 1918 No. of Visits 7  
 No. in Reg. Book on the Iron or Steel S.S. Jewalls Point Port belonging to Camden  
 Built at Camden - N.J. U.S.A. By whom New York Shipbuilding Corp When built 1918  
 Owners Emergency Fleet Corporation Owners' Address Washington D.C.  
 Yard No. 184 Electric Light Installation fitted by New York Shipbuilding Corp. When fitted 1918

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

Two (2) 12 1/2 K.W. - 110 Volt - Generators - Direct Connected to Vertical Marine Engines built by General Electric Co. - Schenectady - N.Y. U.S.A.

Capacity of Dynamo 113.6 Amperes at 110 Volts, whether continuous or alternating current Continuous

Where is Dynamo fixed Engine Room Plat - 5<sup>th</sup>bd. Whether single or double wire system is used Double

Position of Main Switch Board Engine Room Plat - 5<sup>th</sup>bd. having switches to groups of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each

"A" - Main Deck - amid passage (6) - "B" - Bridge Deck - amid passage - 5<sup>th</sup>bd - (6)

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

Are the fuses of non-oxidizable metal Yes 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

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

Total number of lights provided for 197 arranged in the following groups :-

A	44	lights each of	40 Watt	candle power requiring a total current of	16.28	Amperes
B	65	lights each of	40 Watt	candle power requiring a total current of	24.05	Amperes
C	51	lights each of	40 Watt	candle power requiring a total current of	18.87	Amperes
D	13	lights each of	40 Watt	candle power requiring a total current of	4.81	Amperes
E	13	lights each of	40 Watt	candle power requiring a total current of	4.81	Amperes
	11 1/4	lights each of	40 Watt	candle power requiring a total current of	4.07	Amperes
	1	Mast head light with 2 lamps each of	16	candle power requiring a total current of	1	Amperes
	1	Side light with 2 lamps each of	16	candle power requiring a total current of	1	Amperes
	4	Cargo lights of	64	candle power, whether incandescent or arc lights	Incandescent	

If arc lights, what protection is provided against fire, sparks, &c. No arc lamps.

Where are the switches controlling the masthead and side lights placed Tell Tale Board - Pilot House

## DESCRIPTION OF CABLES.

Main cable carrying 113.6 Amperes, comprised of 7/7 wires, each .144 S.W.G. diameter, .1141 square inches total sectional area  
 Branch cables carrying 35 Amperes, comprised of 7/14 wires, each .064 S.W.G. diameter, .0224 square inches total sectional area  
 Branch cables carrying 24.05 Amperes, comprised of 7/18 wires, each .040 S.W.G. diameter, .0091 square inches total sectional area  
 Leads to lamps carrying .5 Amperes, comprised of 7/22 wires, each .025 S.W.G. diameter, .0035 square inches total sectional area  
 Cargo light cables carrying 2 Amperes, comprised of 7/22 wires, each .025 S.W.G. diameter, .0035 square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

Leaded + Armored Cable throughout.

Joints in cables, how made, insulated, and protected Good Mechanical joint, soldered, taped and painted with insulating compound.

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 Leaded + Armored Cable.



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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 Leaded + Armored Cable.

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat Leaded + Armored Cable

What special protection has been provided for the cables near boiler casings Leaded + Armored Cable

What special protection has been provided for the cables in engine room Leaded + Armored Cable

How are cables carried through beams Lead Bushings through bulkheads, &c. Stuffing Tubes

How are cables carried through decks In conduits

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 Leaded + Armored Cable

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

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

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.

Arthur Parker Electrical Engineers Date 1<sup>st</sup> April 1918

COMPASSES.

Distance between dynamo or electric motor's and standard compass Approx - 175'

Distance between dynamo or electric motor's and steering compass Approx - 150'

The nearest cables to the compasses are as follows:—

A cable carrying <u>.5</u>	Amperes <u>3</u>	feet from standard compass <u>3</u>	feet from steering compass <u>3</u>
A cable carrying	Amperes	feet from standard compass	feet from steering compass
A cable carrying	Amperes	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

The maximum deviation due to electric currents, etc., was found to be nil degrees on all course in the case of the standard compass and nil degrees on all course in the case of the steering compass.

H. Hamagawa Builder's Signature. Date 1<sup>st</sup> April 1918

GENERAL REMARKS.

This installation has been well fitted, and proved satisfactory on trial

It is submitted that this vessel is eligible for THE RECORD. Elec. light. JUD 27/5/18.

A. T. Thomas  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute Elec. Light New York APR 30 1918

15c. 114—Transfer.

WRITTEN 21-5-18



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