

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 3042

Port of Philadelphia Date of First Survey 16th Aug 1918 Date of Last Survey 29th Nov 1918 No. of Visits 14
 No. in Reg. Book on the Iron or Steel S. S. "P. L. Doherty Third" Port belonging to CAMDEN N. J.
 Built at Camden, N. J. U.S.A. By whom New York Ship Corp. When built 1918
 Owners Emerg. Fleet Corp. Owners' Address Philadelphia Pa.
 Yard No. 190 Electric Light Installation fitted by New York Ship Corp. When fitted 1918

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Two (2) 20KW-110 Volt Generators, Direct Connected To Vertical Marine Engines. Built by General Electric Co. Schenectady, N.Y. U.S.A.

Capacity of Dynamo 182 Amperes at 110 Volts, whether continuous or alternating current Continuous

Where is Dynamo fixed Eng. Rm. Gallery Aft Whether single or double wire system is used Double

Position of Main Switch Board Eng. Rm. Gallery Aft. having switches to groups B of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each "A" Eng. Rm. (8) - "A" Fire Rm. (6)

B - Ford. Hold & Peak (8) B' - Amid. Deck House (19) C - Quarters under Poop (8)
C' - Quarters Port (8) D - Quarters Stbd. (8)

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 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 250 arranged in the following groups:—

A	39	lights each of	40 Watt	candle power requiring a total current of	12.58	Amperes
A'	19	lights each of	40 "	candle power requiring a total current of	7.03	"
B	29	lights each of	40 "	candle power requiring a total current of	8.88	Amperes
B'	79	lights each of	40 "	candle power requiring a total current of	29.23	"
C	22	lights each of	40 "	candle power requiring a total current of	15.59	Amperes
C'	16	lights each of	40 "	candle power requiring a total current of	5.92	"
D	29	lights each of	40 "	candle power requiring a total current of	8.88	Amperes
E	Searchlight	lights each of		candle power requiring a total current of	35	Amperes
1	Mast head light with	2 lamps each of	16	candle power requiring a total current of	1	Amperes
2	Side light with	2 lamps each of	16	candle power requiring a total current of	2	Amperes
6	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 Lights

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

DESCRIPTION OF CABLES.

Main cable carrying 182 Amperes, comprised of 19/8 wires, each .128 S.W.G. diameter, .2451 square inches total sectional area
 Branch cables carrying 35 Amperes, comprised of 7/19 wires, each .069 S.W.G. diameter, .0229 square inches total sectional area
 Branch cables carrying 29.23 Amperes, comprised of 7/16 wires, each .051 S.W.G. diameter, .0140 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.

Lead & Armored Cable Throughout

Joints in cables, how made, insulated, and protected Good Mech. 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 Lead & 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 Lead & Armored Cable

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

What special protection has been provided for the cables near boiler casings Lead & Armored Cable

What special protection has been provided for the cables in engine room Lead & Armored Cable

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

How are cables carried through decks In Conduit

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

If so, how are they protected ✓

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 ✓

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 on 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 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 Oiltight Fixtures

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.

A. Parkers

Electrical Engineers

Date 21 Sept 18

COMPASSES.

Distance between dynamo or electric motors and standard compass Approx. 200'

Distance between dynamo or electric motors and steering compass Approx. 175'

The nearest cables to the compasses are as follows:—

A cable carrying .5 Amperes 3 feet from standard compass 3 feet from steering compass

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. Magoun

Builder's Signature.

Date 21 Sept 18

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

J. W. D. 3/4/19.

A. T. Thomas.

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Elec. Lt.