

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 2850

Port of San Francisco Date of First Survey June 25 Date of Last Survey Aug 30 No. of Visits 8  
 No. in on the ~~Iron~~ Steel U.S. Governor John Lewis Port belonging to San Francisco  
 Reg. Book Built at Oakland Cal. By whom Horton O. D + Ship Co When built 1918  
 Owners United States Shipping Board Owners' Address \_\_\_\_\_  
 Yard No. 76 Electric Light Installation fitted by Re-Page W. Thiny Co. When fitted 1918

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

2-10-K.W. General Electric generators direct connected to reciprocating engines

Capacity of Dynamo 90 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 Near Dynamo having switches to groups 4 of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each Engine room (3) Forecastle (2)

After Quarters (4) Midships (4)

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 10 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 220 arranged in the following groups:—

A	<u>125</u>	lights each of	<u>40</u>	candle power requiring a total current of	<u>25</u>	Amperes
B	<u>31</u>	lights each of	<u>20</u>	candle power requiring a total current of	<u>6.2</u>	Amperes
C	<u>23</u>	lights each of	<u>20</u>	candle power requiring a total current of	<u>7.5</u>	Amperes
D	<u>33</u>	lights each of	<u>32</u>	candle power requiring a total current of	<u>10.8</u>	Amperes
E		lights each of		candle power requiring a total current of		Amperes
<u>2</u>	Mast head light with	/	lamps each of	<u>12</u>	candle power requiring a total current of	<u>2</u>
<u>2</u>	Side light with	/	lamps each of	<u>12</u>	candle power requiring a total current of	<u>2</u>
<u>8</u>	Cargo lights of		<u>80</u>	candle power, whether incandescent or arc lights	<u>incandescent</u>	

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

Where are the switches controlling the masthead and side lights placed

Pilot House

## DESCRIPTION OF CABLES.

Main cable carrying	<u>90</u>	Amperes, comprised of	<u>19</u>	wires, each	S.W.G. diameter, <u>.067</u>	square inches total sectional area
Branch cables carrying	<u>25</u>	Amperes, comprised of	<u>7</u>	wires, each	S.W.G. diameter, <u>.017</u>	square inches total sectional area
Branch cables carrying	<u>20</u>	Amperes, comprised of	<u>1</u>	wires, each	S.W.G. diameter, <u>.057</u>	square inches total sectional area
Leads to lamps carrying	<u>5</u>	Amperes, comprised of	<u>1</u>	wires, each	S.W.G. diameter, <u>.032</u>	square inches total sectional area
Cargo light cables carrying	<u>3</u>	Amperes, comprised of	<u>1</u>	wires, each	S.W.G. diameter, <u>.032</u>	square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

Rubber covered double lead

Joints in cables, how made, insulated, and protected

soldered Rubber covered Hraction Tape

Painted

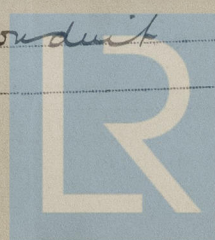
Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances yes Are all joints in accessible positions, none being made in bunkers, cargo spaces, or spaces which may at any time be used for carrying cargo, stores, or baggage yes

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

conduit



© 2020

Lloyd's Register  
 Foundation

005961-005980-0032



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 *conduit*

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

What special protection has been provided for the cables near boiler casings *conduit*

What special protection has been provided for the cables in engine room *conduit*

How are cables carried through beams *conduit* through bulkheads, &c. *conduit*

How are cables carried through decks

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 *conduit*

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 *british*

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.

*The Page McKenny Co. C. B. Kenney* Electrical Engineers Date *Oct 3-1918*

COMPASSES.

Distance between dynamo or electric motors and standard compass *100 feet*

Distance between dynamo or electric motors and steering compass *25 feet*

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<i>25</i>	<i>10</i>	<i>10</i>	<i>10</i>
<i>1</i>	<i>13</i>	<i>13</i>	<i>13</i>

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

*H. J. Young, Mgr.* Builder's Signature. Date *3/10/18*

GENERAL REMARKS. *This installation has been fitted in accordance with the Rule Requirements tested under working condition and found in order and the vessel is eligible in my opinion to have a notation of Electric Light in the Register Book.*

*L. J. Ansell*  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute *Elec. Lt* New York OCT 10 1918

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.