

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 111670

Port of *Glasgow* Date of First Survey _____ Date of Last Survey _____ No. of Visits _____
 No. in on the Iron or Steel *SS. La Plata* Port belonging to _____
 Reg. Book *36* Built at *Glasgow* By whom *R. Napier & Sons (Lm)* When built *1896*
 Owners *Royal Mail S.P.C.* Owners Address _____
 Yard No. *449* Electric Light Installation fitted by *James Compton & Co* When fitted _____

DESCRIPTION OF DYNAMO, ENGINE, ETC.

State whether single or double wire system
 Dynamo built by *Compton & Co.* Compound wound
 Engine by *Bell & Co.* single stroke open type fly wheel governor
 Capacity of Dynamo *150* Amperes at *110* Volts, whether continuous or alternating current *Continuous*
 Where is Dynamo fixed *in Engine Room*
 Position of Main Switch Board *in Eng Room near Dynamo* having switches to groups _____ of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each *all in positions easily accessible but in lead locked boxes.*

If cut outs are fitted on main switch board to the cables of main circuit *yes* and on each auxiliary switch boards 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 cut outs fitted to both flow and return wires or cables of all circuits including lamp circuits *single wires*

Are the cut outs of non-oxidizable metal *yes* and constructed to fuse at an excess of *50* per cent over the normal current

Are all cut outs 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 cut-outs constructed of incombustible materials and fitted on incombustible bases *yes*

Total number of lights provided for *217* arranged in the following groups:—

A	30	lights each of	16	candle power requiring a total current of	16	Amperes
B	25	lights each of	16	candle power requiring a total current of	13	Amperes
C	31	lights each of	16	candle power requiring a total current of	16 1/2	Amperes
D	24	lights each of	16	candle power requiring a total current of	12 1/2	Amperes
E	27	lights each of	16	candle power requiring a total current of	15	Amperes
<i>5. 28 lights 16 amp. 9. 25 lights 14 amp. 4. 26 lights 14 amp.</i> Mast head light with <i>16 1/2</i> lamps each of <i>16 1/2</i> candle power requiring a total current of _____ Amperes Side light with _____ lamps each of _____ candle power requiring a total current of _____ Amperes						

Five Cargo lights of *8-16 1/2* candle power, whether incandescent or arc lights *d.c.*

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

Where are the switches controlling the masthead and side lights placed *no mast head light*

DESCRIPTION OF CABLES.

Main cable carrying *118* Amperes, comprised of *19* wires, each *12* L.S.G. diameter, *.164* square inches total sectional area
 Branch cables carrying *16.5* Amperes, comprised of *7* wires, each *15* L.S.G. diameter, *.029* square inches total sectional area
 Branch cables carrying _____ Amperes, comprised of _____ wires, each _____ L.S.G. diameter, _____ square inches total sectional area
 Leads to lamps carrying *55* Amperes, comprised of *1* wires, each *18* L.S.G. diameter, *.0018* square inches total sectional area
 Cargo light cables carrying *44* Amperes, comprised of *7* wires, each *22* L.S.G. diameter, *.0043* square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

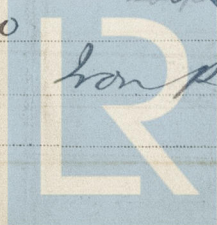
Mains & unbranched lead covered *1000 megohm insulation*
 Branches _____ " _____ " _____ "
 " in Eng Room *vulcanized lead* *1000* " _____ "
 Joints in cables, how made, insulated, and protected *no joints*

Are all the joints of cables thoroughly soldered, resin only having been used as a flux *no joints* 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 *Lamps in two Decks*

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 *wood casing* *iron pipes in*

Engine Dept.



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14620 lbs.

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 *none exposed*
What special protection has been provided for the cables near galleys or oil lamps or other sources of heat *Wood Casings*
What special protection has been provided for the cables near boiler casings *Iron pipes*
What special protection has been provided for the cables in engine room *do*
How are cables carried through beams *Wood plugs* through bulkheads, &c. *—*
How are cables carried through decks *Deck tubes*
Are any cables run through coal bunkers *No* or cargo spaces *No* or spaces which may be used for carrying cargo, stores, or baggage *between Deck*
If so, how are they protected *Wood Casings*
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 *Wood Casings. Lamps guarded fittings*
Where are the main switches and cut outs for these lights fitted *In distributing Boxes*
If in the spaces, how are they specially protected *—*
Are any switches or cut outs fitted in bunkers *No*
Cargo light cables, whether portable or permanently fixed *Portable* How fixed *by plugs*
In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel *By gun metal Bolt to Bulk*
How are the returns from the lamps connected to the hull *Gun metal Screws*
Are all the joints with the hull in accessible positions *Yes*

VESSELS BUILT FOR CARRYING PETROLEUM.

In vessels built for carrying petroleum, are all switches and cut-outs fitted in positions not liable to the accumulation of petroleum vapour or gas
Are any switches, cut outs, 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 installation is *7* supplied with a voltmeter *Yes also an* amperemeter, fixed *in Engine Room*

The copper used is guaranteed to have a conductivity of *98* per cent. that of pure copper.
Insulation of cables is guaranteed to have a resistance of not less than *1000* megohms
statute mile after 24 hours' immersion in seawater.

The foregoing statements are a correct description of the Electric Light installation fitted by us on this vessel and we certify that it is at this date in good order and safe working condition.

COMPASSES.

Distance between dynamo or electric motors and standard compass *100'-0"*
Distance between dynamo or electric motors and steering compass *109'-0"*

The nearest cables to the compasses are as follows:—

A cable carrying <i>13</i> Amperes <i>24</i> feet from standard compass	feet from steering compass
A cable carrying <i>13</i> Amperes <i>40</i> 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

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

R. NAPIER & SONS, Limited.

C. F. Jones Builder's Signature Date *24 Aug 1896*

GENERAL REMARKS.

This installation has been fitted on board and appears to be in accordance with the Rules of this Society
A. McKeand
Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

This installation appears to be in accordance with the Rules

2.9.96