

REPORT ON ELECTRIC LIGHTING INSTALLATION.

No. 21805

Port of Glasgow Date of First Survey 7th Dec^r Date of Last Survey 24th May No. of Visits 12
 No. in Reg. Book 110 on the Iron or Steel Yacht Juan O'Leary Port belonging to Glasgow
 Built at Glasgow By whom Parfild & Co When built 1902
 Owners W & Coats Esq Owners' Address Glasgow
 Yard No. 403 Electric Light Installation fitted by David Hamilton & Co When fitted 1902

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Direct coupled Dynamo & Engine

Capacity of Dynamo 138 Amperes at 65 Volts, whether continuous or alternating current
 Where is Dynamo fixed Engine Room
 Position of Main Switch Board Engine R having switches to groups Six of lights, &c., as below
 Posit' auxiliary switch boards and numbers of switches each None.

If cut outs 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 cut outs fitted to both flow and return wires or cables of all circuits including lamp circuits Yes
 Are the cut outs of non-oxidizable metal Yes and constructed to fuse at an excess of fifty 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 213. arranged in the following groups:—

A	<u>Engine Room</u> lights each of <u>16</u>	candle power requiring a total current of <u>21</u>	Amperes
B	<u>Officers Quarters</u> lights each of <u>8 + 16</u>	candle power requiring a total current of <u>15</u>	Amperes
C	<u>1st Cabins</u> lights each of <u>8 + 16</u>	candle power requiring a total current of <u>24</u>	Amperes
D	<u>Public Rooms</u> lights each of <u>8 + 16</u>	candle power requiring a total current of <u>22</u>	Amperes
E	<u>Owner's Quarters</u> lights each of <u>8 + 16</u>	candle power requiring a total current of <u>20</u>	Amperes
	<u>2</u> Mast head light with <u>2</u> lamps each of <u>32</u>	candle power requiring a total current of <u>4</u>	Amperes
	<u>2</u> Side light with <u>2</u> lamps each of <u>32</u>	candle power requiring a total current of <u>4</u>	Amperes
	<u>—</u> Cargo lights of <u>—</u>	candle power, whether incandescent or arc lights <u>—</u>	

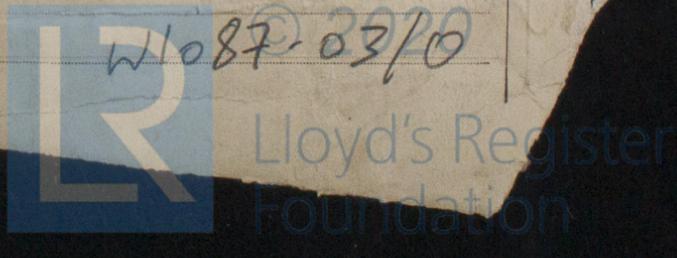
If are lights, what protection is provided against fire, sparks, &c. —
 Where are the switches controlling the masthead and side lights placed Chart Room

DESCRIPTION OF CABLES.

Main cable carrying <u>110</u> Amperes, comprised of <u>37</u> wires, each <u>16</u> L.S.G. diameter, <u>.1176</u> square inches total sectional area
Branch cables carrying <u>22</u> Amperes, comprised of <u>7</u> wires, each <u>16</u> L.S.G. diameter, <u>.02227</u> square inches total sectional area
Branch cables carrying <u>34</u> Amperes, comprised of <u>7</u> wires, each <u>14</u> L.S.G. diameter, <u>.034</u> square inches total sectional area
Leads to lamps carrying <u>3</u> Amperes, comprised of <u>3</u> wires, each <u>20</u> L.S.G. diameter, <u>.003</u> square inches total sectional area
Cargo light cables carrying <u>—</u> Amperes, comprised of <u>—</u> wires, each <u>—</u> L.S.G. diameter, <u>—</u> square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Wires insulated with pure vulcanised India rubber taped, braided & compounded.
 Joints in cables, how made, insulated, and protected very few, & where made insulated with pure rubber & waterproof tape
 Are all the joints of cables thoroughly soldered, resin only having been used as a flux 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 —



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 Iron pipe

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat Teak Wood casing

What special protection has been provided for the cables near boiler casings Teak Wood casing

What special protection has been provided for the cables in engine room Teak wood casing

How are cables carried through beams Teak wood plugs through bulkheads, &c. Water-tight flanges

How are cables carried through decks deck tubes

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

If so, how are they protected Iron pipe

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 cut outs for these lights fitted

If in the spaces, how are they specially protected

Are any switches or cut outs fitted in bunkers

Cargo light cables, whether portable or permanently fixed — 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 —

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

Claude Hamilton Ltd.

Mot.

Electrical Engineers

Date 16/6/04.

COMPASSES.

Distance between dynamo or electric motors and standard compass 60 ft.

Distance between dynamo or electric motors and steering compass 60 ft.

The nearest cables to the compasses are as follows:—

A cable carrying	$\frac{7}{10}$	Amperes	12	feet from standard compass	15	feet from steering compass
A cable carrying	$\frac{7}{18}$	Amperes	12	feet from standard compass	15	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 0° degrees on N and H course in the case of the steering compass.

THE FAIRFIELD SHIPBUILDING AND ENGINEERING CO., LIMITED.

Builder's Signature. Date 1/7/04

GENERAL REMARKS.

M. J. Campbell MANAGER This installation has been fitted in accordance with the rules and satisfactorily tested under full power.

George Murdoch

Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

Glasgow 1904
Recd. 3/6/04
S.O.A.

MAY 1904



When fee is paid

MACHINERY CERTIFICATE

2-604

THE SURVEYOR