

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 1658

Port of Montreal Date of First Survey Aug 8 Date of Last Survey Sept 13 No. of Visits 6
 on the Iron or Steel Wood S.S. "War Gaspe" Port belonging to Quebec P2
 No. in Reg. Book 9917 Built at Quebec P2 By whom Quinlan & Robertson When built 1918
 Owners' Address Imperial Munitions Board Ottawa Ont When fitted 1918
 Electric Light Installation fitted by Owners

DESCRIPTION OF DYNAMO, ENGINE, ETC.

10KW. Enclosed high speed Sodie McCulloch Engine. direct connected to General Electric Company

of Dynamo 86 Amperes at 120 Volts, whether continuous or alternating current continuous

is Dynamo fixed Yes Whether single or double wire system is used single

of Main Switch Board Bottom platform in Eng Room having switches to groups six of lights, &c., as below

of auxiliary switch boards and numbers of switches on each All distribution boxes

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

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 fuses of non-oxidizable metal Yes and constructed to fuse at an excess of 50 per cent over the normal current

all fuses fitted in easily accessible positions Yes Are the fuses of standard dimensions Cartridge Fuses 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 Cartridge Fuses

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

number of lights provided for 137 arranged in the following groups :-

Navigation	5 lights each of	32	candle power requiring a total current of	5.5	Amperes
Accommodation	40			22.0	
"	24 lights each of	32	candle power requiring a total current of	13.0	Amperes
Cargo	36 lights each of	16	candle power requiring a total current of	11.0	Amperes
Wireless	lights each of	✓	candle power requiring a total current of	12.0	Amperes
Machinery	38 lights each of	16	candle power requiring a total current of	16.5	Amperes
1 Mast head light with	2 lamps each of 1-2cp 1-32cp		candle power requiring a total current of	1.5	Amperes
2 Side light with	2 lamps each of 1-2cp 1-32		candle power requiring a total current of	3.0	Amperes
6 Cargo lights of	6 lamp	16	candle power, whether incandescent or arc lights	incandescent	

are lights, what protection is provided against fire, sparks, &c. ✓

are the switches controlling the masthead and side lights placed In wheel house

DESCRIPTION OF CABLES.

main cable carrying	83 Amperes, comprised of	19 wires, each	74.5 MILLS S.W.G. diameter,	105,500 CIRC MILLS square inches	total sectional area
each cables carrying	22 Amperes, comprised of	7 wires, each	48.6 S.W.G. diameter,	16510 square inches	total sectional area
each cables carrying	12 Amperes, comprised of	7 wires, each	38.5 S.W.G. diameter,	10380 square inches	total sectional area
lights to lamps carrying	3 Amperes, comprised of	7 wires, each	24.2 S.W.G. diameter,	4107 square inches	total sectional area
each light cables carrying	3 Amperes, comprised of	61 wires, each	1010 S.W.G. diameter,	6350 square inches	total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

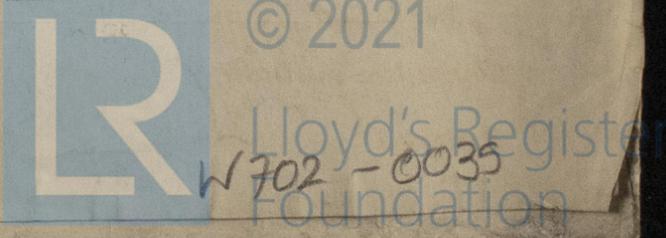
insulation of 30% Para rubber, taped, two braids and compounded. Drawn into Shearolised conduit.
Cast Iron W.T. Junction boxes

are the cables, how made, insulated, and protected Extension box system employing Potcelain extension blocks in W.T. boxes.

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 bunks, 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 All in steel conduit.



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 *All steel conduit.*

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

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

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

How are cables carried through beams through bulkheads, &c. *W.T. glands*

How are cables carried through decks *W.T. 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 *Peep*

If so, how are they protected *All in steel conduit.*

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 *Filled between beams Heavy cast fittings and guards.*

Where are the main switches and fuses for these lights fitted *Peep deck alleyway.*

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 *Plug & switch in W.T. box*

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 *Main switch*

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.

John S. Sadleir for Imperial Maritime & Electrical Engineers Date _____

COMPASSES.

Distance between dynamo or electric motors and standard compass *Eighty six feet*

Distance between dynamo or electric motors and steering compass *Eighty feet.*

The nearest cables to the compasses are as follows:—

A cable carrying	<i>5.5</i> Amperes	<i>10</i> feet from standard compass	<i>9</i> 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 _____

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.

Leunlay & Robertson Leim Builder's Signature. Date *Nov 15/18*

GENERAL REMARKS.

This installation has been duly fitted on board the vessel and tried under full working conditions with satisfactory results. The materials used and the workmen are good. It is submitted that this vessel is eligible for THE RECORD. ELEC. LIGHT

W.D. 5K *W. J. Alderson*
10/4/19 Surveyor to Lloyd's Register of Shipping.

Committee's Minute _____

FRI. APR. 11. 1919

FRI. 22. AUG. 1919

TUE. MAR. 2. 1920

TUE. NOV. 25. 1919

TUE. 16 DEC. 1919



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Certificate (if required) to be sent to

Im. & Reg. - Transfer.