

Dec. 2, 1916

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 1060

Port of NEWPORT NEWS Date of First Survey NOV 13th Date of Last Survey NOV 28th 1916 No. of Visits 6
 No. in Reg. Book on the Iron Steel S.S. "WILLIAM A. MCKENNEY" Port belonging to BOSTON
 Built at NEWPORT NEWS VA By whom NEWPORT NEWS S + I I Co When built 1916
 Owners CROWELL + THURLOW S.S. Co Owners' Address BOSTON
 Yard No. 198 Electric Light Installation fitted by NEWPORT NEWS S + I I Co When fitted 1916

DESCRIPTION OF DYNAMO, ENGINE, ETC.

15 K.W. GENERAL ELECTRIC Co: MARINE TYPE DIRECT CONNECTED
TO 8" X 6" VERTICAL ENGINE

Capacity of Dynamo 136 Amperes at 110 Volts, whether continuous or alternating current CONTINUOUS
 Where is Dynamo fixed ENG. STARTING PLATFORM Whether single or double wire system is used DOUBLE

Position of Main Switch Board NEAR DYNAMO having switches to groups 6 of lights, g'c., as below

Positions of auxiliary switch boards and numbers of switches on each QUARTERS: - 4 - BRIDGE: - 6 GALLEY: - 6

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-oxidisable 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 STANDARD.

Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases YES.

Total number of lights provided for 152 arranged in the following groups: -

Group	Number of Lights	Wattage per Light	Total Current (Amperes)
A	56	"MAZDA" 20	16.8
B	50	" 20	15.0
C	13	" 20	3.9
D	12	" 20	3.6
E	9	" 20	2.7
1	2	Must head light with 2 lamps each of 32	2
2	1	Side light with 1 lamp each of 32	2
6	64	Cargo lights of 64	2

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

Where are the switches controlling the masthead and side lights placed PILOT HOUSE

DESCRIPTION OF CABLES.

Description	Amperes	Wires	W.G. Diameter	Total Sectional Area (sq. inches)
Main cable carrying	136	37	#14	.182
Branch cables carrying	16.8	7	#16	.022
Branch cables carrying	15.0	7	#18	.0125
Branch cables carrying	3.9	7	#19	.0086
Leads to lamps carrying	3.6	3	#18	.0053
Leads to lamps carrying	2.7	7	#19	.0086
Cargo light cables carrying	2	1	#16	.0032
Cargo light cables carrying	2	1	#16	.0032

DESCRIPTION OF INSULATION, PROTECTION, ETC.

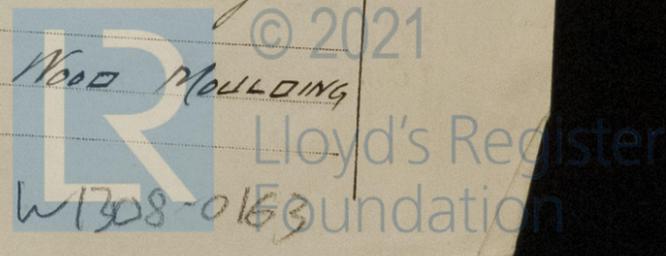
RUBBER TAPE, BRAID, IN IRON CONDUIT. FLEXIBLE HOVE
TUBING & WOOD Moulding IN CABINS

Joints in cables, how made, insulated, and protected SOLDERED; RUBBER TAPE, BRAID
IN IRON JUNCTION 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 IRON CONDUIT
BRIDGE QUARTERS



DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible No

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture IRON CONDUIT

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

What special protection has been provided for the cables near boiler casings IRON CONDUIT

What special protection has been provided for the cables in engine room IRON CONDUIT

How are cables carried through beams IRON CONDUIT through bulkheads, &c. STUFFING BOXES

How are cables carried through decks W.T. STUFFING BOXES

Are any cables run through coal bunkers YES or cargo spaces YES or spaces which may be used for carrying cargo, stores, or baggage YES

If so, how are they protected IRON 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 W.T. GLOBES; IRON CAGES; BARS AROUND BEAMS

Where are the main switches and fuses for these lights fitted MAIN SWITCHBOARD

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 ✓

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 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 ✓

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.

By D. L. Hood Electrical Engineers Date Dec 1, 1916

COMPASSES.

Distance between dynamo or electric motors and standard compass 120 ft

Distance between dynamo or electric motors and steering compass 116 ft

The nearest cables to the compasses are as follows:—

A cable carrying	<u>3</u>	Ampere	<u>6</u>	feet from standard compass	<u>4</u>	feet from steering compass
A cable carrying	<u>1</u>	Ampere	<u>10</u>	feet from standard compass	<u>8</u>	feet from steering compass
A cable carrying		Ampere		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 the standard compass and _____ degrees on _____ course in the case of the steering compass.

By D. L. Hood Builder's Signature. Date Dec 1, 1916

GENERAL REMARKS.

The installation has been fitted in accordance with the Rule requirements; the workmanship and protection all good — The vessel is eligible, in my opinion, to have the record "ELECTRIC LIGHT"

Elec. light. JWD 10/1/17
THE RECORD "ELECTRIC LIGHT"
John H. Marsden
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute New York DEC 7 1916

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



ms
 Im. 9.12. Transfer