

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 3134

Port of Baltimore Md Date of First Survey 22nd February Date of Last Survey 17th March No. of Visits 10
 No. in on the Iron or Steel Steamer Aladdin Port belonging to New York
 Reg. Book Built at Sparrows pt Md By whom Bethlehem St. Corp. When built 1920
 Owners Standard Transportation Co Owners' Address New York When fitted 1920
 Yard No. 41207 Electric Light Installation fitted by Bethlehem St. Corp.

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Two General Electric Co generators direct connected to vertical single acting engines 9x7
400 R.P.M. Generator compound wound 20 K.W.

Capacity of Dynamo 182 Amperes at 110 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Dynamo flat Engine room Whether single or double wire system is used Double
 Position of Main Switch Board adjacent to dynamo having switches to groups A1.2.3, B1.2.6.1.2 D.E of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each Bridge Deck 1-10 cir. panel. Forecastle 1-4 cir. panel
upper engine room 1-8 cir. panel. Companionway to pump room 1-14 cir. panel
 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 200 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 arranged in the following groups:—
 A 3 lights each of 21 candle power requiring a total current of 3.22 Amperes
Eng. room 14
 B 2 lights each of 21 candle power requiring a total current of 20.47 Amperes
Quarters aft. 89
 C 2 lights each of 21 candle power requiring a total current of 3.45 Amperes
Boiler Room 15
 D Search light lights each of 18" Light candle power requiring a total current of 33 Amperes
 E Workshop lights each of candle power requiring a total current of 49.7 Amperes
2 Mast head light with 2 lamps each of 40 candle power requiring a total current of 1.8 Amperes
2 Side light with 2 lamps each of 40 candle power requiring a total current of 1.8 Amperes
3 Cargo lights of 6 lamps @ 40 candle power, whether incandescent or arc lights Incandescent

If arc lights, what protection is provided against fire, sparks, &c. no arc lights used

Where are the switches controlling the masthead and side lights placed Pilot house

DESCRIPTION OF CABLES.

Main cable carrying 130 Amperes, comprised of 61 wires, each # 16 S.W.G. diameter, .1932 square inches total sectional area
 Branch cables carrying 18.86 Amperes, comprised of 37 wires, each 19 S.W.G. diameter, .047 square inches total sectional area
 Branch cables carrying 20.47 Amperes, comprised of 7 wires, each 17 S.W.G. diameter, .014 square inches total sectional area
 Leads to lamps carrying 45 Amperes, comprised of 7 wires, each 22 S.W.G. diameter, .0042 square inches total sectional area
 Cargo light cables carrying 2.7 Amperes, comprised of 17 wires, each 28 S.W.G. diameter, .002 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Navy Standard cable throughout. The wires are stranded rubber covered, taped with insulating tape shaped by jute filler. Taped + covered with a heavy cotton braid impregnated

Joints in cables, how made, insulated, and protected All joints in cables made with an approved type of splice soldered taped with rubber + friction tape then Shellaced

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 Cables are led through ship and protected in rigid conduit



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DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible *Pull boxes and junction boxes in Conduit: all in accessible places*

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture *run in rigid conduit making a Watertight & Steam tight installation*

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

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

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

How are cables carried through beams *In Conduit* through bulkheads, &c. *In Conduit lock nuts but side*

How are cables carried through decks *Conduit with Stuffing box & lock nuts*

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 *Cables are run in rigid 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 *By metal guards*

Where are the main switches and fuses for these lights fitted *Main Switch board*

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 *Main Switch board*

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 *yes*

Are any switches, fuses, or joints of cables fitted in the pump room or companion *no*

How are the lamps specially protected in places liable to the accumulation of vapour or gas *Gas light fixtures*

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 *200* 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.

Electrical Engineers Date

COMPASSES.

Distance between dynamo or electric motors and standard compass *about 250*

Distance between dynamo or electric motors and steering compass *" 255*

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	feet from steering compass
<i>.5</i>	<i>2</i>	<i>2'</i>	
<i>1.5</i>	<i>12</i>	<i>14'</i>	

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.

R. Campbell Builder's Signature. Date

GENERAL REMARKS.

Installation has been fitted in an efficient manner tried under varying loads and found to work in a satisfactory manner

It is submitted that this vessel is eligible for

THE RECORD. Elec Light

Recd 19/4/21

L. Nosworthy

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

New York MAR 29 1921



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