

Rpt. 13.

Received at London Office

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 54

Port of Pensacola Fla Date of First Survey Feb 5th 1920 Date of Last Survey June No. of Visits 15
 No. in Reg. Book 78091 Sub on the Iron Steel City of Havana Port belonging to Pensacola
 Built at Pensacola Fla By whom Pensacola Shipbuilding Co. When built 1920
 Owners United States Shipping Board Owners' Address _____
 Yard No. 941 Electric Light Installation fitted by Pensacola Shipbuilding Co. When fitted 1920

DESCRIPTION OF DYNAMO, ENGINE, ETC.

Two sets by General Electric Co enclosed type (single engines)
 Capacity of Dynamo 150 Amperes at 110 Volts, whether continuous or alternating current Continuous
 Where is Dynamo fixed Upper deck platform Whether single or double wire system is used Double
 Position of Main Switch Board to having switches to groups fifteen of lights, &c., as below
 Positions of auxiliary switch boards and numbers of switches on each Midway: Search light, Saloon, navigation lights, Prop, After Cargo, Engine room, Engineers Quarters, Petty Officers Quarters, Tunnel, Engine room (Port), Boiler room, Gauge Glass, Forward Cargo, Machine Shop
 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 50 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 Yes
 Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases Yes
 Total number of lights provided for 243 arranged in the following groups:—
 A Searchlight lights each of 8000 candle power requiring a total current of 35 Amperes
 B Eng. & Wh. Space 119 lights each of 16 candle power requiring a total current of 29.5 Amperes
 C Midship Accom. 30 lights each of 16 candle power requiring a total current of 7.5 Amperes
 D Bridge Accom. 75 lights each of 16 candle power requiring a total current of 16 Amperes
 E After Accom. 29 lights each of 16 candle power requiring a total current of 7 Amperes
Two Mast head light with Two lamps each of 32 candle power requiring a total current of 2 Amperes
Two Side light with Two lamps each of 32 candle power requiring a total current of 2 Amperes
Twenty four Cargo lights of 16 candle power, whether incandescent or arc lights Incandescent
 If arc lights, what protection is provided against fire, sparks, &c. No Arc lamps
 Where are the switches controlling the masthead and side lights placed Pilot House

DESCRIPTION OF CABLES.

	Amperes	wires	each	CIR. MILS.	S.W.G. diameter	square inches total sectional area
Main cable carrying	150	19	7005	10452	10452	square inches total sectional area
Branch cables carrying	16	7	3750	2062	2062	square inches total sectional area
Branch cables carrying	7.5	7	2358	1297	1297	square inches total sectional area
Leads to lamps carrying	7	7	2358	1297	1297	square inches total sectional area
Cargo light cables carrying	5	19	869	1297	1297	square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Double Braid: Rubber covered, run in Steel conduits of suitable size for each circuit
 Joints in cables, how made, insulated, and protected All joints soldered and fitted in approved connecting 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 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 Steel Conduits

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 Steel Conduits

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat No

What special protection has been provided for the cables near boiler casings No

What special protection has been provided for the cables in engine room No

How are cables carried through beams Steel Conduits through bulkheads, &c. Stuffing Boxes

How are cables carried through decks No Y. Deck flanges

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 Steel Conduits

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 fuses for these lights fitted ✓

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 Watertight Bulkhead fittings

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 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 ✓

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.

J. A. Pearce Electrical Engineers Date November 20th 1920

COMPASSES.

Distance between dynamo or electric motors and standard compass 40ft 40ft

Distance between dynamo or electric motors and steering compass 40ft 40ft

The nearest cables to the compasses are as follows:—

A cable carrying <u>104</u> Amperes	<u>1'</u>	feet from standard compass	<u>1'</u>	feet from steering compass
A cable carrying <u>88</u> Amperes	<u>8'</u>	feet from standard compass	<u>14'</u>	feet from steering compass
A cable carrying <u>✓</u> Amperes	<u>✓</u>	feet from standard compass	<u>✓</u>	feet from steering compass

Have the compasses been adjusted with and without the electric installation at work at full power Not adjusted

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.

Builder's Signature Date November 20th 1920

GENERAL REMARKS.

This installation has been efficiently fitted on board and tried under steam and found satisfactory

It is submitted that this vessel is eligible for THE RECORD. Elec Light Bell W. Collins
15/12/20 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

50,118.—Transfer.

