

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 348

Port of Cleveland, O. Date of First Survey 11 Nov 1926 Date of Last Survey 31 March 27 No. of Visits 10  
 No. in Reg. Book on the Iron or Steel S/S "ROBERT HOBSON" Port belonging to Fairport  
 Built at Lorain, Ohio By whom American S. B. Co. When built 1926  
 Owners Interlake S. S. Company Owners' Address Cleveland, Ohio.  
 Yard No. 494 Electric Light Installation fitted by American S. B. Co. When fitted 1927-3.

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

Two 6 pole 15 H.P. generators direct coupled to reciprocating engs.  
One 6 pole 7.5 H.P. auxiliary generator  
 Capacity of Dynamo 130 Amperes at 115 Volts, whether continuous or alternating current D. C.  
 Where is Dynamo fixed Engine Room Whether single or double wire system is used double  
 Position of Main Switch Board having switches to groups of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each 8 - circuits auxiliary distribution panel for starb. Hall.

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 no 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 10 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  
approx.

Total number of lights provided for 270 arranged in the following groups:—

Group	Description	Lights	Watts	Candle Power	Current (Amperes)
A	Ford. cabin	72	each of 25, 40, 100	watts	21
B	Eng. room	14	each of 40 & 100	watts	38
C	After cabin	38	each of 25, 40, 100	watts	20
D					
E					
	2 Mast head light with 2 lamps each of 60		60	watts	3
	2 Side light with 2 lamps each of 60		60	watts	3
	36 Cargo lights of 100		100	watts	30

If arc lights, what protection is provided against fire, sparks, &c. none used

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

## DESCRIPTION OF CABLES.

Description	Amperes	Wires	Diameter (S.W.G.)	Area (square inches)
Main cable carrying <u>130</u> Amperes, comprised of <u>19</u> wires, each <u>12</u> S.W.G. diameter, <u>114645</u> square inches total sectional area	130	19	12	114645
Branch cables carrying <u>40</u> Amperes, comprised of <u>7</u> wires, each <u>14</u> S.W.G. diameter, <u>28749</u> square inches total sectional area	40	7	14	28749
Branch cables carrying <u>20</u> Amperes, comprised of <u>7</u> wires, each <u>18</u> S.W.G. diameter, <u>11468</u> square inches total sectional area	20	7	18	11468
Leads to lamps carrying <u>5</u> Amperes, comprised of <u>2</u> wires, each <u>14</u> S.W.G. diameter, <u>4107</u> square inches total sectional area	5	2	14	4107
Cargo light cables carrying <u>30</u> Amperes, comprised of <u>6</u> wires, each <u>12</u> S.W.G. diameter, <u>39180</u> square inches total sectional area	30	6	12	39180

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

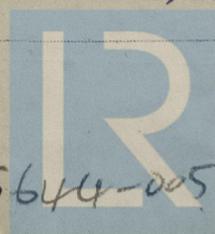
Vulcanized rubber double braided to specifications & tests of National Board of Fire Underwriters.

Joints in cables, how made, insulated, and protected soldered rubbered & taped

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 where exposed, wood moulding in cabin.



© 2020

Lloyd's Register Foundation

005644-005655-0048

**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 and special guards  
 What special protection has been provided for the cables near galleys or oil lamps or other sources of heat steel conduits  
 What special protection has been provided for the cables near boiler casings steel conduits  
 What special protection has been provided for the cables in engine room steel conduits  
 How are cables carried through beams steel conduits through bulkheads, &c. A.S. fittings  
 How are cables carried through decks A.S. fittings  
 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 conduits and A.S. fittings  
 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 guards  
 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 Permanent How fixed steel conduits  
 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.

The American Ship Bldg Co. Electrical Engineers Date \_\_\_\_\_

**COMPASSES.**

Distance between dynamo or electric motors and standard compass about 500 feet  
 Distance between dynamo or electric motors and steering compass about 500 feet  
 The nearest cables to the compasses are as follows:—  

A cable carrying	<u>25</u>	Amperes	<u>6</u>	feet from standard compass	<u>6</u>	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 the standard compass and \_\_\_\_\_ degrees on \_\_\_\_\_ course in the case of the steering compass.

Builder's Signature. Date \_\_\_\_\_

**GENERAL REMARKS.** This installation has been fitted on board the vessel in a satisfactory manner. The quality of the material and workmanship is good. It has been tried out under working conditions and found efficient.

It is submitted that this vessel is eligible for THE RECORD. Elec. Light.  
G. Drummond  
 Surveyor to Lloyd's Register of Shipping.  
17/5/27

Committee's Minute. NEW YORK APR 27 1927

Electric Light 7.9

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

50,118—Transfer.

