

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 4096

Port of Guildhall Date of First Survey 11-12-20 Date of Last Survey 10-1-21 No. of Visits 6  
 No. in Reg. Book on the Iron or Steel D.S. Camden Port belonging to New York  
 Built at CAMPDEN N.J. By whom NEW YORK SHIPBUILDING CORP. When built 1921  
 Owners UNITED FRUIT COMPANY Owners' Address 131 STATE ST., BOSTON MASS.  
 Yard No. 258 Electric Light Installation fitted by NEW YORK SHIPBUILDING CORP. When fitted 1921

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

TWO (2) 10 K.W 110 VOLT GENERATORS, DIRECT CONNECTED TO VERTICAL MARINE ENGINES BUILT BY THE GENERAL ELECTRIC COMPANY SCHNECTADY N.Y. U.S.A.

Capacity of Dynamo 30.9 Amperes at 110 Volts, whether continuous or alternating current CONTINUOUS

Where is Dynamo fixed LOWER ENG. ROOM STBD. Whether single or double wire system is used DOUBLE

Position of Main Switch Board LOWER ENG. ROOM STBD. having switches to groups NINE of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each "A" UPPER DK. PASSAGE AFT (6) "A1" PETTY OFFICERS MESS ROOM (4) "B" UPPER DK. OUTSIDE PUMP RM. (16) "B1" BRIDGE DK. PASSAGE (4) "C" UPPER DK. FORD (8) "C1" LOWER ENGINE RM. "D" UPPER ENGINE RM. "D1" FIRE ROOM. "E" RUNNING LTS. "E1" SEARCHLIGHT

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 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 Included fuses colored.

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

Total number of lights provided for 278 arranged in the following groups :-

A	59	lights each of 57-25W. 1-32 C.P. X 1-16 C.P.	candle power requiring a total current of	14.6	Amperes
A1	22	20-25W. 2-5 C.P.		4.9	
B	18	lights each of 17-25W. 1-16 C.P.	candle power requiring a total current of	4.4	Amperes
BI	55	44-25W. 5-50 C.P. 6-16 C.P.		14.2	
C	25	lights each of 20-25W. 4-16 C.P. 1-32 C.P.	candle power requiring a total current of	7.8	Amperes
CI	14	12-25W. 2-16 C.P.		3.8	
D	24	lights each of 22-25W. 2-16 C.P.	candle power requiring a total current of	6.1	Amperes
DI	22	19-25W. 3-16 C.P.		5.9	
E	6	lights each of 32 C.P.	candle power requiring a total current of	6.5	Amperes
E1	SEARCHLIGHT			35.0	
3	Mast head light with 2 lamps each of 32		candle power requiring a total current of	3.3	Amperes
2	Side light with 2 lamps each of 32		candle power requiring a total current of	2.2	Amperes
8	Cargo lights of 2-300W X 60 F 6-16 C.P. EACH		candle power, whether incandescent or are lights	INCANDESCENT	

If are lights, what protection is provided against fire, sparks, &c. NO ARC LAMPS

Where are the switches controlling the masthead and side lights placed TELL TALE PANEL IN PILOT HOUSE

## DESCRIPTION OF CABLES.

Main cable carrying 30.9 Amperes, comprised of 61/18 wires, each .040 BYS S.W.G. diameter, .0793 square inches total sectional area  
 Branch cables carrying 35.0 Amperes, comprised of 37/18 wires, each .040 BYS S.W.G. diameter, .0481 square inches total sectional area  
 Branch cables carrying 22.5 Amperes, comprised of 7/15 wires, each .057 BYS S.W.G. diameter, .0182 square inches total sectional area  
 Leads to lamps carrying .5 Amperes, comprised of 7/22 wires, each .025 BYS S.W.G. diameter, .0035 square inches total sectional area  
 Cargo light cables carrying 3.3 Amperes, comprised of 7/22 wires, each .025 BYS S.W.G. diameter, .0035 square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

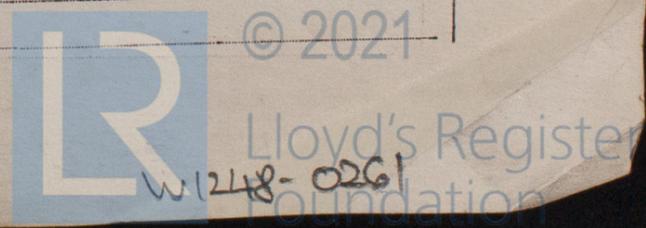
LEAD AND ARMORED CABLE THROUGHOUT.

Joints in cables, how made, insulated, and protected GOOD MECHANICAL JOINTS, WITH APPROVED CONNECTOR BLOCKS, IN WATER TIGHT BOXES PAINTED WITH INSULATING COMPOUND.

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 LEAD AND ARMORED CABLE



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 LEAD AND ARMORED CABLE

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat LEAD AND ARMORED CABLE

What special protection has been provided for the cables near boiler casings LEAD AND ARMORED CABLE

What special protection has been provided for the cables in engine room LEAD AND ARMORED CABLE

How are cables carried through beams LEAD BUSHINGS through bulkheads, &c. STUFFING TUBES

How are cables carried through decks IN CONDUIT

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 LEAD AND ARMORED CABLE

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

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 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 NO

How are the lamps specially protected in places liable to the accumulation of vapour or gas VAPOR PROOF LAMPS

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.

Arthur Parker Electrical Engineers Date 20-JAN-21

COMPASSES.

Distance between dynamo or electric motors and standard compass APPROX. 250 FT.

Distance between dynamo or electric motors and steering compass APPROX. 240 FT.

The nearest cables to the compasses are as follows:—

A cable carrying	<u>.5</u>	Ampere	<u>3</u>	feet from standard compass	feet from steering compass
A cable carrying		Ampere		feet from standard compass	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 YES

The maximum deviation due to electric currents, etc., was found to be no degrees on all courses in the case of the standard compass and no degrees on all courses in the case of the steering compass.

H. W. Magowan Builder's Signature. Date 20-JAN-21

GENERAL REMARKS.

This installation is well fitted & now satisfactory on trial under full load

It is submitted that this vessel is eligible for THE RECORD. Elec Light

Recd  
23/2/21

William Bates

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

New York FEB -1 1921

16c.116.—Transfer.

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

