

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 6571

Port of Falmouth. Date of First Survey July 19th Date of Last Survey Aug 20th. No. of Visits 3  
 No. in Reg. Book on the ~~Steel~~ SS "THEYDON." Port belonging to FALMOUTH.  
 Built at Falmouth. By whom Cox & Co (Engineers) Ltd When built 1926  
 Owners Falmouth Docks & Engineering Co. Owners Address Falmouth, Cornwall.  
 Yard No. 190 Electric Light Installation fitted by Cox & Co (Engineers) Ltd When fitted 1926.

### DESCRIPTION OF DYNAMO, ENGINE, ETC.

~~2000~~ Compound wound dynamo made by Electromotors Ltd direct coupled to a Robey Steam Engine

Capacity of Dynamo 10 Amperes at 100 Volts, whether continuous or alternating current Continuous  
 Where is Dynamo fixed after end of Engine Room  
 Position of Main Switch Board aft Engine Rm. Bulkhead having switches to groups four of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each Fore'sle 1. Wheelhouse 1. aft 1. Navigation 1.

If ~~switches~~ <sup>fuses</sup> are fitted on main switch board to the cables of main circuit yes and on each auxiliary switch boards to the cables of auxiliary circuits ✓ and at each position where a cable is branched or reduced in size ✓ and to each lamp circuit ✓  
 If cessel is wired on the double wire system are ~~switches~~ <sup>fuses</sup> fitted to both flow and return wires or cables of all circuits including lamp circuits yes  
 Are the ~~switches~~ <sup>fuses</sup> of non-oxidizable metal yes and constructed to fuse at an excess of 50% per cent over the normal current  
 Are all cut outs 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 cut-outs constructed of incombustible materials and fitted on incombustible bases yes.

Total number of lights provided for 12 arranged in the following groups :-

A	<u>8</u> lights each of <u>25</u> candle power requiring a total current of <u>2.4</u> Amperes
B	<u>4</u> lights each of <u>80</u> candle power requiring a total current of <u>3.2</u> Amperes
C	lights each of candle power requiring a total current of Amperes
D	lights each of candle power requiring a total current of Amperes
E	lights each of candle power requiring a total current of Amperes
	<u>2</u> Mast head light with <u>1</u> lamps each of <u>80</u> candle power requiring a total current of } <u>Included above</u> Amperes
	<u>2</u> Side light with <u>1</u> lamps each of <u>80</u> candle power requiring a total current of } <u>in group B.</u> Amperes
	Cargo lights of candle power, whether incandescent or arc lights.

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

Where are the switches controlling the masthead and side lights placed Fore'sle Companion

### DESCRIPTION OF CABLES.

Main cable carrying 5.6 Amperes, comprised of 7 wires, each 20 L.S.G. diameter, .007 square inches total sectional area  
 Branch cables carrying Amperes, comprised of wires, each L.S.G. diameter, square inches total sectional area  
 Branch cables carrying Amperes, comprised of wires, each L.S.G. diameter, square inches total sectional area  
 Leads to lamps carrying 2.4 Amperes, comprised of 3 wires, each 22 L.S.G. diameter, .002 square inches total sectional area  
 Cargo light cables carrying Amperes, comprised of wires, each L.S.G. diameter, square inches total sectional area

### DESCRIPTION OF INSULATION, PROTECTION, ETC.

vulcanized india rubber lead covered & armoured. 2500 (medium grade)

Joints in cables, how made, insulated, and protected none.

Are all the joints of cables thoroughly soldered, resin only having been used as a flux ✓ 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 ✓  
 Are there any joints in or branches from the cable leading from dynamo to main switch board ✓

How are the cables led through the ship, and how protected Steel & brass clips to bulk heads & decks.

**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 conduit*

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

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

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

How are cables carried through beams *drilled holes* through bulkheads, &c. *watertight glands*

How are cables carried through decks *tubes with watertight glands*

Are any cables run through coal bunkers *yes* or cargo spaces *no* or spaces which may be used for carrying cargo, stores, or baggage *no*

If so, how are they protected *armoured*

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 cut outs for these lights fitted

If in the spaces, how are they specially protected

Are any switches or cut outs fitted in bunkers

Cargo light cables, whether portable or permanently fixed  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

**VESSELS BUILT FOR CARRYING PETROLEUM.**

In vessels built for carrying petroleum, are all switches and cut-outs fitted in positions not liable to the accumulation of petroleum vapour or gas

Are any switches, cut outs, 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 installation is  supplied with a voltmeter and  an amperemeter, fixed

The copper used is guaranteed to have a conductivity of ~~7500~~ per cent. that of pure copper.

Insulation of cables is guaranteed to have a resistance of not less than *2500* megohms per statute mile after 24 hours' immersion in seawater.

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.

FOR AND ON BEHALF OF  
**COX & CO. (ENGINEERS) LTD.**

*[Signature]* Electrical Engineers Date

**COMPASSES.**

Distance between dynamo or electric motors and standard compass

Distance between dynamo or electric motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying	Amperes	feet from standard compass	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.**

The electric lighting installation of this vessel has been fitted in accordance with the Requirements of the Rules & has been found satisfactory under full working conditions. It is eligible in my opinion to have *the 11<sup>th</sup> Record of Electric Light.* *It is submitted that this vessel is eligible for* *THE RECORD Electric Light.* *R. Moffatt*

Fee £5-0-0 App'd *[Signature]* 30/9/26  
Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

REPORT FORM No. 13.

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



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