

REPORT ON ELECTRIC LIGHTING INSTALLATION.

No. 29129

Port of Hull Date of First Survey 13-12-15 Date of Last Survey Feb 2/16 No. of Visits 14
 No. in Reg. Book on the Iron or Steel S.S. Amaryllis Port belonging to _____
 Built at Hull By whom Charles S.B. - Eng. Co Ltd When built 1916-2
 Owners H.M. Government Owners' Address _____
 Yard No. 621 Electric Light Installation fitted by Falconer Bros Co. When fitted 1916-2

DESCRIPTION OF DYNAMO, ENGINE, ETC.

2 Enclosed type Engines coupled direct to
2 Compound wound dynamo

Capacity of Dynamo 250 Amperes at 105 Volts, whether continuous or alternating current Continuous

Where is Dynamo fixed Shutting Platform Whether single or double wire system is used Double

Position of Main Switch Board Next dynamo having switches to groups A. B. C. D. E. F. of lights, &c., as below

Positions of auxiliary ^{fuse} switch boards and numbers of ^{fuses} switches on each 1 x 8 Way in Crews space forward, 1 x 8 Way in Engine Room, 1 x 8 Way in Officers lobby aft

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 25 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 157 + 2 Projectors arranged in the following groups :-

| | | | | | |
|------------------------|--|----|--|------|------------------|
| A Navigation | 18 lights each of | 16 | candle power requiring a total current of | 10.8 | Amperes |
| B Cabin + crew | 77 lights each of | 16 | candle power requiring a total current of | 46.2 | Amperes |
| C Wheelhouse | 3 lights each of | 16 | candle power requiring a total current of | 1.8 | Amperes |
| D Machinery | 59 lights each of | 16 | candle power requiring a total current of | 34.8 | Amperes |
| E Horizontal Projector | lights each of | | candle power requiring a total current of | 80 | Amperes |
| F Mast | 2 Mast head light with 1 lamp each of | 16 | candle power requiring a total current of | 80 | Amperes |
| | 2 Side light with 1 x 16 lamps each of | | candle power requiring a total current of | 1.2 | included Amperes |
| | 2 Cargo lights of 8 x 50 | | candle power, whether incandescent or arc lights | 1.8 | in above Amperes |

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

Where are the switches controlling the masthead and side lights placed Wheelhouse

DESCRIPTION OF CABLES.

| | | | | |
|-----------------------------|----------------------------|----------------|---------------------|---|
| Main cable carrying | 250 Amperes, comprised of | 61 wires, each | 15 S.W.G. diameter, | .245 square inches total sectional area |
| Branch cables carrying | 80 Amperes, comprised of | 19 wires, each | 14 S.W.G. diameter, | .094 square inches total sectional area |
| Branch cables carrying | 46.2 Amperes, comprised of | 37 wires, each | 15 S.W.G. diameter, | .14 square inches total sectional area |
| Leads to lamps carrying | .6 Amperes, comprised of | 1 wires, each | 17 S.W.G. diameter, | .00246 square inches total sectional area |
| Cargo light cables carrying | 12 Amperes, comprised of | 19 wires, each | 20 S.W.G. diameter, | .019 square inches total sectional area |

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Pure & Vulca I.R. taped + lead covered

Joints in cables, how made, insulated, and protected _____

Are all the joints of cables thoroughly soldered, and the fuses used not containing acids or other corrosive substances _____ 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 cables leading from dynamo to main switch board _____

How are the cables led through the ship, and how protected Lead covered cables clipped up along

Fore + aft bulkheads



W1365-0118

DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.

Are they in places always accessible Generally

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture Lead covered

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 " " "

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

How are cables carried through beams Lead bushes through bulkheads, &c. W. J. Blanks

How are cables carried through decks Deck tubes

Are any cables run through coal bunkers Yes or cargo spaces — or spaces which may be used for carrying cargo, stores, or baggage Yes

If so, how are they protected Lead covered iron casing in bunkers

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 Special guarded fittings

Where are the main switches and fuses for these lights fitted Outside of compartments

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 W.I. connection boxes

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 Main 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 2500 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.

Falconer, Cross & Co

Electrical Engineers

Date Jan 21st 1916

COMPASSES.

Distance between dynamo or electric motors and standard compass 104 ft

Distance between dynamo or electric motors and steering compass 96 "

The nearest cables to the compasses are as follows:—

| | | | | | | |
|------------------|----------|---------|------------|----------------------------|------------|----------------------------|
| A cable carrying | <u>6</u> | Amperes | <u>1.5</u> | feet from standard compass | <u>1.5</u> | feet from steering compass |
| A cable carrying | <u>6</u> | Amperes | <u>5</u> | feet from standard compass | <u>10</u> | 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 Yes

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.

FOR EARLE'S
SHIPBUILDING & ENGINEERING CO. LIMITED.

W. H. Gibson

Builder's Signature.

Date 8.2.16

GENERAL REMARKS.

This vessel has been fitted with an electric light installation as above & the workmanship is good on completion it was tested under full working conditions for 6 hours continuously & found satisfactory

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

JAW
16.2.16

Frank A. Sturgeon

Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

Im. 912—Transfer.

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



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