

REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 31913

Port of Aull Date of First Survey 20/5/20 Date of Last Survey 5/7/20 No. of Visits 6
 No. in on the Iron or Steel S.C.K. MAI Port belonging to Reykjavik
 Reg. Book Built at Beverly By whom Cook Wilton & Gemmell When built 1920
 Owners The Fishing Co Iceland L^d Owners' Address
 Yard No. 423 Electric Light Installation fitted by The Numbur Electrical Eng^{rs} Co fitted 1920-6

DESCRIPTION OF DYNAMO, ENGINE, ETC.

4 Pole Compound wound direct coupled to 5x4" Nobby engine all on
Common bed plate.

Capacity of Dynamo 440 Amperes at 100 Volts, whether continuous or alternating current Continuous

Where is Dynamo fixed Engine Room Whether single or double wire system is used double

Position of Main Switch Board Starboard engine room having switches to groups A. B. C. D. of lights, &c., as below

Positions of auxiliary switch boards and numbers of switches on each one 12 way wheelhouse one 5 way
Aft Accommodation one 3 way Forecastle

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-oxidisable metal Yes and constructed to fuse at an excess of 20% 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 80 arranged in the following groups:—

A	10	lights each of	16	candle power requiring a total current of	4	Amperes
B	16	lights each of	16	candle power requiring a total current of	4	Amperes
C	30	lights each of	16	candle power requiring a total current of	14	Amperes
D	8	lights each of	16	candle power requiring a total current of	4	Amperes
E	✓	lights each of	✓	candle power requiring a total current of	✓	Amperes
3	Mast head light with 1 lamp each of	32	candle power requiring a total current of	3	Amperes	
2	Side light with 1 lamp each of	32	candle power requiring a total current of	2	Amperes	
1	Cargo lights of 6 light @	16	candle power, whether incandescent or arc lights	<u>Incandescent.</u>		

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

Where are the switches controlling the masthead and side lights placed In wheelhouse

DESCRIPTION OF CABLES.

Main cable carrying 40 Amperes, comprised of 19 wires, each 18 S.W.G. diameter, .034 square inches total sectional area
 Branch cables carrying 15 Amperes, comprised of 4 wires, each 18 S.W.G. diameter, .0125 square inches total sectional area
 Branch cables carrying 7 Amperes, comprised of 3 wires, each 20 S.W.G. diameter, .003 square inches total sectional area
 Leads to lamps carrying 4 Amperes, comprised of 3 wires, each 20 S.W.G. diameter, .003 square inches total sectional area
 Cargo light cables carrying 3 Amperes, comprised of 140/36 wires, each 36 S.W.G. diameter, .0032 square inches total sectional area

DESCRIPTION OF INSULATION, PROTECTION, ETC.

Lead covered in berth & wheelhouse elsewhere lead covered
& galv. wire armoured.

Joints in cables, how made, insulated, and protected No joint splicing connection in ins
boxes.

Are all the joints of cables thoroughly soldered, and the flux 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 cable leading from dynamo to main switch board No

How are the cables led through the ship, and how protected Clipped up to cargo & deck lead
Covered & armoured.

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 covered & surrounded

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

What special protection has been provided for the cables near boiler casings Lead covered & surrounded

What special protection has been provided for the cables in engine room Lead covered & surrounded

How are cables carried through beams Cables through bulkheads, &c. Iron glands

How are cables carried through decks Deck pipes

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

If so, how are they protected Lead covered & surrounded

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 Two joint plugs

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 amperometer No, fixed In accessible places

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 _____ 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 HUNTER ELECTRICAL ENGINEERING CO
W & E Shuttleworth
PROPRIETOR

Electrical Engineers Date 12/7/20

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	<u>1</u>	Amperes	<u>to</u>	feet from standard compass	feet from steering compass
A cable carrying	<u>1</u>	Amperes	<u>to</u>	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 Yes

The maximum deviation due to electric currents, etc., was found to be Nil degrees on _____ course in the case of the standard compass and Nil degrees on _____ course in the case of the steering compass.

COOK, WELTON & GEMMELL, LTD.
W. G. G. G.
DIRECTOR

Builder's Signature. Date July 9th 12.

GENERAL REMARKS.

The materials & workmanship are good, on completion the installation was tried under full working conditions & found satisfactory.

It is submitted that this vessel is eligible for THE RECORD. Elec. Light. *J. W. D.*
20/7/20

G. P. Well
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.

