

Rpt. 13.

No. 98492

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report

19

When handed in at Local Office

19

Port of

Received at London Office

Liverpool

No. in Survey held at

Birkenhead

Date, First Survey

19/12/30

Last Survey

4/2/

1931

Reg. Book.

(Number of Visits)

89465

on the

SS AIRE

Tons

Gross 1103

Net 445

Built at

Birkenhead

By whom built

Cammell Laird & Co Ltd

Yard No. 978

When built 1921

Owners

London, Midland & Scottish Railway Co Ltd

Port belonging to

Goolie

Electric Light Installation fitted by

Dunderland Forge & Engineering Co Ltd

Contract No. 978

When fitted 1921

Is the Vessel fitted for carrying Petroleum in bulk

No

System of Distribution Double wire

Pressure of supply for Lighting

110

volts, Heating

—

volts, Power

—

volts.

Direct or Alternating Current, Lighting

Direct

Power

—

If alternating current system, state frequency of periods per second

—

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off

Yes

Generators, do they comply with the requirements regarding rating

Yes

, are they compound wound

Yes

are they over compounded 5 per cent.

Yes

, if not compound wound state distance between each generator

—

Where more than one generator is fitted are they arranged to run in parallel

—

, is an adjustable regulating resistance fitted in

series with each shunt field

Yes

Are all terminals accessible, clearly marked, and furnished with sockets

Yes

, are they so spaced or shielded that they cannot be accidentally earthed,

short circuited, or touched

Yes

Are the lubricating arrangements of the generators as per Rule

Yes

Position of Generators

Main Engine Room

is the ventilation in way of the generators satisfactory

Yes

, are they clear of all inflammable material

Yes

if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the generators

—

and

—

, are the generators protected from mechanical injury and damage from water, steam or oil

Yes

are their axes of rotation fore and aft

Yes

Earthing, are the bedplates and frames of the generating plant efficiently earthed

Yes

are the prime movers and

their respective generators in metallic contact

Yes

Main Switch Boards, where placed

Main Engine Room

If the generators and main switchboard are not placed in the same compartment, is each generator provided with

a fuse on each insulated pole as near as possible to the terminals of the generator, additional to that provided on the main switchboard

—

Switchboards, are they placed in accessible positions, free from inflammable gases and acid fumes

Yes

are they protected from mechanical injury and damage from water, steam or oil

Yes

, if situated near unprotected

woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards

—

and

—

are they constructed wholly of durable, non-ignitable non-absorbent materials

Yes

, is all insulation of high dielectric strength and of

permanently high insulation resistance

Yes

, if semi-insulating material is used, are all conducting parts insulated from the slab

with mica or micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework

Yes

and is the frame effectively earthed

Yes

Are the fittings as per Rule regarding:— spacing or shielding of live parts

Yes

, accessibility of all parts

Yes

, absence of fuses on back of board

Yes

, proportion of omnibus

bars

Yes

, individual fuses to voltmeter, pilot or earth lamp

Yes

, connections of switches

Yes

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches

Double Pole Switch

9 fuses for Generator. Double Pole Switch & fuses for each outgoing circuit.

Instruments on main switchboard

1 ammeters

1 voltmeters

—

synchronising device for paralleling purposes.

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system

Earth Lamp, Switch &

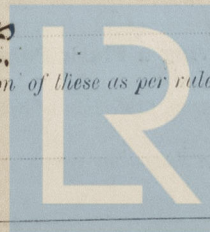
fuse on each pole

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules

Yes

Joint Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule

Yes



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005293-005300-0026 1/2

If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office _____

GENERATOR, LIGHTING AND HEATING CONDUCTORS.									
DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
MAIN GENERATOR	1	.100	19	.083	90.9	118	39	V.C.	Lead Covered & Braided
EQUALISER CONNECTIONS	—								
AUXILIARY GENERATOR	—								
EMERGENCY GENERATOR	—								
ROTARY MOTOR TRANSFORMER GENERATOR	—								
ENGINE ROOM	1	.010	7	.044	11.1	31	65	Macoute	Lead Covered & Braided
BOILER ROOM	—								
AUXILIARY SWITCHBOARDS	—								
Salom Mangalam & 2nd officers & Engineers Accom.	1	.0145	7	.052	13.7	37	230	Macoute	Lead Covered & Braided
POOP & 2nd Accom.	1	.007	7	.036	8.3	24	100	Macoute	Lead Covered & Braided
ALL CARGO & HOLD LIGHTING	1	.007	7	.036	8.3	24	150	Macoute	Lead Covered & Braided
Forward Cargo Accomodation	1	.010	7	.044	10.9	31	150	Macoute	Lead Covered & Braided
WIRELESS	—								
SEARCHLIGHT	1	.002	3	.029	3.6	7.8	350	Macoute	Lead Covered & Braided
MASTHEAD LIGHT	1	.002	3	.029	3.6	7.8	80	Macoute	Lead Covered & Braided
SIDE LIGHTS	1	.002	3	.029	3.6	7.8	30	Macoute	Lead Covered & Braided
COMPASS LIGHTS	1	.002	3	.029	3.6	7.8			
POOP LIGHTS	—								
CARGO LIGHTS	—								
ARC LAMPS	—								
HEATERS	—								

[illegible]

All Conductors are of annealed copper conforming to British Standard Specification No. 7.

The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.

The foregoing is a correct description.

P. PRO THE SUNDERLAND FORGE & ENGINEERING CO. LTD.

Electrical Engineers.

Date March 4th 1931.

COMPASSES.

Distance between electric generators or motors and standard compass 100

Distance between electric generators or motors and steering compass 100 feet

The nearest cables to the compasses are as follows:—

A cable carrying 18 Ampères 12 feet from standard compass 10 feet from steering compass.

A cable carrying 36 Ampères feet from standard compass 10 feet from steering compass.

A cable carrying — Ampères — 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

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted Yes

The maximum deviation due to electric currents was found to be — degrees on all course in the case of the standard compass, and 2° W degrees on SE course in the case of the steering compass.

CAMMELL LAIRD AND COMPANY LIMITED

J. W. Laird

Builder's Signature.

Date 16 MAR 1931

SECRETARY

Is this installation a duplicate of a previous case Yes If so, state name of vessel SS/ Caldecott Blyth. RMT No. 98226. 95394.

General Remarks (State quality of workmanship, opinions as to class, &c.)

This Elec light installation has been fitted under special Survey and is in accordance with the Rule Requirements. It has been examined under full working conditions and found satisfactory, and is eligible in my opinion for record of 'Elec light' in Register book.

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

Elec light

27/2/31

Total Capacity of Generators 10 Kilowatts.

The amount of Fee ... £ 10 0 0

When applied for, 17/2/31

Travelling Expenses (if any) £ :

When received, 27/2/31

BRH.

J. B. Millon

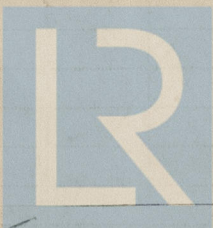
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

LIVERPOOL -2 APR. 1931

Assigned

Electric Light.



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