

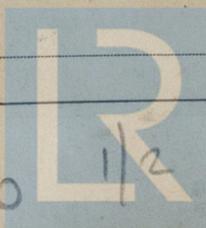
REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL) Received at London Office..... 8. Sept. 1926.

Date of writing Report 1 - 9 - 1926 When handed in at Local Office 10 Port of GLASGOW
 No. in Survey held at GREENOCK Date, First Survey 27th July Last Survey 31st Aug 1926.
 Reg. Book. 88706 on the S. S. DALBLAIR Tons { Gross 4608
 Net 2810
 Built at GREENOCK By whom built SCOTTS' S. & E. COY. LTD. Yard No. 528 When built 1926
 Owners UNITED STEAM NAVIGATION COY. Port belonging to NEWCASTLE
 Electric Light Installation fitted by MESSRS SCOTTS' S. & E. COY LTD Contract No. 528 When fitted 1926

RETAIN

System of Distribution TWO CONDUCTOR INSULATED ✓
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 overload YES ✓, are they compound wound YES ✓
 are they over compounded 5 per cent. LEVEL COMPOUND, 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 _____
 Are all terminals accessible and clearly marked. YES, are they so spaced or shielded that they cannot be accidentally earthed, or short circuited YES Are the lubricating arrangements of the generators as per Rule YES
Position of Generator BOTTOM PLATFORM 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 axis 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 Board where placed BOTTOM PLATFORM 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, incombustible 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 connected to one pole insulated from the slab with mica or micanite and the slab similarly insulated from its framework YES, and is the frame effectively earthed YES
 Are the following fittings as per Rule, viz. :— 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.
 ONE D.P. ST. Q.B. KNIFE SWITCH & D.P. FUSES FOR GENERATOR SIZE 100 AMPERES.
 ONE S.P. ST. Q.B. KNIFE SWITCH & D.P. FUSES FOR EACH CIRCUIT SIZE 30 AMPERES.
Instruments on main switchboard ONE ammeter ONE voltmeter _____ 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 TWO 30WATT 110 VOLT LAMPS IN PARALLEL BETWEEN POSITIVE & NEGATIVE POLES WITH MID POINT EARTHED, COMPLETE WITH D.P. SWITCHES & FUSES, YES
Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules. YES
Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule YES



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Lloyd's Register Foundation

W382-0150

Insulation of Cables, state type of cables, single or twin SINGLE & TWIN are the cables insulated and protected as per Tables III or IV of the Rules IV.

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 4.3 VOLTS

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.007 square inch and above provided with soldering sockets YES

Paper Insulated Cables. If cables are paper covered, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound YES

Cable Runs, are the cables fixed as far as possible in accessible positions not exposed to drip or accumulation of water or oil, or to high temperature from boilers, steam pipes, uptakes or other hot objects, or to avoidable risk of mechanical damage YES

Support and Protection of Cables, state how the cables are supported and protected CLIPPED TO PERFORATED METAL TRAYS OR BULK-HEADS BY GALVANIZED IRON OR BRASS CLIPS. LEAD COVERED, LEAD COVERED & ARMoured, OR V.I.R. ARMoured.

If cables are run in wood casings, are the casings and caps secured by screws YES, are the cap screws of brass YES, are the cables run in separate grooves YES. If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VI YES

Refrigerated Chambers, if lights are fitted, are the cables and fittings in accordance with the special requirements YES

Joints in Cables, state if any, and how made, insulated, and protected NO JOINTS

Watertight Glands and Deck Tubes, are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands YES

Bushes in Beams and Non-watertight Positions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed YES state the material of which the bushes are made LEAD

Earthing Connections, state what earthing connections are fitted and their respective sectional areas YES, are their connections made as per Rule YES

Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule YES

Emergency Supply, state position and method of control of the emergency supply and how the generator is driven NONE FITTED

Navigation Lamps, are these separately wired YES, controlled by separate switch and separate fuses YES, are the fuses double pole YES, are the switches and fuses grouped in a position accessible only to the officers on watch YES, has each navigation lamp an automatic indicator as per Rule YES, are separate screens provided for the use of oil and electric side lights YES, are separate oil lanterns provided for the mast head lights and side lights YES

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight YES, are any fittings placed in spaces in which goods are liable to be stacked in close proximity to them; if so, how are they protected NONE SO FITTED, are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected NONE SO FITTED, how are the cables led YES, where are the controlling switches situated YES

Searchlight Lamps, No. of YES, whether fixed or portable YES, are their fittings as per Rule YES

Are Lamps, other than searchlight lamps, No. of YES, are their live parts insulated from the frame or case YES, are their fittings as per Rule YES

Motors, are their working parts readily accessible YES, are the coils self-contained and readily removable for replacement YES, are the brushes, brush holders, terminals and lubricating arrangements as per Rule YES, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material YES, are they protected from mechanical injury and damage from water, steam or oil YES, are their axis of rotation fore and aft YES, if situated near unprotected woodwork or other combustible material, are the motors of the totally enclosed, pipe ventilated, forced draught, drip or flame proof type YES, if not of this type, state distance of the combustible material horizontally or vertically above the motors YES and YES

Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed as per Rule YES

Lightning Conductors, where lightning conductors are required, are these fitted as per Rule YES

Ships carrying Oil having a Flash Point less than 150° F. Have the special requirements of the Rules been complied with regarding switches, joint boxes, section and distribution boards, protection of cables, method of distribution, lead of cables, lights and fittings YES

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

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY.	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN ...	1	10	110	90	500	7x5 SUNDERLAND FORGE ENG		
AUXILIARY ...								
EMERGENCY ...								
ROTARY TRANSFORMER								

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	2	0.7592	19	0.072	90	45	RUBBER	L.C. ARMoured
	AUXILIARY GENERATOR ...								
	EMERGENCY GENERATOR ...								
	ROTARY TRANSFORMER...								
	AUXILIARY SWITCHBOARDS ...								
	{ENGINE ROOM} ...								
	{BOILER ROOM} ...	2	0.0701	7	0.036	10.1	66	RUBBER	L.C. ARMoured
	WIRELESS ...	2	0.0701	7	0.036	7.8	440	RUBBER	L.C. & L.C. ARMoured
	SEARCHLIGHT ...								
	MASTHEAD LIGHT...	2	0.0289	3	0.036	9	850	RUBBER	L.C. & L.C. ARMoured
	SIDE LIGHTS ...	2	0.0194	3	0.029	9	96	RUBBER	L.C.
	COMPASS LIGHTS ...	2	0.0194	3	0.029	19	40	RUBBER	L.C.
	POOP LIGHTS ...	2	0.0701	7	0.036	4.6	378	RUBBER	V.I.R. ARMOUR & L.C.
	CARGO LIGHTS ...	2	0.462	7	0.052	18.8	198	RUBBER	L.C. ARMoured
	ARC LAMPS ...								
	HEATERS ...								

RETAIN

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP ...								
	MAIN BILGE LINE PUMPS ...								
	GENERAL SERVICE PUMP ...								
	EMERGENCY BILGE PUMP ...								
	SANITARY PUMP ...								
	CIRC. SEA WATER PUMPS ...								
	CIRC. FRESH WATER PUMPS ...								
	AIR COMPRESSOR ...								
	FRESH WATER PUMP ...								
	ENGINE TURNING GEAR ...								
	ENGINE REVERSING GEAR ...								
	LUBRICATING OIL PUMPS ...								
	OIL FUEL TRANSFER PUMP ...								
	WINDLASS ...								
	WINCHES, FORWARD ...								
	WINCHES, AFT ...								
	STEERING GEAR ...								
	WORKSHOP MOTOR ...								
	VENTILATING FANS ...								

RETAIN

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.

SCOTT'S SHIPBUILDING & ENGINEERING COMPANY,
 LIMITED

Algha
 ELECTRICAL MANAGER

Electrical Engineers.

Date 4/9/26

COMPASSES.

Distance between electric ~~generator~~ motor and standard compass 13 FEET

Distance between electric ~~generator~~ motor and steering compass 9 FEET

The nearest cables to the compasses are as follows:—

A cable carrying 19 Ampères 12 feet from standard compass 12 feet from steering compass.

A cable carrying 6.6 Ampères 12 feet from standard compass 8 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 NIL degrees on EVERY course in the case of the standard

compass, and NIL degrees on EVERY course in the case of the steering compass.

SCOTT'S SHIPBUILDING & ENGINEERING COMPANY,
 LIMITED

A. Hutchison
 Director

Builder's Signature.

Date 4/9/26

Is this installation a duplicate of a previous case No. If so, state name of vessel

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

has been fitted on board under special survey.

Tested under full working conditions and found satisfactory.

The workmanship was found to be good and sound.

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

J. S. Rankin
 4/9/26

Total Capacity of Generators 10 Kilowatts

The amount of Fee ... £ 10:00

Travelling Expenses (if any) £ 10/6

When applied for, 1/9/26
 When received, 8.9.26

J. S. Rankin
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 7-SEP 1926

Assigned Elec. light

HC

Im. 4.22.—Transferor.
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)