

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 15 MAY 1925

Date of writing Report 30th April 1925 When handed in at Local Office 14th May, 1925 Port of Aberdeen

No. in Survey held at Aberdeen Date, First Survey 1.4.25 Last Survey 16.4.1925
Reg. Book.

on the S.S. "CARRICKMORE"

Tons { Gross 581
Net 269

Built at Aberdeen By whom built J. Lewis & Son Ltd. Yard No. 77 When built 1925

Owners J. Kelly Ltd. Port belonging to Belfast

Electric Light Installation fitted by The Sunderland Forge & Eng. Co. Ltd. Contract No. — When fitted 1925.

System of Distribution DOUBLE WIRE ✓

Pressure of supply for Lighting 110 ✓ volts, Heating Nil volts, Power Nil volts.

Direct or Alternating Current, Lighting DIRECT ✓ Power Nil

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. YES, if not compound wound state distance between each generator —————

Where more than one generator is fitted are they arranged to run in parallel ONE GENERATOR, is an adjustable regulating resistance fitted in series with each shunt field YES

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 Generators IN 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 Boards, where placed 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 IN SAME COMPARTMENT

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 two poles 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

DOUBLE POLE SWITCH AND FUSES FOR GENERATOR

SINGLE POLE SWITCHES AND DOUBLE POLE FUSES FOR LIGHTING CIRCUITS

Instruments on main switchboard ONE ammeters ONE voltmeters Nil 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 ON EACH POLE

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

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 4.5

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 NONE

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 Metal clips. LEAD COVERED AND BRAIDED IN ACCORDANCE WITH RULES.

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 NONE

Joints in Cables, state if any, and how made, insulated, and protected NONE

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 FIBRE

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

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 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

how are the cables led YES

where are the controlling switches situated YES

Searchlight Lamps, No. of NONE, whether fixed or portable NONE, are their fittings as per Rule YES

Arc Lamps, other than searchlight lamps, No. of NONE, 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	42	110	44	420	STEAM ENGINE.	/	/
AUXILIARY ...	NONE					OPEN TYPE.		
EMERGENCY ...	NONE					SINGLE CYLINDER.		
ROTARY TRANSFORMER	NONE							

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	2	.0225 ✓	7	.064	44	20	VIR	W.I. PIPE
	AUXILIARY GENERATOR	NONE							
	EMERGENCY GENERATOR	NONE							
	ROTARY TRANSFORMER...	NONE							
	AUXILIARY SWITCHBOARDS	NONE							
	ENGINE ROOM ...	2	.003 ✓	1	.064	6.6	30	VIR	LEAD COVERED ARMOURED & BRAIDED
	BOILER ROOM ...								
	NAVIGATION ACCOMMODATION	2	.0045 ✓	7	.029	6.8	280	VIR	W.I. PIPE
		2	.003 ✓	1	.064	5.2	440	VIR	W.I. PIPE
	WIRELESS ...	NONE							
	SEARCHLIGHT ...	NONE							
	MASTHEAD LIGHT...	2	.003 ✓	1	.064	1.0	210	VIR	W.I. PIPE
	SIDE LIGHTS ...	2	.003 ✓	1	.064	1.0	40	VIR	LEAD COVERED & BRAIDED
	COMPASS LIGHTS ...	2	.0015 ✓	1	.044	.5	20	VIR	LEAD COVERED & BRAIDED
	POOP LIGHTS ...								
	CARGO LIGHTS ...	2	.0045 ✓	7	.029	14.3	230	VIR	W.I. PIPE
	ARC LAMPS ...	NONE							
	HEATERS ...	NONE							

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	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 ...								

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.

F. P. & THE SONDERLAND FUDGE & ENGINEERING CO., LTD.

J. Thompson

Electrical Engineers.

Date 27 APR '25

COMPASSES.

Distance between electric generators or motors and standard compass 96 FEET

Distance between electric generators or motors and steering compass "

The nearest cables to the compasses are as follows:—

A cable carrying 2 Ampères 2 feet from standard compass — feet from steering compass.

A cable carrying 5.0 Ampères 6 feet from standard compass — 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 — course in the case of the standard compass, and NIL degrees on — course in the case of the steering compass.

JOHN LEWIS & SONS LTD.

C. Wilson

Builder's Signature.

Date 30th April, 25

SHIPYARD MANAGER

Is this installation a duplicate of a previous case Similar If so, state name of vessel S.S. "Donaghmore" Alm. Rpt. N° 13775

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

This installation has been fitted on board the vessel in accordance with the Rules and in a satisfactory manner; the materials and workmanship are good.
 On completion the installation was tried under full working conditions with satisfactory results.

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

J.W.
15/5/25

Total Capacity of Generators 4.8 Kilowatts

The amount of Fee ... £ 5 : 0 : 0 When applied for, 29.4 19 25

Travelling Expenses (if any) £ : : When received, 7.8 19 25

M. Forster

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Elec Lt

Im. 323.—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)



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