

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

30 SEP 1930

Date of writing Report 29.9.30 When handed in at Local Office 29.9.30 Port of Middlebrough.

No. in Survey held at South Bank. Date, First Survey 5 May Last Survey 22 May 1930  
Reg. Book. "Pont Alfred" (Number of Visits.....)

91951 Sub on the Tons { Gross 4918  
Net 30055

Built at South Bank. By whom built Messrs Souths Dock Co Yard No. 912 When built 1930-5.

Owners Anticosti Shipping Co. Port belonging to Middlebrough.

Electric Light Installation fitted by RICHARD PICKERSGILL & SONS, LTD. Contract No. When fitted May 1930

## 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

Generators, do they comply with the requirements regarding rating

ye

, are they compound wound

ye

are they over compounded 5 per cent.

ye

, if not compound wound state distance between each generator

-

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

No

, is an adjustable regulating resistance fitted in

series with each shunt field

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

ye

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

short circuited, or touched

ye

Are the lubricating arrangements of the generators as per Rule

ye

## Position of Generators

Starboard side engine room. In recess.

is the ventilation in way of the generators satisfactory

ye

, are they clear of all inflammable material

ye

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

-

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

ye

are their axes of rotation fore and aft

ye

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

ye

are the prime movers and

their respective generators in metallic contact

ye

## Main Switch Boards, where placed

Starboard side engine room. In Recess.

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

ye

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

ye

, 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

ye

, is all insulation of high dielectric strength and of

permanently high insulation resistance

ye

, 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

ye

and is the frame effectively earthed

ye

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

ye

, accessibility of all parts

ye

, absence of fuses on back of board

ye

, proportion of omnibus

bars

, individual fuses to voltmeter, pilot or earth lamp

ye

, connections of switches

ye

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

D.P. main

switches and fuses, and 6 selection switches for outgoing circuits with D.P. fuses.

## Instruments on main switchboard

1

ammeters

1

voltmeters

synchronising device for paralleling purposes.

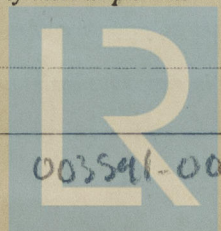
Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system

2 lamps

in series across positive and negative to earth

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

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



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Cables: Single, twin, concentric, or multicore *Single* are the cables insulated and protected as per Tables IV or V of the Rules *nil*

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

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets

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

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

Support and Protection of Cables, state how the cables are supported and protected *Lead & Armoured Cable with Galv. W.I. clips and Lead Covered with Brass clips*

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

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

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

Bushes in Beams and Non-watertight Partitions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed *Y* state the material of which the bushes are made *Lead*

Earthing Connections, state what earthing connections are fitted and their respective sectional areas *Copper Strips 1" x 1/8"*

are their connections made as per Rule *Y*

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

Emergency Supply, state position and method of control of the emergency supply and how the generator is driven

Navigation Lamps, are these separately wired *Y*, controlled by separate switch and separate fuses *Y*, are the fuses double pole *Y*, are the switches and fuses grouped in a position accessible only to the officers on watch *Y*

has each navigation lamp an automatic indicator as per Rule *Y*

Secondary Batteries, are they constructed and fitted as per Rule

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight *Y*, 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

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

where are the controlling switches situated

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

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

Motors, are their working parts readily accessible —, are the coils self-contained and readily removable for replacement

are the brushes, brush holders, terminals and lubricating arrangements as per Rule —, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material

are they protected from mechanical injury and damage from water, steam or oil —, are their axes of rotation fore and aft

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

if not of this type, state distance of the combustible material horizontally or vertically above the motors and

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

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

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

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

## PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Amps.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	2	10	110	91	380	Ind. and Forge		
AUXILIARY						Engine Steam		
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. Amperes.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	2	11680	37	0.064	91	28	V.I.R.	Lead & Gas pipe
	EQUALISER CONNECTIONS								
	AUXILIARY GENERATOR	2	11680	37	0.064	91	28	V.I.R.	
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER...								
	AUXILIARY SWITCHBOARDS								
	ENGINE ROOM								
	BOILER ROOM								
	ACCOMMODATION								
	Life boats	2	00055	7	0.029	6	174	V.I.R.	Lead & Armoured
	Engine room	2	00705	7	0.036	15	161	"	"
	Garage	2	00705	7	0.036	18	51	"	"
	Engine room	2	00705	7	0.036	7.8	45	"	"
	Bridge Navig.	2	00445	7	0.029	8.5	245	"	"
	WIRELESS	2	00705	7	0.036	10	220	"	"
	SEARCHLIGHT								
	MASTHEAD LIGHT...	2	00152	1	0.044	40 watts	250	V.I.R.	Lead Covered
	SIDE LIGHTS	2	"	1	"	40 watts	110	"	"
	COMPASS LIGHTS	2	"	1	"	30 "	35	"	"
	POOP LIGHTS								
	CARGO LIGHTS								
	ARC LAMPS								
	HEATERS								

## 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								
	(a) MOTOR GENERATOR								
	(b) MAIN MOTOR								
	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.

RICHARD PICKERSGILL & SONS, LTD.

Electrical Engineers.

Date

#### COMPASSES.

Distance between electric generators or motors and standard compass

260 feet

Distance between electric generators or motors and steering compass

250 feet

The nearest cables to the compasses are as follows:—

A cable carrying 30 <sup>amps</sup> ~~amps~~ 12 feet from standard compass 6 feet from steering compass.

A cable carrying Ampères 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 each course in the case of the standard

compass, and nil degrees on each course in the case of the steering compass.

For SMITH'S DOCK COMPANY, L<sup>td</sup>

Builder's Signature.

Date 25/9/30

Is this installation a duplicate of a previous case ☒ If so, state name of vessel

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

The materials and workmanship are good.  
This electric light installation has been fitted under special  
survey and in accordance with the Rules. In my opinion  
it is suitable for a vessel classed with this Society.

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

Elec. Light  
P. J. McA.

30/9/30.

Total Capacity of Generators 20 Kilowatts.

The amount of Fee ... £ 17-10-0

When applied for,

10 May 1930

Travelling Expenses (if any) £

When received,

7 June 1930

P. J. McA.  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Elec. Lt.



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