

Rpt. 13.

No. 45185

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office.....

2 DEC 1925

Date of writing Report 4-11-25 When handed in at Local Office 30-11-25 Port of GLASGOW.

No. in Survey held at
Reg. Book.

GLASGOW.

Date, First Survey 20-10-25 Last Survey 5-11-25 19

(Number of Visits.....)

31942. on the

S.S. AUDACITY.

Tons { Gross 589.
Net

Built at GREENOCK.

By whom built MESSRS G BROWN & CO Yard No. 149 When built 1925

Owners

MESSRS F. T. EVERARD & SONS LTD

Port belonging to LONDON.

Electric Light Installation fitted by MESSRS CLAUD HAMILTON LTD Contract No. 149 When fitted 1925.

System of Distribution

Double wire distributing bus.

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.

Yes.

if not compound wound state distance between each generator

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

Yes.

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 5 Sect 2.

Position of Generators

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

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

12"

Yes.

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 micamite 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

and fuse for generator and 4 D.P. Switches and D.P. Fuses for circuits

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.

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

Sect 6 Rule 3



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Lloyd's Register
Foundation

WS-0027

Insulation of Cables, state type of cables, single or twin *main 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 *2.5 Volls*

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 *no paper.*

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 *Lead covered in tubing or lead covered in cabin direct to bulkhead.*

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 VI *-*

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 *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 *-*

-, are their connections made as per Rule *-*

Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule *4 Sec 10. Yes.*

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

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 *4 Sec 10.*, 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 *-*

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected *Yes.*

Special magazine A. B. fittings, how are the cables led *-*

where are the controlling switches situated *outside*

Searchlight Lamps, No. of *none*, 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 *none*, 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 axis 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 as per Rule *-*

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	2.5	110	23.	630	Endured steam engine	coal	-	
AUXILIARY						and connected to dynamo			
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	.0010	✓	4	.036	23	30	V. I. R. Lead covered in tubing
	AUXILIARY GENERATOR	-							
	EMERGENCY GENERATOR	-							
	ROTARY TRANSFORMER...	-							
	AUXILIARY SWITCHBOARDS	-							
	ENGINE ROOM	2	.0030	✓	3	.036	2.5	10	V. I. R. Lead covered in tubing
	BOILER ROOM								
	Forward Accom.	2	.0036	✓	3	.036	5	300	V. I. R. Lead covered in tubing
	Aft	2	.0030	✓	3	.036	4.5	60	V. I. R. Lead covered in tubing
	hangar	2	.0030	✓	3	.036	4.5	120	V. I. R. Lead covered in tubing
	WIRELESS	-							
	SEARCHLIGHT	-							
	MASTHEAD LIGHT...	2	.0020	✓	3	.029	1	250	V. I. R. Lead covered in tubing
	SIDE LIGHTS...	2	.0020	✓	3	.029	1	30	" " " "
	COMPASS LIGHTS...	2	.0020	✓	3	.029	1	30	" " " "
	POOP LIGHTS...	2	.0020	✓	3	.029	1	30	" " " "
	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	-							
	WORKSHOP MOTOR	-							
	VENTILATING FANS	-							

All Conductors are of annealed copper conforming to British Standard Specification No. 7. *Yes.*
The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules. *Yes.*
The foregoing is a correct description.

For CLAUD HAMILTON, LIMITED

W. R. Scott
Director.

Electrical Engineers.

Date *23rd Nov. 25*

COMPASSES.

Distance between electric generators or motors and standard compass

50 feet

Distance between electric generators or motors and steering compass

40 feet

The nearest cables to the compasses are as follows:—

A cable carrying *5* Amperes *15* feet from standard compass *12* feet from steering compass.

A cable carrying *1* Amperes *5* feet from standard compass *5* feet from steering compass.

A cable carrying *1* Amperes *5* feet from standard compass *5* 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 *avg.* course in the case of the standard compass, and *nil* degrees on *avg.* course in the case of the steering compass.

G. Brown & Co

Builder's Signature.

Date *27-11-25*

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, etc.)

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. W. Rankin
4/12/25

Total Capacity of Generators *2.5* Kilowatts

The amount of Fee ...

£ *0.0.0*

When applied for, at

When received, at

Travelling Expenses (if any) £

11. 1. 1926

Committee's Minute *GLASGOW 1-DEC 1925*

Assigned

Glec. Light.

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



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