

Rpt. 13.

No. 17154

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 11 JUN 1932

Date of writing Report 19 When handed in at Local Office 10.6.32 Port of West Hampton
 No. in Survey held at West Hampton Date, First Survey 19.4.32 Last Survey 28.5.1932
 Reg. Book. S/S B.O. Davies (Number of Visits.....)
 on the
 Built at West Hampton By whom built Wm Gray & Co Yard No. 1058 When built 1932
 Owners Port belonging to
 Electric Light Installation fitted by Clute Chapman & Co Contract No. 1058 When fitted 1932
 Is the Vessel fitted for carrying Petroleum in bulk

System of Distribution Double wire volts, Heating — volts, Power — volts.

Pressure of supply for Lighting 110 volts, Heating — Power —

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 Yes, is an adjustable regulating resistance fitted in series with each shunt field

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

Position of Generators Engine room Yes, are they clear of all inflammable material Yes

is the ventilation in way of the generators satisfactory Yes, are they clear of all inflammable material, state distance of same horizontally from or vertically above the generators

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

are their axes of rotation fore and aft Yes, are the prime movers and

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

their respective generators in metallic contact In Engine room near dynamo

Main Switch Boards, where placed

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

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 micaite 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 fuses on dynamo mains, single pole switches double pole fuses on each outgoing circuit.

Instruments on main switchboard one ammeters one 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 Lamps

Coupled to Earth through switches fuses. Yes

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

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

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 2 volts

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 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 —

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, armoured & braided for main machinery spaces. Lead covered in accommodation.

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 yes

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 made.

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 Partitions, 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 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 yes

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 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 no are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected no how are the cables led —

where are the controlling switches situated —

Searchlight Lamps, No. of 1, whether fixed or portable fixed, are their fittings as per Rule yes

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 sizes 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.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	1	5	110	45.4	450	Single Cylinder steam engine	—	
AUXILIARY								
EMERGENCY								
ROTARY TRANSFORMER								

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	.0400	19	.032	45.4	150	16ft.	VIT.	Lead covered
EQUALISE CONNECTIONS									
AUXILIARY GENERATOR									
EMERGENCY GENERATOR									
ROTARY TRANSFORMER									
ENGINE ROOM	1	.0045	4	.039	4.9	112	72ft.	"	Lead armoured & braided
BOILER ROOM									
AUXILIARY SWITCHBOARDS									
ACCOMMODATION Forward	1	.0225	4	.064	15.8	46	160ft.	"	"
ACCOMMODATION Aft	1	.0030	3	.036	14.5	12	70ft.	"	"
WIRELESS									
SEARCHLIGHT	1	.0070	4	.036	4.5	24	50ft.	"	Lead covered
MASTHEAD LIGHT	1	.00194	3	.039	.36	47.8	112ft.	"	"
SIDE LIGHTS	1	4	3	.039	.36	—	40ft.	"	"
COMPASS LIGHTS	1	4	3	.039	.36	—	10ft.	"	"
PILOT LIGHTS RED	1	4	3	.039	3.6	—	35ft.	"	"
PILOT LIGHTS WHITE	1	4	3	.039	1.4	—	45ft.	"	"
STEIN LAMPS	1	4	3	.039	.36	—	190ft.	"	"
HEATERS									

MOTOR CONDUCTORS.

DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
	No. of Motors.	No. Per Pole.	Total Effective Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.			
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.

For Clarke, Chapman & Co., Ltd.

W. Taylor Director Electrical Engineers. Date 6/6/32

COMPASSES.

Distance between electric generators or motors and standard compass 52 ft.
 Distance between electric generators or motors and steering compass 52 ft.
 The nearest cables to the compasses are as follows:—
 A cable carrying 24 Ampères 4 feet from standard compass 16 feet from steering compass.
 A cable carrying 24 Ampères 4 feet from standard compass 16 feet from steering compass.
 A cable carrying 24 Ampères 4 feet from standard compass 16 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 all course in the case of the standard compass, and nil degrees on all course in the case of the steering compass.

For William Gray & Co., Limited.

Thos. S. Simpson Builder's Signature. Date 1/10
 General Manager

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 under survey and is in accordance with the requirements of the Rules. The materials and workmanship are good. On completion it was tried under full working conditions and found satisfactory. In our opinion the vessel is eligible to have the record of electric light.

Electric Light
RD Shilston
SWood

Total Capacity of Generators 5 Kilowatts.

The amount of Fee ... £ 5 : - : { When applied for, 4-6-32
 Travelling Expenses (if any) £ - : - : { When received, 14-7-32

RD Shilston SWood
 Surveyors to Lloyd's Register of Shipping.

Committee's Minute
Elec Lt
 Assigned

1m. 0.30.—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)