

REPORT ON ELECTRICAL EQUIPMENT.

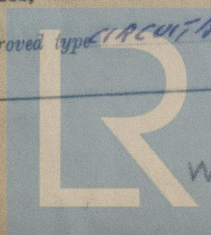
(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

26 OCT 1942

Received at London Office

Date of writing Report 27/8 1942 When handed in at Local Office 27/8 1942 Port of MOBILE ALA.
 No. in Survey held at CHICKASAW ALA. Date, First Survey 5TH NOV/41 Last Survey 15TH JUNE 1942
 Reg. Book. on the STEEL SINGLE SCREW STEAMER "FAIRPORT" (Number of Visits 24) Tons { Gross 6165.30
 Net 3519
 Built at CHICKASAW ALA. By whom built GULF SHIPBUILDING CORP. Yard No. 1 When built 1942
 Owners WATERMAN STEAMSHIP CORPN. Port belonging to MOBILE ALA.
 Electric Light Installation fitted by GULF SHIPBUILDING CORPN. Contract No. 9.5.5.11 When fitted 1942
 Is the Vessel fitted for carrying Petroleum in bulk NO.

System of Distribution THREE WIRE - 120/240 VOLTS.
 Pressure of supply for Lighting 120 volts, Heating — volts, Power 240 volts.
 Direct or Alternating Current, Lighting DIRECT CURRENT. Power DIRECT CURRENT.
 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 temperature rise 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 YES. Have certificates of test results for machines under 100 kw. been submitted and approved YES. Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing YES. A.B.
 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. Are the lubricating arrangements of the generators as per Rule YES.
 Position of Generators FORE & AFT ON OPERATING PLATFORM STARBOARD SIDE. 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 axes 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 FORE & AFT. OPERATING PLATFORM OUTBOARD.
 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, non-ignitable non-absorbent materials YES. is all insulation of high dielectric strength and of permanently high insulation resistance YES. is it of an approved type YES. 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 YES. is the non-hygroscopic insulating material of an approved type 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. temperature rise of omnibus bars YES. individual fuses to voltmeter, pilot or earth lamp YES. are moving parts of switches alive in the "off" position NO. are all screws and nuts securing connections effectively locked YES. are any fuses fitted on the live side of switches NO. Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches FIVE BLADE SWITCH & CIRCUIT BREAKER.
 Are turbine driven generators fitted with emergency trip switch as per rule YES. Are cupboards or compartments containing switchboards composed of fire-resisting material or lined with approved material YES. Instruments on main switchboard 4 ammeters 4
 voltmeters NONE. synchronising device for paralleling purposes. For compound machines is the ammeter connected on the opposite pole to equaliser connection —
 Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system AMM IN POS. & NEG. LEADS
VOLTMETER TO GROUND. Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules YES. are the fusible cutouts of an approved type YES. Have the reversed



current protection devices been tested under working conditions. YES. Joint Boxes, Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule YES. 100 MULTICORE Cables: Single, twin, concentric, or multicore CABLE TWIN are the cables insulated and protected as per Tables IV, V, X or XI of the Rules YES. If the cables are insulated otherwise than as per Rule, are they of an approved type —. Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 3.367%. Cable Sockets, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets. YES. Paper Insulated and Varnished Cambric Insulated Cables, If conductors are paper or varnished cambric insulated, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound YES, or waterproof insulating tape 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. Are cables in machinery spaces, galleys, laundries, bathrooms and lavatories lead covered or run in conduit LEAD COVERED. Support and Protection of Cables, state how the cables are supported and protected STEEL CABLE HANGERS EVERY 15" AND STRAPPED WITH FORGED STEEL STRAPS EVERY 30". 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, are the cables and fittings in accordance with the special requirements YES. 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 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 PIPING / STEEL FLATBAR SUPPORTS. Earthing Connections, state what earthing connections are fitted and their respective sectional areas NEUTRAL TO GROUND - 300,000 CM. 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 EMERGENCY GENERATOR LOCATED PORT SIDE BRIDGE DECK - DIESEL 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 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. are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected EXPLOSION PROOF. FIXTURES (IN HOLDS AND TWEEN DECKS) how are the cables led OPEN. where are the controlling switches situated DECK ABOVE. are all fittings suitably ventilated YES, are all switches and lampholders constructed wholly of non-ignitable, non-absorbent materials YES. Heating and Cooking Appliances, are they constructed and fitted as per Rule YES, are air heaters constructed and fitted as per Rule NONE. Searchlight Lamps, No. of THREE, whether fixed or portable FIXED, 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 —, are their fittings as per Rule —. 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 axes 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 —, if not of this type, state distance of the combustible material horizontally or vertically above the motors — and — have machines of over 100 BHP been inspected by the Surveyors during manufacture and testing YES. Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed and fitted as per Rule YES. 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 — are all fuses of the filled cartridge type — are they of an approved type —. If portable lamps for use in dangerous spaces are supplied, are they of a self-contained, battery-fed type approved by the Home Office —. Spare Gear, if the vessel is for open sea service have spares been supplied as per Rule YES.

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	300	120/240	1250	1200	STEAM TURBINE	—	—		
AUXILIARY	1	15	120/240	67	1200	DIESEL ENGINE	Diesel Oil	185°		
EMERGENCY										
ROTARY TRANSFORMER										
GENERATOR, LIGHTING AND HEATING CONDUCTORS.										
DESCRIPTION.	No. per Pole.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
		Total Nominal Area per Pole Sq. Ins.	No.	Diameter.	Circuit.	Rule.				
MAIN GENERATOR	4	1.5088	37	.1162	1250	1832	40	40	VARNISH CAMBRIC LEAD	ARMOR
EQUALISER CONNECTIONS	2	.7844	37	.1162		916	40	40	"	"
AUXILIARY GENERATOR	1	.2356	37	.090	67	340	20	20	"	"
EMERGENCY GENERATOR										
ROTARY TRANSFORMER										
ENGINE ROOM LIGHTING	1	.0261	7	.0688	41.85	80	70	70	"	"
BOILER ROOM	1	.0261	7	.0688	62.5	80	20	20	"	"
AUXILIARY SWITCHBOARDS	1	.0261	7	.0688	62.5	80	20	20	"	"
ACCOMMODATION LIGHTING PANEL	1	.0829	19	.0745	47.3	160	240	240	"	"
LIGHTING PANEL	1	.1659	19	.1055	59.65	260	260	260	"	"
LIGHTING PANEL	1	.0829	19	.0745	27.04	160	650	650	"	"
WIRELESS	1	.0414	7	.0867	70	112	320	320	"	"
SEARCHLIGHT	1	.0130	7	.0486	8.7	50	360	360	"	"
MASTHEAD LIGHT	1	.0032	7	.0242	.87	14	560	560	RUBBER COVERED LEAD	ARMOR
SIDE LIGHTS	1	.0032	7	.0242	.87	14	180	180	"	"
COMPASS LIGHTS	3	.0032	7	.0242	6.5	14	80	80	"	"
POOP LIGHTS	NONE									
CARGO LIGHTS	1	.0261	7	.0688	20.43	80	320	320	VARNISH CAMBRIC LEAD	ARMOR
ARC LAMPS										
HEATERS										
MOTOR CONDUCTORS.										
DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Nominal Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
BALLAST PUMP										
MAIN BILGE LINE PUMPS										
GENERAL SERVICE PUMP										
EMERGENCY BILGE PUMP	2	1	.0164	7	.0385	20	30	130	VARNISH CAMBRIC LEAD	ARMOR
SANITARY PUMP	2	1	.0819	19	.0745	92	130	130	"	"
CIRC. SEA WATER PUMPS	2	1	.3922	37	.1162	160	458	458	"	"
CIRC. FRESH WATER PUMPS	2	1	.0134	7	.0486	29	50	80	VARNISH CAMBRIC LEAD	ARMOR
AIR COMPRESSOR	2	1	.0414	7	.0867	56	112	60	"	"
FRESH WATER PUMP	2	1	.0051	7	.0305	2.4	20	100	"	"
ENGINE TURNING GEAR	1	1	.0261	7	.0688	18.7	80	140	"	"
ENGINE REVERSING GEAR										
LUBRICATING OIL PUMPS	2	1	.0658	19	.0664	74	140	80	"	"
OIL FUEL TRANSFER PUMP	2	1	.0130	7	.0486	185	50	150	"	"
WINDLASS										
WINCHES, FORWARD										
WINCHES, AFT										
STEERING GEAR—										
(a) MOTOR GENERATOR	2	1	.1045	19	.0837	125	191	640	"	"
(b) MAIN MOTOR	2	1	.0658	19	.0664	53.5	160	260	"	"
WORKSHOP MOTOR	4	1	.0414	7	.0867	29	112	180	"	"
VENTILATING FANS	4	1	.0414	7	.0867	29	112	180	"	"

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All Conductors are of annealed copper conforming to British Standard Specification No. 7 (or International Electro-technical Commission Publication No. 28).

The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.

The foregoing is a correct description.

Electrical Engineers.

Date

COMPASSES.

Distance between electric generators or motors and standard compass 60 feet

Distance between electric generators or motors and steering compass 50 feet

The nearest cables to the compasses are as follows:—

A cable carrying 2.95 Amperes 10 feet from standard compass 10 feet from steering compass.

A cable carrying 8.7 Amperes 6 feet from standard compass 10 feet from steering compass.

A cable carrying 5 Amperes 6 feet from standard compass 6 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 6° degrees on SOUTH EAST course in the case of the standard compass, and — degrees on — course in the case of the steering compass.

Chief Shipbuilding Corp by [Signature] Builder's Signature.

Date

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.)

The electric installation of this vessel has been fitted on board in accordance with the Rules. The workmanship and materials are good. The generators and motors were surveyed by the American Bureau of Shipping. The cut-off switches were examined and found satisfactory. The complete installation has been satisfactorily tried out at full load and it is now in good and safe working condition and the vessel is eligible to receive a character in the Register Book.

Noted
L.S. Rodd
29/10/42

Total Capacity of Generators 615 Kilowatts.

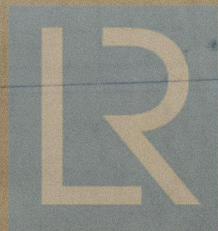
The amount of Fee ... \$ 238.00
When applied for, 19
When received, 19
Travelling Expenses (if any) £ : :

L.S. Rodd.
Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK SEP 23 1942

Assigned Elec. light.

3m534.—Transfer.
The Surveyors are requested not to write on or below the space for Committee's Minute.)



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