

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report Aug 12<sup>th</sup> 1937 When handed in at Local Office Aug 12<sup>th</sup> 1937 Port of Philadelphia  
 No. in Survey held at Chester Pa Date, First Survey May 10 Last Survey July 23 1937  
 Reg. Book. SS M.V. LOUISIANA Hull 163 Tons { Gross  
 on the SS M.V. LOUISIANA Yard No. 163 When built 1937  
 Built at Chester Pa By whom built Sim SB & DD Co Port belonging to Wilmington - Del  
 Owners The Texas Company Contract No. 163 When fitted 1937  
 Electric Light Installation fitted by Sim SB & DD Co  
 Is the Vessel fitted for carrying Petroleum in bulk Yes

System of Distribution 2 wire direct current - ungrounded.  
 Pressure of supply for Lighting 115 volts, Heating Direct Power 115 volts, Power Direct  
 Direct or Alternating Current, Lighting Direct  
 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  
 Are the lubricating arrangements of the generators as per Rule Yes  
 Position of Generators Port side on engine room flat, are they clear of all inflammable material Yes  
 is the ventilation in way of the generators satisfactory Yes  
 if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the generators Yes  
 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  
 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 Port side on engine room flat near generators, in same compartment  
 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 Yes  
 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 Yes  
 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 micamite 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 3 pole switches for line to generator, mid blade of switch is equalizer, single pole circuit breaker with overload, and reverse current protection.  
 Instruments on main switchboard 2 ammeters 2 voltmeters Ground lamps  
 Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system 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. *Single 9* are the cables insulated and protected as per Tables IV or V of the Rules *Yps*

**Fall of Pressure,** state maximum between bus bars and any point of the installation under maximum load *3 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 *Yps*

**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 *Cables are all varnish cambie insulated*

**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 *Yps*

**Support and Protection of Cables,** state how the cables are supported and protected *supported on steel structure with cable straps*

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

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

**Joints in Cables,** state if any, and how made, insulated, and protected *made in cast has watertight junction boxes soldered & taped.*

**Watertight Glands and Deck Tubes,** are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands *Yps*

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

**Earthing Connections,** state what earthing connections are fitted and their respective sectional areas *Yps*, are their connections made as per Rule *Yps*

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

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

**Navigation Lamps,** are these separately wired *Yps*, controlled by separate switch and separate fuses *Yps*, are the fuses double pole *Yps*, are the switches and fuses grouped in a position accessible only to the officers on watch *on bell tale panel in wheel house.* *Yps* has each navigation lamp an automatic indicator as per Rule *Yps*

**Secondary Batteries,** are they constructed and fitted as per Rule *Yps*

**Fittings,** are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, watertight *Yps* 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 installed.* *Yps* are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected *Vapour proof fittings* *Yps*, how are the cables led *lead & armoured cable used.* *Yps* where are the controlling switches situated *outside of the space.* *Yps*

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

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

**Motors,** are their working parts readily accessible *Yps*, are the coils self-contained and readily removable for replacement *Yps*, are the brushes, brush holders, terminals and lubricating arrangements as per Rule *Yps*, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material *Yps*, are they protected from mechanical injury and damage from water, steam or oil *Yps*, are their axes of rotation fore and aft *Yps*, 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 *Yps*, if not of this type, state distance of the combustible material horizontally or vertically above the motors *Yps* and *Yps*

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

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

**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 *Yps* *Yps*

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

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	80	170	400	1800	Steam turbine	-	-	
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.	Dia.	In Circuit.	Rule.			
MAIN GENERATOR ... ..	1	4715	61	99.2	400	460	30	Varnish Cambie Lead & armoured	
EQUALISER CONNECTIONS	1	4715	61	99.2	400	460	30	"	"
AUXILIARY GENERATOR ... ..									
EMERGENCY GENERATOR									
ROTARY TRANSFORMER } MOTOR GENERATOR ... ..									
ENGINE ROOM ... ..	1	0658	19	66.4	56	141	20	"	"
BOILER ROOM ... ..									
AUXILIARY SWITCHBOARDS									
Navigation lights	1	0082	7	38.5	2.2	38	500	"	"
Forecastle	1	"	"	"	15.6	"	700	"	"
fore pump room	1	"	"	"	9.6	"	600	"	"
fore " "	1	"	"	"	9.6	"	400	"	"
Missile quarters	1	0414	"	86.7	82.2	94	100	"	"
ACCOMMODATION									
fore quarters	1	0261	"	68.8	61.2	78	100	"	"
upper deck	1	0261	"	68.8	41.3	78	150	"	"
fore quarters	1	0261	"	68.8	41.3	78	150	"	"
fore deck	1	0130	"	48.6	31.0	51	450	"	"
WIRELESS ... ..	1	0082	"	38.5	10.0	38	500	"	"
SEARCHLIGHT ... ..	1	0032	"	24.2	5	11.6	300	"	"
MASTHEAD LIGHT ... ..	1	"	"	"	"	"	100	"	"
SIDE LIGHTS ... ..	1	"	"	"	"	"	20	"	"
COMPASS LIGHTS ... ..	1	"	"	"	"	"			
POOP LIGHTS ... ..									
CARGO LIGHTS									
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 Effective Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
Condenser Condensate	1	1	0206	7	61.2	42.2	68	100	Varnish Cambie Lead & armoured	
Fore pump	1	1	0082	7	38.5	17.2	38	80	"	"
Main Bilge Line Pump	1	1	0082	7	38.5	17.2	38	150	"	"
Fore pump	1	1	0082	7	38.5	17.2	38	150	"	"
GENERAL SERVICE PUMP										
EMERGENCY BILGE PUMP	1	1	0206	7	61.2	42.2	68	80	"	"
SANITARY PUMP ... ..	1	1	0206	7	61.2	42.2	68	80	"	"
CIRC. SEA WATER PUMPS										
CIRC. FRESH WATER PUMPS										
AIR COMPRESSOR ... ..	1	1	0082	7	38.5	25	38	60	"	"
FRESH WATER PUMP ... ..	1	1	1318	19	94.0	24	226	70	"	"
ENGINE TURNING GEAR ... ..										
ENGINE REVERSING GEAR										
LUBRICATING OIL PUMPS										
OIL FUEL TRANSFER PUMP ... ..										
WINDLASS ... ..										
WINCHES, FORWARD	1	1	0082	7	38.5	13.2	38	250	"	"
pump room blow fore	1	1	0082	7	38.5	13.2	38	200	"	"
WINCHES, AFT	1	1	0082	7	38.5	13.2	38	200	"	"
pump room blow missile	1	1	0082	7	38.5	13.2	38	200	"	"
STEERING GEAR										
(a) MOTOR GENERATOR ... ..										
(b) MAIN MOTOR ... ..	3	1	0130	7	48.6	43.6	51	100	"	"
WORKSHOP MOTOR ... ..	4	1	0032	7	24.2	7.0	11.6	100	"	"
VENTILATING FANS ... ..	1	1	0082	7	38.5	17.2	38	100	"	"
Fore pump	1	1	0658	19	66.4	78.0	141	100	"	"
Fore pump	1	1	0658	19	66.4	78.0	141	100	"	"
Fore pump	1	1	0206	7	61.2	42.2	68	"	"	"
Fore pump	1	1	"	7	"	"	"	"	"	"
Fore pump	1	1	"	7	"	"	"	"	"	"
Fore pump	1	1	"	7	"	"	"	"	"	"

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*The foregoing is a correct description.*

Date \_\_\_\_\_

## COMPASSES.

300 ft

290 ft

*The nearest cables to the compasses are as follows:—*

 $\frac{1}{2}$ 

Ampères

feet from standard compass

24

feet from steering compass.

10

Ampères.

feet from standard compass

10

feet from steering compass.

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*

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted.

The maximum deviation due to electric currents was found to be \_\_\_\_\_ degrees on \_\_\_\_\_ course in the case of the standard

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

Sun Shipbuilding & Dry Dock Co.  
Builder's Signa

*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.)

All precautions have been taken to make the installation as safe as possible. The electric cables are all varnish cambie insulated, leaded & woven bronze armoured. The cables are all well protected against mechanical injury. All fittings & fixtures are of brass. The installation has been satisfactorily installed on board the vessel, tried out under full power with satisfactory results.

noted

WBS 10/9/37

Total Capacity of Generators.....100. Kilowatts.

The amount of the ... .. \$ 162.00

Travelling Expenses (if any) £

When applied for,

12 Aug. 1937

When received,

22/10/2

Surveyor to Lloyd's Register of Shipping.

NEW YORK AUG 25 1937

Committee's Minute

Assigned Elec. light