

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office.....

Date of writing Report 10 When handed in at Local Office 10 Port of SAN FRANCISCO, CAL.

No. in Survey held at Boston, Mass + San Francisco Date, First Survey 7 April Last Survey 3 June 1932
Reg. Book. (Number of Visits.....)

#1281 on the T.W.S.C. s/s MONTEREY Tons { Gross 18017 Net 10580

Built at Quincy, Mass. By whom built Bethlehem S. B. Corp. Yard No. 1441 When built 1932

Owners Oceanic S. S. Co. Port belonging to SAN FRANCISCO.

Electric Light Installation fitted by Bethlehem S. B. Corp. Contract No. 1441 When fitted 1932

System of Distribution 3 WIRE GROUNDED NEUTRAL

Pressure of supply for Lighting 115 volts, Heating 230 volts, Power 230 volts.

Direct or Alternating Current, Lighting D.C. Power D.C.

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 Shunt wound

are they over compounded 5 per cent. ✓, if not compound wound state distance between each generator abt 8'-0

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

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 in Generator 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 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 Generator 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. ✓

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, if semi-insulating material is used, are all conducting parts insulated from the slab with mica or micawite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework. ✓, 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.

Circuit Breaker a 3 pole Pole Switch for each Generator. Each outgoing circuit has 2 pole or 3 pole Pole Switch. No equalisers

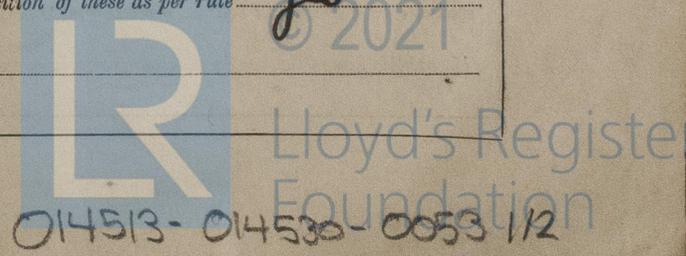
Instruments on main switchboard 8 ammeters 4 voltmeters / synchronising device for paralleling purposes.

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

GROUND DETECTOR LAMPS & METER

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



ALL TYPES USED 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 **5%**

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 **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**

Support and Protection of Cables, state how the cables are supported and protected **ALL ARMORED, OR ARMORED & LEADED OR LEADED. SUPPORTED AS PER RULE**

If cables are run in wood casings, are the casings and caps secured by screws **yes**, are the cap screws of brass **yes**, are the cables run in separate grooves **yes**. If armored 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 **yes**

Joints in Cables, state if any, and how made, insulated, and protected **SOLDERED TAPED & MADE IN METAL JUNCTION BOXES**

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 unarmored cables pass through beams and non-watertight partitions, are the holes efficiently bushed **yes** state the material of which the bushes are made **yes**

Earthing Connections, state what earthing connections are fitted and their respective sectional areas **GROUNDING NEUTRAL AT SWITCHBOARD**

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 **30 KW set on D deck direct driven by Oil Engine, + controlled from boards on D deck. Also storage battery**

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 storerooms and engine rooms and where 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 **Fitted high up + protected by heavy glass globes + wire guards** 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 **yes**

where are the controlling switches situated **yes**

Searchlight Lamps, No. of **2**, 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 **yes**, are their fittings as per Rule **yes**

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

Control Gear and Resistances, are the generator field and motor speed regulators, starle's and controllers constructed and fitted as per Rule **YES**

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	4	500	230/115	2080	1200	Scotch Steam Turbines		
AUXILIARY								
EMERGENCY	1	30	115	260		OIL ENGINE	Oil	Above 150° F
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. Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR	4	.785	61	.128	2080	50	VARISHED CANBRIC	Leadless Armored
	EQUALISER CONNECTIONS	2000							
	AUXILIARY GENERATOR	1	.235	37	.09	260	20	4	L + a
	EMERGENCY GENERATOR	1	.235	37	.09	260	20	4	L + a
	ROTARY TRANSFORMER								
	AUXILIARY SWITCHBOARDS								
	ENGINE ROOM	2	.022	7	.061	83			L + a
	BOILER ROOM	4				48			L + a
	ACCOMMODATION								
	WIRELESS	1	.055	19	.056	100	700		
	SEARCHLIGHT	1	.003	7	.024	8	60		
	MASTHEAD LIGHT	2					200		
	SIDE LIGHTS	2					50		
	COMPASS LIGHTS	1					50		
	POOP LIGHTS								No POOP
	CARGO LIGHTS								PLEASE SEE PLAN
	ARC LAMPS								NONE
	HEATERS								PLEASE SEE PLAN

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. am. amp.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP	2	.035	7	.08	60	350		
	MAIN BILGE LINE PUMPS								
	GENERAL SERVICE PUMP								
	EMERGENCY BILGE PUMP	1	.170	19	.108	60	100		
	SANITARY PUMP	2	"	"	"	220	150		
	CIRC. SEA WATER PUMPS	2	.055	"	.056	74	170		
	CIRC. FRESH WATER PUMPS								
	AIR COMPRESSOR								
	FRESH WATER PUMP	2	.035	7	.08	55	70		
	ENGINE TURNING GEAR	2	.014	7	.048	35	180		
	ENGINE REVERSING GEAR								
	LUBRICATING OIL PUMPS	4	.035	7	.08	60	200		
	OIL FUEL TRANSFER PUMP	2	.235	37	.09	280	120		
	WINDLASS	2	.170	19	.108	180	50		
	WINCHES, FORWARD	6	.785	61	.128	1000	1000		
	WINCHES, AFT	4	.510			640	500		
	STEERING GEAR								
	(a) MOTOR GENERATOR								
	(b) MAIN MOTOR	2	.170	19	.108	260	750		
	WORKSHOP MOTOR	9	.105	19	.056	125	100		
	VENTILATING FANS	74							PLEASE SEE PLAN

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.

BETHLEHEM S. B. CORP^Y

Electrical Engineers.

Date 9 May 1932

COMPASSES.

Distance between electric generators or motors and standard compass alt 300 feet

Distance between electric generators or motors and steering compass " "

The nearest cables to the compasses are as follows:—

A cable carrying 1/2 Ampères alt 6 feet from standard compass alt 6 feet from steering compass.

A cable carrying 5 Ampères alt 15 feet from standard compass alt 15 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 _____ degrees on _____ course in the case of the standard compass, and _____ degrees on _____ course in the case of the steering compass.

BETHLEHEM S. B. CORP^Y

J. W. Mahan
one President

Builder's Signature.

Date 9 May 1932

Is this installation a duplicate of a previous case YES If so, state name of vessel MARIPOSA San Francisco Reg 6623

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

The electric installation of this vessel has not been fitted under Special Survey but it has been examined + tried at full load + found to comply with the Rules + approved plans, + the workmanship + material are good.

It is now in good + safe working condition + eligible, in our opinion, to receive the notation ELEC. LIGHT in the Register Book

It is submitted that this vessel is eligible for the notation Elec. light.
J. S. Heck
29/6/32

Total Capacity of Generators 2000 Kilowatts. MAIN EMERGENCY.
30

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

J. S. Archbold John S. Heck
Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK JUN 15 1932

Assigned Elec. light

Im. 1.26.—Transfer. (The Surveyors are requested not to write on or back the space for Committee's Minutes.)

