

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

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19

Port of NEW YORK.

No. in Survey held at Quincy, Mass.: Date, First Survey July 7<sup>th</sup> Last Survey Oct. 8<sup>th</sup> 1954.  
Reg. Book.

(No. of Visits CONC.)

on the steel, screw, steamer "Master Peter"

Tons { Gross 18,763.  
Net 11,609.

Built at Quincy, Mass: By whom built Bethlehem Steel Co. Yard No. 1635 When built 1954.

Owners Bilbao Compania Nau. SA. Port belonging to Panama, R. P.

Installation fitted by Bethlehem Steel Co. When fitted 1954

Is vessel equipped for carrying Petroleum in bulk Yes Is vessel equipped with D.F. Yes E.S.D. Yes Gy.C. Yes Sub.Sig. - Radar Yes

Plans, have they been submitted and approved Yes Three phase, three wire, for power & lighting feeders.  
System of Distribution Voltage of Lighting 117.

Teating 230 Power 450 D.C. or A.C., Lighting A.C. Power A.C. If A.C. state frequency 60 cycles.

Prime Movers, has the governing been found as per Rule when full load is thrown on and off Yes Are turbine emergency governors fitted with a trip switch Yes Generators, are they compound wound —, and level compounded under working conditions —,

if not compound wound state distance between generators — and from switchboard — Are the generators arranged to run in parallel Yes Exciter, are shunt field regulators provided Yes Is the compound winding connected to the negative or positive pole — Yes, to A.I.E.E. standards

Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing — Have certificates of A.I.E.E. standards test for machines under 100 kw. been supplied — and the results found as per Rule —

Position of Generators after end of engine room on 20'-6" flat.

is the ventilation in way of generators satisfactory Yes are they clear of inflammable material and protected from mechanical injury and damage from water, steam and oil Yes. Switchboards, where are main switchboards placed starboard side 20'-6"  
flat at after end of engine room.

are they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water, steam and oil Yes, what insulation is used for the panels dead front, grounded, if of synthetic insulating material is it an Approved Type —, if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule — Is the construction as per Rule, including locking of screws and nuts Yes. Description of Main Switchgear for each generator and arrangement of equaliser switches Three pole circuit breaker with overload and reverse power trips.

and the switch and fuse gear (or circuit breakers) for each outgoing circuit two and three pole (thermal overload &amp; magnetic short circuit) circuit breakers

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes Instruments on main switchboard two ammeters two voltmeters one synchronising devices. For compound machines in parallel are the ammeters and reversed current protection devices connected on the pole opposite to the equaliser connection — Earth Testing, state means provided ground detecting lamps

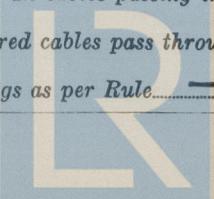
R.I.E.E. standards Switches, Circuit Breakers and Fuses, are they as per Rule —, are the fuses an Approved Type —, make of fuses stand: N.E.C. fuses, are all fuses labelled Yes. If circuit breakers are provided for the generators, at what overload do they operate 825 amps, and at what current do the reversed current protective devices operate 20 K.W.

Joint Boxes, Section Boards and Distribution Boards, is the construction as per Rule A.I.E.E. standards

A.I.E.E. stand: Cables, are they insulated and protected as per Rule —, if otherwise than as per Rule are they of an Approved Type —, state maximum fall of pressure between bus bars and any point under maximum load 2.95%, are the ends of all cables having a sectional area of 0.01 square inch and above provided with soldering sockets Yes. Are all paper insulated and varnished cambric insulated cables sealed at the ends Yes. Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil, high temperatures or risk of mechanical damage Yes. Are any cables laid under machines or floorplates No. if so, are they adequately protected —

Are cables in machinery spaces, galleys, laundries, etc., lead covered Yes. or run in conduit — or of the "HR" type — State how the cables are supported or protected in brass pipe on fore and after walkway, clipped to joiner work in quarters and on steel hangers in machinery spaces

Are all lead sheaths, armouring and conduits effectually bonded and earthed Yes. Are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands Yes. where unarmoured cables pass through beams, etc., are the holes effectively bushed — Refrigerated chambers, are the cables and fittings as per Rule —



Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule Yes. Emergency Supply, state position  
**Emergency generator & switchboard, situated at after end engine room, starboard side 32'-6" flat**  
 A.I.E.E. standards  
 Navigation Lamps, are they separately wired Yes, controlled by separate double pole switches and fuses. Are the switches and fuses in a position accessible only to the officers on watch Yes, is an automatic indicator fitted Yes. Is an alternative supply provided Yes.  
 Secondary Batteries, are they constructed and fitted as per Rule —, are they adequately ventilated —  
 state battery capacity in ampere hours —  
 Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof Yes.  
 Are any fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present No  
 if so, how are they protected pump room lighted by fitting located & wired in engine room  
 and where are the controlling switches fitted outside pump room All fittings suitably ventilated Yes.  
 Searchlight Lamps, No. of one, whether fixed or portable fixed, are they of the carbon arc or of the filament type filament  
 Heating and Cooking, is the general construction as per Rule A, are the frames effectually earthed Yes, are heaters in the accommodation of the convection type —  
 Motors, are all motors constructed and installed as per Rule and placed in well-ventilated compartments in which inflammable gases cannot accumulate and protected from damage from water, steam and oil A.I.E.E. standards  
 Are motors coupled to oil fuel transfer and pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment Yes. Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing A.I.E.E. standards  
 Have certificates of test for motors under 100 BHP intended for essential sea services been supplied and the results found as per Rule A.I.E.E. standards  
 Control Gear and Resistances, are they constructed and fitted as per Rule A, Lightning Conductors, where required are they fitted as per Rule —  
 Ships carrying Oil having a Flash Point less than 150° F. Have all the special requirements of the Rules for such ships been complied with A.I.E.E. standards, are all fuses of an Approved Cartridge Type Yes, make of fuse standard NEC. Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships Yes. Are the cables lead covered as per Rule Yes.  
 E.S.D., if fitted state maker Bludworth, location of transmitter at frame 49½ starboard and receiver frame 49½ port.  
 Spare Gear, if the vessel is for open sea service have spares been provided as per Rule and suitably stored in dry situations Yes.  
 Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory Yes.

#### PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	MAKER.	RATED AT				TYPE.	MAKER.
			Kilowatts per Generator.	Volts.	Ampères.	Revs. per Min.		
MAIN ...	2		400	450	641	1200	Turbine	Westinghouse.
EMERGENCY ROTARY TRANSFORMER	1			75	450	120	1200 Diesel	Cummings Diesel.

#### GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.			MAXIMUM CURRENT IN AMPERES. A.I.E.E.	APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
		No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands Sq. ins. or sq. mm.	In the Circuit.				
MAIN GENERATOR ...	400	3	·7068	641,837	66	V.C	Lead + basket weave armoured.	
" " EQUALISER ...								
EMERGENCY GENERATOR ...	75.0	1	·1045	120,158	50			
ROTARY TRANSFORMER: MOTOR	7.5	1	·0051	10.5	22	70		Do.
" " GENERATOR...	5.0	1	·0206	41.0	55.5	66		

#### MAIN DISTRIBUTION CABLES (to Section Boards, Distribution Fuse Boards, etc.).

DESCRIPTION.								
Main switchboard to fore switchboard	1	·1045	57.6	158	850			
" " " Emergency " P.O.1	1	·1045	31.6	158	40			
Emergency " " forward " E.P.O.1	1	·0206	12.9	55.5	820			
Machine shop panel P.45	1	·0130	22.9	41	40			
Boiler room panel P.43	1	·0051	1.7	22	150			
Galley power panel P.44	1	·0521	44.3	99	210			
After quarters Vent. panel P.46	1	·0130	18.3	41	90			
Machinery space P.47	1	·0521	59.0	99	240			
Shore connection P.O.4	1	·1659	200.0	217	300			

LIGHTING, HEATING, WIRELESS, NAVIGATION LIGHTS, ETC., CABLES.								
DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.	APPENDIX LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.		
	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands Sq. ins. or sq. mm.	In the Circuit.	Rule.				
Upper deck lighting L.2	1	·1045	52.4	158	160	V.C.	Lead + basket weave armoured.	
Poop " L.3	1	·0521	44.7	99	180			
Engine room " L.4	1	·0521	45.7	99	30			
Boiler room " L.5	1	·0521	30.0	99	210			
Midship " L.101	1	·0521	55.8	99	110			
Forecastle " L.102	1	·0206	5.2	55.5	420			
After quarters emerg: Lighting E.L.1	1	·0130	11.7	41	150			
Engine room " E.L.2	1	·0051	13.0	22	30			
Engine room + Boiler rm: " E.L.3	1	·0051	8.4	22	200			
Radar E.L.102	1	·0130	12.0	41	80			
Navigation light panel E.L.101	1	·0082	2.6	30	90			
Radio E.P. 101	1	·0051	4.4	22	110			
Echo sounder E.S.	1	·0051	3.5	22	-			
Lighting transformers E.merg.	1	·0206	49.7	55.5	50		Do.	
3 galley ranges (each)	1	·0521	69.8	99	40			
After pump room lighting L.1	1	·0130	5.2	41	-			
Midship emergency " E.L.104	1	·0206	20.9	55.5	90			
Masthead	1	·0032	·52	11.5	360	R.I.		
Side lights	1	·0032	·52	11.5	70	R.I.		
Cargo lighting forward L.103	1	·0051	10.4	41	360	V.C.		
Fwd. pump room L.104	1	·0082	2.6	30	410			
Cargo lighting aft. L.105	1	·0051	5.2	22	-			
Electric whistle control W.	1	·0051	1.0	22	-			
Emergency gen: heaters E.L.4	1	·0051	4.3	22	50			

MOTOR CABLES.								
ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.						
Main condenser circ. pump	1	125	1	·1659	155	217	310	
Prs forced draught blower (ea)	2	83	1	·1659	100	217	240	
Fire + gen. service pump	1	50	1	·0521	59.5	99	200	
Fuel oil transfer pump	1	30	1	·0521	39	99	330	
Fd. + aft. lub. oil service pump (ea)	2	25	1	·0206	31	55.5	90	
Air compressor	1	25	1	·0206	31	55.5	260	
In. + outboard main condenser	2	20	1	·0130	25	41	290	
Atmos. ext. cond. circ. pump	1	20	1	·0130	25	41	270	
Fd. + aft. water service pumps (ea)	2	15	1	·0130	20	41	250	
Mid. + out'd fuel oil service "	2	15	1	·0130	20	41	360	
Bilge + ballast pumps	1	15	1	·0130	20	41	310	
Fd. + aft. aux. cond. circ. pumps (ea)	2	10	1	·0051	13	22	120	
" " " condensate " (ea)	2	10	1	·0051	18	22	120	
Ind + out'd condensate drain	2	7.5	1	·0051	10	22	260	
Sanitary pump	1	7.5	1	·0051	10	22	240	

