

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

14 JUN 1928

Received at London Office

Date of writing Report

19

When handed in at Local Office

13 JUN 1928

Port of

NEWCASTLE-ON-TYNE

No. in Survey held at Newcastle.

Date, First Survey April 19th Last Survey April 30th 1928

Reg. Book. Supp.

(Number of Visits 3)

39869. on the S.S. "Apure"

Tons { Gross 3164.
Net

Built at Newcastle.

By whom built Palmer & Co. Ltd.

Yard No. 982 When built 1928

Owners Venezuela Gulf Oil Co. Ltd.

Port belonging to Maracaibo

Electric Light Installation fitted by Palmer & Co. Ltd.

Contract No. 982. When fitted 1928.

System of Distribution

Double wire

Pressure of supply for Lighting

110

volts, Heating

volts, Power

volts.

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 no, 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 Engine room 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 Engine room starboard side

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 micanite 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

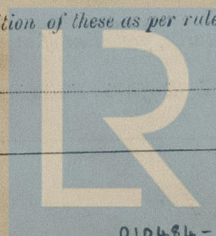
switch & double pole fuses on dynamo & on each outgoing circuit

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.

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



Lloyd's Register Foundation

010484-010494-0419/2

Cables: Single, twin, concentric, or multicore. single. 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 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, uplakes or other hot objects, or to avoidable risk of mechanical damage —.

Support and Protection of Cables, state how the cables are supported and protected Lead covered braided cables supported by iron clips in machinery spaces. Main cables carried in pipes along expansion trunk.

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 —.

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected. yes in pump room in gas tight fittings having well glasses & metal guards, how are the cables led in gas tight pipe.

where are the controlling switches situated outside pump room entrance.

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

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 axes 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 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.

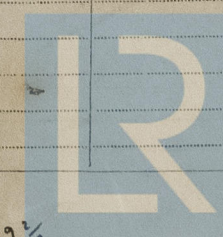
DESCRIPTION OF GENERATOR.	No of	RATED AT			Revs. per Min.	DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE	
		Kilowatts.	Volts.	Amperes.			Fuel Used.	Flash Point of Fuel.
MAIN ...	1	12	110	109	360	Single cylinder steam engine.		
AUXILIARY ...								
EMERGENCY ...								
ROTARY TRANSFORMER								

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor, Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current, Amperes.	Approximate Length, (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	2	.1165	37	.064	109	70	V. I. R.	Lead core braided
	EQUALISER CONNECTIONS ...								
	AUXILIARY GENERATOR ...								
	EMERGENCY GENERATOR ...								
	ROTARY TRANSFORMER...								
	AUXILIARY SWITCHBOARDS ...								
	ENGINE ROOM ... }								
	BOILER ROOM ... }	2	.00455	7	.029	9.29	102	50	Lead core braided
	ACCOMMODATION ... }	2	.01462	7	.052	33.96	96	50	50
	Deck lighting	2	.06	19	.064	28.0	420	50	50
	Navigation	2	.00701	7	.026	6.0	620	50	50
	WIRELESS ...	2	.01462	7	.052	13.5	520	50	50
	SEARCHLIGHT ...	2	.00299	3	.036	5.0	40	50	50
	MASTHEAD LIGHT...	2	.00299	3	.036	9	300	50	50
	SIDE LIGHTS ...	2	.00194	3	.029	9	114	50	50
	COMPASS LIGHTS ...	2	.00194	3	.029	2.25	56	50	50
	Stem LIGHTS ...	2	.00299	3	.036	9	533	50	50
	CARGO LIGHTS ...	2	.003	70	.0076	3.0	60	50	Specially arm flexible
	ARC LAMPS ...								
	HEATERS ...								

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor, Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current, Amperes.	Approximate Length, (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	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.

W. Palmer
Palmer S. & I. Co. Ltd.

Electrical Engineers.

Date 11/6/28

COMPASSES.

Distance between electric generators or motors and standard compass 120 feet.

Distance between electric generators or motors and steering compass 110 feet.

The nearest cables to the compasses are as follows:—

A cable carrying 25 Ampères on the feet from standard compass 8 feet from steering compass.

A cable carrying 25 Ampères 8 feet from standard compass on the 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 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.

Palmer's Shipbuilding & Iron Co., Ltd.

Ab Jenkins
Shipyard Manager.

Builder's Signature.

Date 11th June 1928.

Is this installation a duplicate of a previous case yes. If so, state name of vessel batatumba

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

The above installation is in accordance with the Society's Rules. The vessel is eligible in my opinion for notation Elec Light Wireless

It is submitted that
this vessel is eligible for
THE RECORD. Elec. Light.

(S)

16/6/28.

Total Capacity of Generators 12 Kilowatts.

The amount of Fee ... £ 12: - : 12-5-1928

Travelling Expenses (if any) £ : : 26-5-1928

W.T. Badger

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Elec Light



© 2021

Lloyd's Register
Foundation