

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 20 NOV 1930

Date of writing Report 19... When handed in at Local Office 18/11/19... 10 Port of Antwerp

No. in Survey held at Hoboken Date, First Survey 22/8/30 Last Survey 31-10-1930
 Reg. Book. (Number of Visits... 7)

on the Steel Twin S Turbine S. "Prince Charles" Tons { Gross
 Net

Built at Hoboken By whom built Chant. Nav. John. Cockfield No. 643 When built 1930.11

Owners Belgian Government Port belonging to Ostend

Electric Light Installation fitted by Electro havale et Industrielle Contract No. When fitted 1930

Is the Vessel fitted for carrying Petroleum in bulk no

System of Distribution Compound wound direct current.

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

Direct or Alternating Current, Lighting Direct Power 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 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 On special platform at entrance of Engine 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 On after part of generator platform.
 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 60x8 mm, individual fuses to voltmeter, pilot or earth lamp lamp, connections of switches Yes

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches For each generator one double pole circuit breaker - Maximum and minimum - arranged with a secondary one pole switch on the equalising bar as per instructions

Instruments on main switchboard six ammeters three voltmeters three 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 six test earthing lamps.

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 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 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 sheet plating with clips with brass screws and galvanised deck pipes

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 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 -

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 state the material of which the bushes are made fibre and lead

Earthing Connections, state what earthing connections are fitted and their respective sectional areas -

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 watertight fittings protected with brass 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 gas-tight fittings with brass guards

with galvanised clips and brass screws how are the cables led

where are the controlling switches situated outside of these spaces

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 -, 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 yes, 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 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.

Table with columns: DESCRIPTION OF GENERATOR, No of, RATED AT (Kilowatts, Volts, Amperes, Revs. per Min.), DRIVEN BY, WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE (Fuel Used, Flash Point of Fuel). Includes MAIN, AUXILIARY, EMERGENCY, ROTARY TRANSFORMER.

GENERATOR, LIGHTING AND HEATING CONDUCTORS.

Table with columns: DESCRIPTION, CONDUCTORS (No. per Pole, Total Effective Area per Pole Sq. Ins.), COMPOSITION OF STRAND (No., Diameter), TOTAL MAXIMUM CURRENT (In Circuit, Rule), Approximate Length (Lead and Return) Feet, Insulated with, HOW PROTECTED. Includes MAIN GENERATOR, EQUALISER CONNECTIONS, AUXILIARY GENERATOR, EMERGENCY GENERATOR, ROTARY TRANSFORMER, ENGINE ROOM, BOILER ROOM, AUXILIARY SWITCHBOARDS, accommodation Deck, Searchlight, WIRELESS, SEARCHLIGHT, MASTHEAD LIGHT, SIDE LIGHTS, COMPASS LIGHTS, POOP LIGHTS, CARGO LIGHTS, ARC LAMPS, HEATERS.

MOTOR CONDUCTORS.

Table with columns: DESCRIPTION, No. of Motors, CONDUCTORS (No. Per Pole, Total Effective Area per Pole Sq. Ins.), COMPOSITION OF STRAND (No., Diameter), TOTAL MAXIMUM CURRENT (In Circuit, Rule), Approximate Length (Lead and Return) Feet, Insulated with, HOW PROTECTED. Includes 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, Thermotank.

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Lloyd's Register Foundation

004556-004563-0092

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.

A. Miley

Electrical Engineers.

Date 13-11-30

COMPASSES.

Distance between electric generators or motors and standard compass 75 feet

Distance between electric generators or motors and steering compass 75 feet

The nearest cables to the compasses are as follows:—

A cable carrying	3	Ampères	15	feet from standard compass	9	feet from steering compass.	Navigation
A cable carrying	4	Ampères	15	feet from standard compass	9	feet from steering compass.	accommodation
A cable carrying	4	Ampères	15	feet from standard compass	9	feet from steering compass.	Compan. Telegraph

Have the compasses been adjusted with and without the electric installation at work at full power Yes with and without

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. See attached

Compan adjusters report.



Builder's Signature.

Date 17-11-1930

Is this installation a duplicate of a previous case Yes If so, state name of vessel H. Pine, Astrid, Pine Log off.

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

This installation has been fitted and tried under my supervision the materials and workmanship are good and eligible in my opinion to be recorded "Electric light and wireless" in the Register Book.

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

AS
27/11/30.

Total Capacity of Generators _____ Kilowatts.

The amount of Fee ...	£ 93.19	When applied for,	12/11/30
Travelling Expenses (if any) £	:	When received,	5-12-30

J. L. Raboy
Surveyor to Lloyd's Register of Shipping.

Committee's Minute _____
Assigned _____

1m, 12, 23.—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)