

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL) 15 MAY 1930

Received at London Office

Date of writing Report 14 May 1930 When handed in at Local Office 14 May 1930 Port of Southampton

No. in Survey held at Cowes Date, First Survey 17 March Last Survey 2 May 1930
Reg. Book. (Number of Visits... 5)

40889 on the Paddle Tug Steamer "JOHN BENN" Tons { Gross Net

Built at Cowes By whom built J. Samuel White & Co. Ltd. No. 1685 When built 1930

Owners London County Council Port belonging to London

Electric Light Installation fitted by J. Samuel White & Co. Ltd. Contract No. 1685 When fitted 1930

Is the Vessel fitted for carrying Petroleum in bulk no

System of Distribution 2 wire

Pressure of supply for Lighting 100 volts, Heating volts, Power volts.

Direct or Alternating Current, Lighting D.C. 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 , 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 Upper (central) platform in 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 no (Transverse) 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 Upper (central) platform in Engine 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 micanite 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

1. Q.B. D.P. Switch & D.P. fuses for Generators.

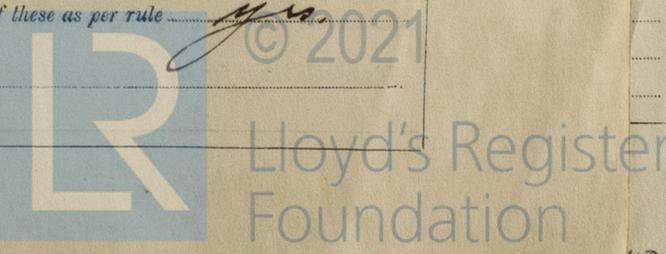
1. do do do do for each outgoing circuit

Instruments on main switchboard 1 ammeters 1 voltmeters 1 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

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 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 *210 lbs.*

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 *clips L.C. & armoured*

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 *yes*

Joints in Cables, state if any, and how made, insulated, and protected *yes*

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 *all fittings earthed by wire 0.12"*

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 *yes*

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 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 *yes*

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*

how are the cables led *yes*

where are the controlling switches situated *yes*

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

Arc Lamps, other than searchlight lamps, No. of *yes*, 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, 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, Ampères, Revs. per Min.), DRIVEN BY, WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE (Fuel Used, Flash Point of Fuel).

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, AMPERES), Approximate Length (Lead and Return) Feet, Insulated with, HOW PROTECTED.

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, AMPERES), Approximate Length (Lead and Return) Feet, Insulated with, HOW PROTECTED.

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.

Electrical Engineers. Date _____

COMPASSES.

Distance between electric generators or motors and standard compass _____

Distance between electric generators or motors and steering compass _____

The nearest cables to the compasses are as follows:—

A cable carrying 8 Ampères _____ feet from standard compass 6 feet from steering compass.

A cable carrying 5 Ampères _____ feet from standard compass 3 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 _____

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.

For J. Samuel White & Company Ltd.

W. H. ...
 Managing Director.

Builder's Signature.

Date 13.5.30.

Is this installation a duplicate of a previous case _____ If so, state name of vessel _____

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

The Electric Fittings have been installed on board this vessel in accordance with the requirements of the Rules & tested with satisfactory results.

The workmanship and materials are good.

The vessel is eligible, in my opinion, for the notation

"Electric Light"

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

Elec Light
 27/5/30.

J. H. Millan self
L. D. Home

Surveyor to Lloyd's Register of Shipping.

Total Capacity of Generators 5 Kilowatts.

The amount of Fee ... £ 5: : When applied for, 14.5.7.19.30.

Travelling Expenses (if any) £ : : When received, 14.6.19.30.

Committee's Minute TUE. 20 MAY 1930

Assigned Elec Light

1m, 12, 28.—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)



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