

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

21 JUL 1928

Received at London Office

Date of writing Report 19 When handed in at Local Office 20 JULY 1928 Port of NEWCASTLE ON TYNE SUNDERLAND.

No. in Survey held at Sunderland. Date, First Survey June 12 Last Survey 29 June 1928
Reg. Book. Supp. (Number of Visits 5)

41684 on the S.S. Stanfair

Tons { Gross 4966
Net 2985
When built 1928

Built at Sunderland. By whom built Bastram & Sons Yard No.

Owners Wimborne S.S. Co. Ltd. Port belonging to London

Electric Light Installation fitted by Messrs Campbell, Isherwood & Co. Ltd. Contract No. 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 —, 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 on aft bulkhead

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

fuses on dynamo mains. Single pole switch + double pole fuses 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



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 4.0 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 Lead covered twin cables in track in spaces. R.R. in steel pipe in the engine room spaces. Lead covered cables in cabin

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 home 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 —

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 none fitted

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 —

how are the cables led —

where are the controlling switches situated —

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

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 —, 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 —

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 —

If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office —

are they of a type approved by the Home Office —

are they of a type approved by the Home Office —

PARTICULARS OF GENERATING PLANT.

Table with columns: DESCRIPTION OF GENERATOR, No. of, Kilowatts, Volts, Amps, Revs. per Min., DRIVEN BY, WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE. Includes entries for MAIN, AUXILIARY, EMERGENCY, and ROTARY TRANSFORMER.

LIGHTING AND HEATING CONDUCTORS.

Table with columns: Ref. No., DESCRIPTION, No. of Conductors, Effective Area of each Conductor, COMPOSITION OF STRAND, Total Maximum Current, Approximate Length, Insulated with, HOW PROTECTED. Lists various lighting and heating conductors like MAIN GENERATOR, WIRELESS, SEARCHLIGHT, etc.

MOTOR CONDUCTORS.

Table with columns: Ref. No., DESCRIPTION, No. of Motors, Effective Area of each Conductor, COMPOSITION OF STRAND, Total Maximum Current, Approximate Length, Insulated with, HOW PROTECTED. Lists motor conductors like BALLAST PUMP, MAIN BILGE LINE PUMPS, etc.

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.

CAMPBELL & ISHERWOOD, LTD
 PER Thomas Moady

Electrical Engineers.

Date 6th July 1928

COMPASSES.

Distance between electric generators or motors and standard compass 24 feet.

Distance between electric generators or motors and steering compass

The nearest cables to the compasses are as follows:—

A cable carrying .25 Ampères on the ~~set from~~ standard compass — feet from steering compass.

A cable carrying — Ampères — feet from standard compass — 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.

For Bartram & Sons Ltd.

W. C. Brown
 Secretary

Builder's Signature.

Date 7th July 1928

Is this installation a duplicate of a previous case Yes. If so, state name of vessel Llandilo

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.

W.T. Badger
 9/8/28

Total Capacity of Generators 10 Kilowatts.

The amount of Fee ... £ 10 : : 26 ^{When applied for,} 19.28

Travelling Expenses (if any) £ : : 13 ^{When received,} 28 1000

W.T. Badger
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned Elec Light

Im. 127.—Transfer. (The Surveyors are requested not to write on or below the space for Committee's Minute.)



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