

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report June 4th 1942 When handed in at Local Office June 4th 1942 Port of Vancouver, B. C.
 No. in Survey held at Vancouver, B. C. Date, First Survey 30th April Last Survey 2nd June 1942
 Reg. Book. (Number of Visits 9)
 -- on the Steel Single Screw Steamer "FORT ELLICE" Tons { Gross 7129.24
 Net 4254.74
 Built at North Vancouver, B.C. By whom built Burrard Dry Dock Co. Ltd. Yard No. 135 When built 1942
 Owners His Majesty's Government in the United Kingdom. Port belonging to
 Electric Light Installation fitted by Burrard Dry Dock Co. Ltd. Contract No. -- When fitted 1942
 Is the Vessel fitted for carrying Petroleum in bulk No

System of Distribution Constant Pressure two-wire Direct Current

Pressure of supply for Lighting 110 volts, Heating -- volts, Power 110 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 temperature rise Yes, are they compound wound Yes

are they over compounded 5 per cent. No, 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 Have certificates of test results for machines under 100 kw. been submitted and

approved Attached. Also Ships Trial Results attached. Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing Under 100 K.W.

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 Centre of 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 Aft end of 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 Same Compartment

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 Ebony Asbestos, is all insulation of high dielectric strength and of permanently high insulation resistance Yes,

is it of an approved type 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 --, is the non-hygroscopic insulating material of an approved

type --, 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, temperature rise of

omnibus bars 4° F., individual fuses to voltmeter, pilot or earth lamp Yes, are moving parts of switches alive in the

"off" position No are all screws and nuts securing connections effectively locked Yes are any fuses fitted on the live side of

switches No Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches
Double Pole linked switch with a fuse on each pole for each generator and a D.P. D.T. linked selector switch with fuse on each pole for each outgoing circuit.

Are turbine driven generators fitted with emergency trip switch as per rule -- Are cupboards or compartments containing switchboards composed of

fire-resisting material or lined with approved material Yes Instruments on main switchboard 2 ammeters 2 volt-

meters -- synchronising device for paralleling purposes. For compound machines is the ammeter connected on the opposite pole to equaliser connection

No Equalizer

Connections fitted Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system

Positive & Negative earth lamps with switches Switches, Circuit Breakers and Fusible Cut-outs,

do these comply with the requirements of the Rules Yes are the fusible cutouts of an approved type Yes have the reversed

All Conductors are of annealed copper conforming to British Standard Specification No. 7 (or International Electro-technical Commission Publication No. 28).

The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.

The foregoing is a correct description.

Burrard Dry Dock Company, Limited

[Signature]
President

Electrical Engineers.

Date June 4th, 1942

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 .20 Ampères 1' feet from standard compass 1' feet from steering compass.

A cable carrying .35 Ampères 5' feet from standard compass 3.5' feet from steering compass.

A cable carrying 1.25 Ampères 9.5' feet from standard compass 6' 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.

Burrard Dry Dock Company, Limited

[Signature]
President

Builder's Signature.

Date June 4th, 1942

Is this installation a duplicate of a previous case Yes If so, state name of vessel S.S. "FORT ST. JAMES"—
Vancouver Report No. 5718

General Remarks (State quality of workmanship, opinions as to class, &c. The electrical equipment of this ship has been installed under special survey in accordance with the approved plans, New York letters and Society's Rules. The material and workmanship are good. The installation has been examined under full working conditions, tested as per Rule and found satisfactory, and in our opinion is eligible to have the Society's Classification without Special Notation. Copies of particulars of ship's trials on generators attached. Maker's Certificates covering steam auxiliary engines (driving generators) and generators attached. As fitted plan of electrical wiring attached. The electrical equipment has also been surveyed during construction and installation on behalf of Wartime Merchant Shipping, Ltd., to ensure that the terms of the specification have been fully complied with and this work has been satisfactorily carried out.

Noted
L.P.
29/7/42.

Total Capacity of Generators 30 Kilowatts.

The amount of Fee ... \$ 125.00 : When applied for, 4th June 42

Travelling Expenses (if any) \$ 10.00 : When received, 19

Committee's Minute

Assigned

See Ver. 76. 5759

[Signature] & *A. G. Donald*
Surveyors to Lloyd's Register of Shipping.

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