

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 7 MAR 1944

Date of writing Report 3rd Jan. 1944 When handed in at Local Office 3rd Jan. 1944 Port of Vancouver, B.C.

No. in Survey held at Vancouver, B.C. Date, First Survey 3rd Dec. 1943 Last Survey 3rd Jan. 1944
Reg. Book.

on the Steel Single Screw Steamer "KITSILANO PARK" Tons { Gross 7159.64
Net 4235.08

Built at North Vancouver, B.C. By whom built North Van Ship Repairs Ltd. and No. 135 When built 1943

Owners Minister of Munitions & Supply of Canada (Managers Park Steamship Co. Ltd.) Port belonging to

Electric Light Installation fitted by Hume & Rumble Ltd. Contract No. When fitted 1943

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 Yes, 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 Attd. 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 Engine Room generator platform on first grating level starboard aft, 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 Generator platform athwartships

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 Yes, 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

150 ampere D.P. Linked circuit breakers on separate panels with overload and reverse current trips, and a three pole isolating switch for each generator. D.P. switches and fuses 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 3 ammeters 3 volt-

Selector switch on No.2 Generator Voltmeter. meters 1 synchronising device for paralleling purposes. For compound machines is the ammeter connected on the opposite pole to equaliser connection

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

No.2 Generator Voltmeter Selector Switch wired to give ground readings in addition to Generator and bus bar readings also earth lamps and switch. 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

PARTICULARS OF GENERATING PLANT.									
DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.		
		Kilowatts.	Volts.	Amperes.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.	
MAIN ...	3	15	110	136	575	Steam Reciprocating	-	-	
AUXILIARY ...									
EMERGENCY ...									
ROTARY TRANSFORMER									

GENERATOR, LIGHTING AND HEATING CONDUCTORS.									
DESCRIPTION.	No. per Pole.	Total Nominal Area per Pole Sq. Ins.	COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED
			No.	Diameter.	In Circuit	Rule.			
MAIN GENERATOR Nos. 1, 2 & 3	1	.166	19	.105	136	162	50	Rubber	In Conduit
EQUALISER CONNECTIONS	1	.0828	19	.074	-	102	25	"	" "
AUXILIARY GENERATOR									
Final distribution circuits mostly				.024	Insulated with either rubber or synthetic resin lead covered or in conduit.				
EMERGENCY GENERATOR									
ROTARY MOTOR									
TRANSFORMER GENERATOR									
Boiler room light	1	.052	7	.097	33.14	122	40	Varnished Cambric	Lead covered in Conduit
ENGINE ROOM	1	.052	7	.097	33.14	122	40	Varnished Cambric	Lead covered in Conduit
BOILER ROOM	1	.008	7	.038	20	27	6	Rubber	Switchboard Wiring
AUXILIARY SWITCHBOARDS	1	.082	19	.074	75	166	200	Varnished Cambric	Lead Covered in Conduit
Refrigerator	1	.131	19	.094	65	225	50	"	" "
Degaussing Panel	1	.032	7	.077	23	55	40	Rubber	In Conduit
Power Panel P.1	1	.052	7	.097	9.1	122	350	Varnished Cambric	Lead Covered in Conduit
Accommodation Crew	1	.082	19	.074	10.9	166	420	"	" "
" Aft. Deck House	1	.052	7	.097	20.9	122	100	"	" "
Engr. House Star	1	.052	7	.097	16.3	122	180	"	" "
ACCOMMODATION L.2	1	.052	7	.097	22.3	122	300	"	" "
" " Port L.3	1	.052	7	.097	19.1	55	350	Synthetic Resin	" "
" Saloon House L.4	1	.032	7	.077	14.9	55	420	"	" "
" Capt. House L.5	1	.052	7	.097	30	122	400	Varnished Cambric	" "
Navigation L.6	1	.008	7	.038	10	27	450	Synthetic Resin	" "
WIRELESS	1	.003	7	.024	.45	10	350	"	" "
SEARCHLIGHT	1	.003	7	.024	.45	10	80	"	Lead Covered.
MASTHEAD LIGHT	1	.003	7	.024	.3	10	22	"	" "
SIDE LIGHTS	1	.052	7	.097	19.5	122	460	Varnished Cambric	Lead Covered in Conduit
COMPASS LIGHTS	1	.032	7	.077	14.1	55	240	Synthetic Resin	" "
POOP LIGHTS	1	.032	7	.077	10	55	400	"	" "
CARGO LIGHTS Ford. L.7	1	.052	7	.097	19.5	122	460	Varnished Cambric	Lead Covered in Conduit
" " " L.8	1	.032	7	.077	14.1	55	240	Synthetic Resin	" "
Gyro Compass	1	.032	7	.077	10	55	400	"	" "

MOTOR CONDUCTORS.										
DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT. AMPERES.		Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED
		No. per Pole.	Total Nominal Area per Pole Sq. Ins.	No.	Diameter.	In Circuit	Rule.			
BALLAST PUMP										
MAIN BILGE LINE PUMPS										
GENERAL SERVICE PUMP										
EMERGENCY BILGE PUMP										
SANITARY PUMP										
CIRC. SEA WATER PUMPS										
CIRC. FRESH WATER PUMPS	1	1	.005	7	.030	6.5	16	12	Rubber	In Conduit
AIR COMPRESSOR										

Checked from
Fort St Croix

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.

Hume + Rumble Ltd.
per G. Borton

Electrical Engineers.

Date 3rd Jan. 1944.

COMPASSES.

Distance between electric generators or motors and standard compass 19 feet (Wireless Alternator)

Distance between electric generators or motors and steering compass 16 feet (" ")

The nearest cables to the compasses are as follows:—

A cable carrying .3 Ampères 9" feet from standard compass 9" feet from steering compass. (Compass Lights)

A cable carrying .3 Ampères 1'-4" feet from standard compass 1'-4" feet from steering compass. (Compass correction coils)

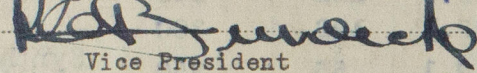
A cable carrying .3 Ampères 5 feet from standard compass 3 feet from steering compass. (Wheelhouse Light)

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.

NORTH VAN SHIP REPAIRS LIMITED.


Vice President

Builder's Signature.

Date 3rd Jan. 1944.

Is this installation a duplicate of a previous case Yes If so, state name of vessel S.S. "FORT COLUMBIA"
Ver. Rpt. No. 5942

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, and special attention has been given to the installation of synthetic resin insulated cables, and in the machinery spaces they are kept at least 1" clear of all steel work to allow for air circulation. 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 ships trials on generators attached. Makers' 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.

Total Capacity of Generators 45 watts.

The amount of Fee ... \$ 125.00 : When applied for, 31st Dec. 43

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

Committee's Minute FRI. 17 MAR 1944

Assigned see minute on J.E. Rpt

Holier
Hua
15.3.44


Surveyor to Lloyd's Register of Shipping.