

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 17<sup>th</sup> OCT 1927 When handed in at Local Office

10 Port of LENINGRAD

No. in Survey held at LENINGRAD

Date, First Survey

17<sup>th</sup> JAN 27 Last Survey 1<sup>st</sup> AUG 1927

Reg. Book.

(Number of Visits 14)

on the S/S GREGORY ZINOVIEFF

Tons

Gross

Net

Built at LENINGRAD

By whom built

BALTIC SHIPBUILDING ENG<sup>g</sup> WORKS Yard No. 165

When built 1927

Owners SOVIET MERCANTILE FLEET Port belonging to LENINGRAD

Electric Light Installation fitted by BALTIC SHIPBUILDING ENG<sup>g</sup> WORKS Contract No. When fitted 1927

System of Distribution DOUBLE WIRE

Pressure of supply for Lighting 220 VOLTS

volts, Heating

volts, Power 220 VOLTS

volts.

Direct or Alternating Current, Lighting DIRECT CURRENT

Power DIRECT CURRENT

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 NOT EFFICIENT

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 3-60 KW 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 ENGINE ROOM STAR<sup>d</sup> 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 NONE 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

If the generators and main switchboard are not, located 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 NONE 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

with mica or micrite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework MICANITE USED ON FITTINGS 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 NONE, proportion of omnibus bars YES, individual fuses to voltmeter, pilot or earth lamp NO, connections of switches YES

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches EACH 60 KW. GENERATOR HAS TWO SINGLE POLE FUSES AND DOUBLE POLE CIRCUIT BREAKER WITH OVERLOAD &amp; REVERSE TRIPS, EACH GENERATOR IS CONNECTED

TO A PAIR OF BUS BARS, FOR CONNECTING EACH PAIR OF BUS BARS IN PARALLEL AND EQUALIZING A TRIPLE POLE SWITCH IS FITTED AUX. GENERATOR HAS TWO SINGLE POLE FUSES AND DOUBLE POLE SWITCH.

Instruments on main switchboard 7 ammeters. 3 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 FRISCH'S SYSTEM

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules YES EXCEPT MAIN SWITCHBOARD FUSES

Joint Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule YES



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Lloyd's Register  
Foundation

W1229-0145 1/2



MOTOR CONDUCTORS.									
Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current. am. amp.	Approximate Length. (Lead in & Return) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP ... ..	✓							
	MAIN BILGE LINE PUMPS ...	✓							
	GENERAL SERVICE PUMP ...	✓							
	EMERGENCY BILGE PUMP ...	✓							
	SANITARY PUMP ... ..	✓							
	CARGO SEA WATER PUMPS ...	✓							
	CARGO FRESH WATER PUMPS	1	6 1/2"	7	1/08/3-2	12 ✓	15 MET.		LEAD COVERED
	AIR COMPRESSOR ... ..	✓							
	FRESH WATER PUMP ... ..	✓							
	ENGINE TURNING GEAR ...	✓							
	ENGINE REVERSING GEAR ...	✓							
	LUBRICATING OIL PUMPS ...	✓							
	OIL FUEL TRANSFER PUMP ...	1	50 1/2"	27	1-31/9-2	150 ✓	110 MET.		LEAD COVERED
	WINDLASS ... ..	1	50 1/2"	27	1-31/9-2	150 ✓	90 MET.		" "
	WINCHES, FORWARD ... ..	4	"	"	"	"	"		" "
	WINCHES, AFT ... ..	4	"	"	"	"	"		" "
	STEERING GEAR—	✓							
	(a) MOTOR GENERATOR ...	✓							
	(b) MAIN MOTOR ... ..	1	6 1/2"	7	1/08/3-2	18 ✓	15 MET.		LEAD COVERED
	WORKSHOP MOTOR ... ..	12	1 1/2"	7	7-3/1-3	5 ✓	FROM LIGHTING CIRCUITS.		" "
	VENTILATING FANS CABIN ...	1	25 1/2"	19	1-3/6-5	75 ✓	40 MET.		" "
	CARGO WINCH ... ..								

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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.

*Baisukov*

Electrical Engineers.

Date

*12/ VIII 27*

#### COMPASSES.

Distance between electric generators or motors and standard compass

*70'*

Distance between electric generators or motors and steering compass

*84'*

The nearest cables to the compasses are as follows:—

A cable carrying *0.15* Amperes *28* feet from standard compass *42* feet from steering compass.

A cable carrying *0.17* Amperes *2'-4"* feet from standard compass *6'-4"* feet from steering compass.

A cable carrying *0.17* Amperes *2'-4"* feet from standard compass *6'-4"* 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

*No*

The maximum deviation due to electric currents was found to be *+ 0.5* degrees on *90°* course in the case of the standard

compass, and *- 2* degrees on *270°* course in the case of the steering compass.



*Skorotschelle*

Builder's Signature.

Date

*30/ VIII 27*

Is this installation a duplicate of a previous case *No* If so, state name of vessel

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

*This installation has been fitted on board under special survey, the workmanship generally was found to be very good.*

*The 60 kW. Generators have not been adjusted under full power working conditions on account of the engine governors not operating satisfactorily. When the engine governors have been efficiently regulated the circuit breakers are to be adjusted in the presence of a Surveyor and a notice fixed to the switch board giving instructions for working the triple-pole switch when the machines are run in parallel. Meanwhile the Owner's Representative has been informed that the machines are not to be run in parallel.*

Total Capacity of Generators *128* Kilowatts.

The amount of Fee ... £

When applied for,

19.....

Travelling Expenses (if any) £

When received,

19.....

*H. M. Crick*  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned