

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 2 DEC 1926

Date of writing Report 19 When handed in at Local Office 29/11/26 19 Port of ROVEN.

No. in Survey held at Le Trait. Date, First Survey July 2nd Last Survey Nov 22nd 1926
Reg. Book. (Number of Visits 10)

on the SINGLE SCREW STEAMER "SOROKA" Tons { Gross 1718 Net 1002

Built at Le Trait. By whom built Messrs Worms et Cie. Yard No. 40 When built 1926.
at Le Trait et Ch de la Seine Maritimee

Owners Det Norsk Russiske Dampskibsselskab Port belonging to BERGEN.

Electric Light Installation fitted by Ateliers et Chantiers de la Seine Maritimee Contract No. 40 When fitted 1926.

System of Distribution Two wire system with direct current ✓

Pressure of supply for Lighting 110 volts ✓, Heating ✓, 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 ✓ One Generator Only ✓, is an adjustable regulating resistance fitted in series with each shunt field ✓

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 ✓

Position of Generators Engine Room bottom platform Starboard Side ✓, Are the lubricating arrangements of the generators as per Rule ✓ yes ✓

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 after Bulkhead 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 ✓

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 14" and clear of all woodwork ✓

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 micaite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework ✓ yes ✓

and is the frame effectually 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

For the generator a double pole linked switch and a fuse on each pole
For each outgoing circuit: a fuse switch on each pole.

Instruments on main switchboard One ammeters 2 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 testing by volt-ohmmeter

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 twin 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 5 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 Cables secured by metal clips having rounded edges and spaced in accordance with rules.

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 Joint boxes.

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 armoured 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 yes, are their connections made as per Rule yes.

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 where 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 no, are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected no, how are the cables led yes, where are the controlling switches situated yes.

Searchlight Lamps, No. of 1, whether fixed or portable yes, are their fittings as per Rule yes.

Arc Lamps, other than searchlight lamps, No. of 0, 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 18 inches and 18 inches.

Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed and fitted as per Rule yes.

Lighting Conductors, where lighting 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.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel
MAIN	1.	7.15	110	65	600	Single cylinder double acting steam engine		
AUXILIARY								
EMERGENCY								
ROTARY TRANSFORMER								

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current Ampères.	Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR	2	.05200	19	.060	65	40	rubber	Lead & Armour
	EQUALISER CONNECTIONS								
	AUXILIARY GENERATOR								
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER								
	AUXILIARY SWITCHBOARDS								
	ENGINE ROOM	2	.00426	7	.028	8.0	160	"	Lead & Armour
	BOILER ROOM	2	.00426	1	.056	3.6	140	"	Lead & Armour
	ACCOMMODATION N°1	2	.01254	7	.048	8.4	440	"	Lead covered
	" N°2	2	.01254	7	.048	11.5	320	"	Lead covered
	" N°3	2	.00426	7	.028	2.0	460	"	Lead covered
	Deck and galley	2	.00426	7	.028	4.0	200	"	Lead & Armour
	Navigation Lights	2	.00426	7	.028	3.5	580	"	Lead & Armour
	Shaft Tunnel	2	.00426	1	.056	1.8	220	"	Lead & Armour
	Cargo Clusters and other	2	.00426	7	.028	3.7	420	"	Lead & Armour
	WIRELESS	2	.01254	7	.048	25.0	240	"	Lead & Armour
	SEARCHLIGHT								
	MASTHEAD LIGHT	2x2	.00246	1	.056	.5	640	"	Lead & Armour
	SIDE LIGHTS	2x2	.00246	1	.056	.6	320	"	Lead & Armour
	COMPASS LIGHTS	3x2	.00246	1	.056	.1	600	"	Lead & Armour
	POOP LIGHTS	2	.00246	1	.056	.6	660	"	Lead & Armour
	CARGO LIGHTS	8x2	.00246	1	.056	1.0	500	"	Lead & Armour
	ARC LIGHTS								
	HEATING								

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current Ampères.	Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP								
	MAIN BILGE LINE PUMPS								
	GENERAL SERVICE PUMP								
	EMERGENCY BILGE PUMP								
	SANITARY PUMP								
	CIRC. SEA WATER PUMPS								
	CIRC. FRESH WATER PUMPS								
	AIR COMPRESSOR								
	FRESH WATER PUMP								
	ENGINE TURNING GEAR								
	ENGINE REVERSING GEAR								
	LUBRICATING OIL PUMPS								
	OIL FUEL TRANSFER PUMP								
	WINDLASS								
	WINCHES, FORWARD								
	WINCHES, AFT								
	STEERING GEAR—								
	(a) MOTOR GENERATOR								
	(b) MAIN MOTOR								
	WORKSHOP MOTOR								
	VENTILATING FANS								

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.

Handwritten signature/initials

Electrical Engineers.

Date 29/11/26.

COMPASSES.

Distance between electric generators or motors and standard compass 80 feet.
 Distance between electric generators or motors and steering compass 80 feet from compass amidship 110 feet from stern compass.

The nearest cables to the compasses are as follows:—

A cable carrying 2.5 Amperes 6 feet from standard compass 9 feet from steering compass. *1 a cable carrying 8.4 amperes 12ft from Prop. Steering Compass*
 A cable carrying .5 Amperes 7 feet from standard compass 6 feet from steering compass. *2 cables carrying 10 amperes 5ft from prop. steering compass*
 A cable carrying .1 Amperes fixed in feet from standard compass 4 fixed in 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 nil. course in the case of the standard compass, and -3 degrees on N.N.E. course in the case of the steering compass.

P. P. WORMS & CO.

Le Secrétaire Général

Handwritten signature

Builder's Signature.

Date

Is this installation a duplicate of a previous case Yes If so, state name of vessel "LEO" "LYNX" "NOVA"

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

The Electric Light Installation of this vessel has been fitted in accordance with the Society's Rules and to approved plans. The material and workmanship is satisfactory and the installation is eligible in my opinion to be classed and the vessel to have the notation in the register book of "Electric Light" also "Wireless."

L. Prescott

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

Handwritten signature
 3/12/26

Total Capacity of Generators 7.15 Kilowatts.

The amount of Fee ... £ 959 : When applied for, ... 19.
 Travelling Expenses (if any) £ : When received, ... 19.
Charged on Machinery Report.

L. Prescott
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 7 DEC 1926

FRI. 25 FEB 1927
 TUES. 6 DEC 1927

Assigned Electric Light

Im. 1.26.—Transfer. (The Surveys are requested not to be on or behind the space for Committee's Minute.)



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