

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

No. 119224

5 SEP 1949

Report No. 26/8 | 1949 When handed in at Local Office 5 SEP 1949 Received at London Office

Port of LONDON

Survey held at LONDON Date, First Survey 11 | 48 Last Survey 19 | 8 | 1949

(No. of Visits 24)

on the S.S. LAZAR KAGANOVICH Tons { Gross 4866

Nicolaieff By whom built Andre Marti S.B. Yd. Yard No. When built 1937

U.S.S.R. Port belonging to Leningrad.

ion fitted by When fitted

l equipped for carrying Petroleum in bulk Is vessel equipped with D.F. YES E.S.D. YES Gy.C. Sub. Sig. -

ave they been submitted and approved. YES System of Distribution 2WIRE Voltage of Lighting 230

Power 230 D.C. or A.C., Lighting 12V. EMERGENCY Power - If A.C. state frequency 50

Movers, has the governing been found as per Rule when full load is thrown on and off YES Are turbine emergency governors fitted

trip switch NO Generators, are they compound wound YES, and level compounded under working conditions YES

compound wound state distance between generators - and from switchboard - Are the generators arranged to run

parallel YES, are shunt field regulators provided YES Is the compound winding connected to the negative or positive pole

NEG Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing NO Have certificates of

Are draft machines under 100 kw. been supplied NO and the results found as per Rule -

ion of Generators PORT FLAT of AFTER ENGINE ROOM

the ventilation in way of generators satisfactory YES are they clear of inflammable material and protected from mechanical injury and

age from water, steam and oil - Switchboards, where are main switchboards placed

ADJACENT TO GENERATORS

they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water,

am and oil - what insulation is used for the panels. 75% PAXOLIN [APPD MATERIAL] 25% GETINACS [NOT APPD MATERIAL] if of synthetic insulating

material is it an Approved Type - if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom as

per Rule - Is the construction as per Rule, including locking of screws and nuts YES Description of Main Switchgear

for each generator and arrangement of equaliser switches. TWO 50 KW GENS HAVE 2 POLE CIRCUIT BREAKERS WITH EQUALISERS SWGS.

25 KW GEN HAS 2 POLE CIRCUIT BREAKER WITHOUT EQUALIZER SWITCH. LATTER M/C OPERATES

and the switch and fuse gear (or circuit breakers) for each outgoing circuit. 2 POLE SWITCHES & FUSES.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule YES Instruments on main switchboard 5

ammeters 3 voltmeters - synchronising devices. For compound machines in parallel are the ammeters and reversed current

protection devices connected on the pole opposite to the equaliser connection YES Earth Testing, state means provided

BY VOLTMETER & SELECTOR SWITCH

Switches, Circuit Breakers and Fuses, are they as per Rule YES, are the fuses an Approved Type CARTRIDGE TYPE

make of fuses RUSSIAN MANUFACTURE, are all fuses labelled YES If circuit breakers are provided for the generators, at what

overload do they operate 250A 50KW/M², 140A 25KW/M², and at what current do the reversed current protective devices operate 10% FLC

Joint Boxes, Section Boards and Distribution Boards, is the construction as per Rule YES

Cables, are they insulated and protected as per Rule YES, if otherwise than as per Rule are they of an Approved Type YES

state maximum fall of pressure between bus bars and any point under maximum load LESS THAN 6% are the ends of all cables having a sectional

area of 0.01 square inch and above provided with soldering sockets. YES Are all paper insulated and varnished cambric insulated

cables sealed at the ends. - Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil,

high temperatures or risk of mechanical damage. YES, are any cables laid under machines or floorplates. YES, if so, are they

adequately protected. YES Are cables in machinery spaces, galleys, laundries, etc., lead covered. YES or run in conduit -

or of the "HR" type - State how the cables are supported or protected. CLEATED TO CABLE TRAYS

Are all lead sheaths, armouring and conduits effectually bonded and earthed YES Are all cables passing through decks and watertight

bulkheads provided with deck tubes or watertight glands. YES, where unarmoured cables pass through beams, etc., are the holes

effectively bushed. YES Refrigerated chambers, are the cables and fittings as per Rule. YES

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule YES Emergency Supply, state position



Navigation Lamps, are they separately wired... **YES**... controlled by separate double pole switches and fuses... **YES**... Are the switches a position accessible only to the officers on watch... **YES**... is an automatic indicator fitted... **YES**... Is an alternative supply provided... **YES**...
 Secondary Batteries, are they constructed and fitted as per Rule... **YES**... state battery capacity in ampere hours... **10X60 AH**... are they adequately ventilated... **YES**...
 Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weather proof if so, how are they protected... **WATERTIGHT WELGLASS FITTINGS WITH WIRE GUARDS**... *Copy with 437 Rules*... Are all fittings suitably ventilated... **YES**...
 Searchlight Lamps, No. of **2**... whether fixed or portable... **FIXED**... are they of the carbon arc or of the filament type... **USE AT PORT**...
 Heating and Cooking, is the general construction as per Rule... **YES**... are the frames effectually earthed... **YES**...
 Accommodation of the convection type... **NONE**... Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing... **NO**...
 Control Gear and Resistances, are they constructed and fitted as per Rule... **YES**... Lighting Conductors, where required are they fitted... **NO**...
 Spare Gear, if fitted state maker... **HUGHES**... location of transmitter... **DOUBLE BOTTOM MIDSHIPS** and receiver... **DOUBLE BOTTOM MIDSHIPS**...
 Insulation Tests, has the insulation resistance of all circuits and apparatus been provided as per Rule and suitably stored in dry situations... **YES**...

DESCRIPTION OF GENERATOR	No. of	MAKER	PARTICULARS OF GENERATING PLANT				PRIME MOVER	TYPE	MARKET
			Kilowatts per Generator	Volts	Ampères	Revs. per Min.			
MAIN	2	RUSSIAN MANUFACTURE	50	230	217.6	1500	STEAM TURBINE	RUSSIAN MANUFACTURE	
EMERGENCY	1	"	25	230	108.8	500	STEAM RECIPROCATING	"	
EMERGENCY ROTARY TRANSFORMER	1	JAPANESE	12	230	52.2	350	DIESEL	JAPANESE	
			6	230	26.1	350	"	"	

DESCRIPTION	KILOWATTS	GENERATOR CABLES				INSULATION	PROTECTIVE COVERING
		CONDUCTORS	MAXIMUM CURRENT IN AMPERES	APPROX. LENGTH (head plus return feet)	INSULATION		
MAIN GENERATOR	50	1	217.6	240	96	VIR	LC
" " EQUALISER	50	1	217.6	152	96	"	"
" " FWD	50	1	217.6	152	44	"	"
EMERGENCY GENERATOR	25	1	217.6	152	44	"	"
EMERGENCY GENERATOR	12	1	108.8	152	36	"	"
EMERGENCY ROTARY TRANSFORMER: MOTOR	6	1	52.2	53	32	"	"
" " GENERATOR		1	26.1	31	26	"	"

DESCRIPTION	KILOWATTS	MAIN DISTRIBUTION CABLES (to Section Boards, Distribution Fuse Boards, etc.)				INSULATION	PROTECTIVE COVERING
		CONDUCTORS	MAXIMUM CURRENT IN AMPERES	APPROX. LENGTH (head plus return feet)	INSULATION		
MAIN BD-SUB BD, AFT PORT, LTG		1	66	53	200	VIR	LC
" " " MIDSHIPS		1	66	53	200	"	"
" " " FWD VESTIBLE		1	66	53	200	"	"
" " " STARBD ALLEYWAY LTG		1	66	53	200	"	"
" " " N°4 FAN RM		1	66	53	200	"	"
" " " AFT ENG RM		1	66	53	200	"	"
" " " DFB DECK		1	66	53	200	"	"
" " " TO EMERGENCY PANEL		1	66	53	200	"	"
" " " FROM EMERGENCY PANEL		1	66	53	200	"	"
" " " MAIN RADIO		1	66	53	200	"	"
" " " AUX RADIO		1	66	53	200	"	"
" " " ANCHOLUS GYRO MOTOR		1	66	53	200	"	"
" " " BRIDGE & NAVIGATION PANEL		1	66	53	200	"	"

LIGHTING, HEATING, WIRELESS, NAVIGATION LIGHTS, ETC., CABLES.

DESCRIPTION	CONDUCTORS	MAXIMUM CURRENT IN AMPERES		APPROX. LENGTH (head plus return feet)	INSULATION	PROTECTIVE COVERING		
		In the Circuit	Rule					
AFT PORT CREWS SALOON	FDB	1	30.5	31	112	VIR LC		
" " PORT SIDE AFT	FDB	1	14.6	"	60	"		
" " AFT ENG RM [TOP]	FDB	1	10.7	"	60	"		
" " STARBD ALLEY	FDB	1	11.4	"	120	"		
" " AFT ENG RM [BOTTOM]	FDB	1	11.4	"	12	"		
" " FWD ENG RM	FDB	1	10.4	"	40	"		
" " in N°4 FAN RM	STOKEHOLD N°4	FDB	1	3.9	15	100	"	
" " " " N°3	FDB	1	3.6	"	80	"		
" " in STARBD ALLEY	" N°2	FDB	1	3.6	"	70	"	
" " " " N°1	FDB	1	4.2	"	110	"		
" " in FWD VESTIBLE	LOWER VESTIBLE	FDB	1	0.007	25.0	24	32	"
" " " " UPPER	FDB	1	1.7	"	80	"		
" " BRIDGE CAPTS DK	FDB	1	8.7	"	120	"		
" " FWD ALLEYWAY	FDB	1	28	"	136	"		
" " in MIDSHIPS	PORT ALLEYWAY	FDB	1	0.0045	4.4	15	48	"
" " " " PORT ALLEYWAY	FDB	1	0.007	11.5	24	100	"	
" " " " STARBD ALLEYWAY	FDB	1	14.3	"	150	"		

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED	No.	B.H.P.	MAXIMUM CURRENT IN AMPERES		APPROX. LENGTH (head plus return feet)	INSULATION	PROTECTIVE COVERING		
			In the Circuit	Rule					
MAIN BD - FWD ENG RM FANS	2	3.4	1	0.007	14.8	24	260	VIR	LC
" " AFT ENG RM FANS	1	3.4	1	0.007	14.8	24	88	"	"
" " CONVERTOR - AC PLUGS & BAT. CH.	1	4 & 3.5	1	0.01	25.5	31	400	"	"
" " CONVERTOR " "	1	4.0	1	0.01	13.5	31	160	"	"
" " WELDING SET	1	25.0	1	0.06	83	83	100	"	"
" " FRIGE COMPRESSOR	1	5.0	1					"	"
" " CIRC. PUMPS.	1	1.25	1	0.01	23	31	600	"	"
" " FRIGE FANS	2	0.75	1	0.007	4.8	24	600	"	"
" " SHORE SUPPLY CONVERTOR.	1	2.5	1	0.06	83	83	180	"	"

The Electrical Equipment is installed in accordance with the approved plans and the requirements of the Rules.
 All Insulated Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.
 The foregoing is a correct description.

..... Electrical Contractors. Date

COMPASSES.

Have the compasses been adjusted under working conditions..... YES

..... Builder's Signature. Date

Have the foregoing descriptions and schedules been verified and found correct..... YES

Is this installation a duplicate of a previous case..... NO If so, state name of vessel..... -

Plans. Are approved plans forwarded herewith..... NO If not, state date of approval..... 23 6 49

Certificates. Are certificates of test for motors engaged on essential sea services and generators forwarded herewith..... NO

General Remarks. (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.)

This installation has been overhauled throughout and circuits rewired where considered necessary. On completion the installation was megger tested and examined. The generators were subjected to 4 Hr heat runs and regulation tests. Circuit Breakers were tested for correct operation. The results of these tests were satisfactory. The whole installation was examined under working conditions during sea trials. The installation as now seen is in my opinion such as could be accepted for classification.

Total Capacity of Generators..... 143 Kilowatts..

The amount of Fee £	: {	When applied for,
		19
Travelling Expenses (if any) £	:	When received,
	:	19

L.S. Reed
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute.....

Assigned..... *See minute on fe. r/f.*

MAR 24 1950

