

18 NOV 1953

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

When handed in at Local Office 19 Port of Copenhagen  
 Survey held at Nakskov Date, First Survey 1/9/53 Last Survey 23<sup>rd</sup> Oct 1953  
 (No. of Visits) 5 Tons { Gross 4967  
 Net 2806

on the steel screw M/V "Margit" Nakskov By whom built A/S Nakskov Skibsværft Yard No. 133 When built 1953

Dampskibsselskabet "Myren" Port belonging to Copenhagen fitted by A/S Nakskov Skibsværft When fitted 1953

equipped for carrying Petroleum in bulk. No Is vessel equipped with D.F. Yes E.S.D. Yes Gy.C. Yes Sub.Sig. No Radar Yes

they been submitted and approved Yes System of Distribution Two wire insulated Voltage of Lighting 220

Power 220 D.C. or A.C., Lighting D.C. Power D.C. If A.C. state frequency —

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

switch. — 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

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

Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing Yes Have certificates of

machines under 100 kw. been supplied Yes and the results found as per Rule Yes

Generators Motor Room Floor Level, 2@ port side, 1@ starboard side, Harbour generator at port side

oil water, steam and oil Yes Switchboards, where are main switchboards placed Motor Room Floor at the

Level

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

oil Yes Dead front type with Sindanoye panels at back, if of synthetic insulating

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

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

generator and arrangement of equaliser switches A three pole circuit breaker with overload and

current trips

switch and fuse gear (or circuit breakers) for each outgoing circuit Two pole locked switches with a fuse in pole. Hold deck winches a 2 pole 500 amp circuit breaker

rtments containing switchboards composed of fire-resisting material or lined as per Rule Yes Instruments on main switchboard 6

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

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

eter and two earth lamps

Circuit Breakers and Fuses, are they as per Rule Yes, are the fuses in Approved Type Yes

ses L.K. MEK. ETABL. COPENHAGEN are all fuses labelled Yes If circuit breakers are provided for the generators, at what

o they operate 750 amps, and at what current do the reversed current protective devices operate 54 amps

s, Section Boards and Distribution Boards, is the construction as per Rule Yes

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

maximum fall of pressure between bus bars and any point under maximum load At 5amps are the ends of all cables having a sectional

01 square inch and above provided with soldering sockets Yes Are all paper insulated and varnished cambric insulated

led at the ends — Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil

temperatures or risk of mechanical damage Yes, are any cables laid under machines or floorplates No, if so, are they

protected — Are cables in machinery spaces, galleys, laundries, etc., lead covered Yes or run in conduit No

HR" type No State how the cables are supported or protected The cables are laid on steel

and adequately protected by steel covers in way of cargo holds, with

spaced as per Rules

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

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

bushed Yes Refrigerated chambers, are the cables and fittings as per Rule Yes

© 2021

004003 - 004008 - 0083

Lloyd's Register Foundation

18 NOV 1953

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule Yes. Emergency Supply, state position Motor room, port side.

Navigation Lamps, are they separately wired Yes controlled by separate double pole switches and fuses Yes. Are the switches and fuses in a position accessible only to the officers on watch Yes, is an automatic indicator fitted <sup>Aural</sup> alarm Is an alternative supply provided Yes.

Secondary Batteries, are they constructed and fitted as per Rule Yes, are they adequately ventilated Yes state battery capacity in ampere hours Yes.

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof Yes. Are any fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present No, if so, how are they protected Yes and where are the controlling switches fitted Yes. Are all fittings suitably ventilated Yes.

Searchlight Lamps, No. of 2, whether fixed or portable Portable, are they of the carbon arc or of the filament type Filament.

Heating and Cooking, is the general construction as per Rule Yes, are the frames effectually earthed Yes, are heaters in the accommodation of the convection type Yes. Motors, are all motors constructed and installed as per Rule and placed in well-ventilated compartments in which inflammable gases cannot accumulate and protected from damage from water, steam and oil Yes.

Are motors coupled to oil fuel transfer and pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment Yes. Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing Yes.

Have certificates of test for motors under 100 BHP intended for essential sea services been supplied and the results found as per Rule Yes.

Control Gear and Resistances, are they constructed and fitted as per Rule Yes. Lightning Conductors, where required are they fitted as per Rule Yes. Ships carrying Oil having a Flash Point less than 150° F. Have all the special requirements of the Rules for such ships been complied with —, are all fuses of an Approved Cartridge Type —, make of fuse — Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships Double bottom between E.S.D., if fitted state maker Kelvin-Hughes location of transmitter frames 121-122 and receiver Bridge house.

Spare Gear, if the vessel is for open sea service have spares been provided as per Rule and suitably stored in dry situations Yes.

Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory Yes.

## PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	MAKER.	RATED AT				PRIME MOVER.	
			Kilowatts per Generator.	Volts.	Ampères.	Revs. per Min.	Type.	Maker.
MAIN ...	3.	T.B. Thorne & Sons	160	220	728	500	Oil engine	A/S Burmeister & Wain.
HARBOUR. EMERGENCY ROTARY TRANSFORMER	1	General Motors Dayton U.S.A.	30	220	136	1200	Oil engine	General Motors, Dayton U.S.A.

## GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.	APPROX LENGTH (lead plus return <sup>m</sup> )	INSULAT.	PROTECTIVE COVERING.
		No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. <sup>sq. mm.</sup>				
MAIN GENERATOR ...	160	3	3x240	728	825 V 30	V.R.	Lead covered & Wire armoured.
" EQUALISER ...			2x185		30	V.R.	"
EMERGENCY GENERATOR ...	30	1	95	136	150 V 10	V.R.	Lead covered & Wire armoured.
ROTARY TRANSFORMER: MOTOR ...							
" GENERATOR...							

## MAIN DISTRIBUTION CABLES (to Section Boards, Distribution Fuse Boards, etc.).

DESCRIPTION.							
Emergency Generator switchboard	1	185	200	235 V 30	V.R.	Lead covered & Wire armoured.	
Main Light "	1	120	150	175 V 36	"	"	
Steering Gear "	1	50	59	99 V 30	"	"	
Bilge Pump & Ballast Pump "	1	70	100	125 V 30	"	"	
Aux. cooling Pumps "	1	50	70	99 V 30	"	"	
Workshop "	1	50	70	99 V 40	"	"	
Fuel Oil "	1	95	130	150 V 10+24	"	"	
Crane "	1	10	26	38 V 40	"	"	
Galley "	1	150	175	205 V 40	"	"	
Winches (Aft) "	1	185	225	235 V 60	"	"	
" (Midship) "	1	120	163	175 V 60	"	"	
" (Ford) "	1	310	317	323 V 100	"	"	

LIGHTING, HEATING, WIRELESS, NAVIGATION LIGHTS, ETC., CABLES.							
DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.	APPROX LENGTH (lead plus return <sup>m</sup> )	INSULAT.	PROTECTIVE COVERING.	LEAD COVERED & WIRE ARMoured.
	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. <sup>sq. mm.</sup>	In the Circuit.	Rule.			
Ventilation (Aft).	1	4	10	22.5 V 90	V.R.		
Refrigeration.	1	50	80	99 V 20	"	"	
Boiler.	1	25	50	63 V 22	"	"	
Hydro.	1	10	34	38 V 20	"	"	
Ventilation (Midships).	1	4	15	22.5 V 40	"	"	
" (Saloon House).	1	6	15	29 V 40	"	"	
Fire Extinguishing.	1	4	14	22.5 V 20	"	"	
Deckhouse (Ford) Lighting.	1	6	20	29 V 90	"	"	
Motor Room	1	10	25	38 V 30	"	"	
Deckhouse (Aft)	1	10	30	38 V 50	"	"	
Engine Officers	1	10	30	38 V 20	"	"	
Saloon house etc	1	16	30	49 V 60	"	"	
Navigation	1	2.5	5	15.5 V 70	"	"	
Wireless.	1	10	15	38 V 70	"	"	
Kadar & Gyro compass.	1	25	32	63 V 60	"	"	

All other sub-circuits wired in accordance with the rules.

MOTOR CABLES.							
ALL IMPORTANT MOTORS TO BE ENUMERATED.		No.	B.H.P.				
Steering gear motors	2	15	1	35	59	78 V 100	V.R.
Tuning gear.	1	18	1	50	70	99 V 30	"
Cooling water pumps	3	22	1	70	84	125 V 40	"
Lubricating Oil pumps	2	58	1	185	217	235 V 36	"
Bilge & Fire pump	1	23	1	50	88	99 V 30	"
Air compressor	3	58	1	185	217	235 V 30	"
Cargo oil pump	1	40	1	95	150	150 V 20	"
Ballast pump	1	18	1	50	70	99 V 30	"
Bilge & Sanitary pump	1	9	1	16	36	49 V 32	"
Cooling pumps for auxiliaries.	2	9.5	1	16	38	49 V 32	"
Fans for Motor Room	2	4.5	1	4	19	22.5 V 40	"
Fuel & Lub Oil Purifiers	3	3.8	1	2.5	14	15.5 V 6	"
Fuel Oil pumps	2	1	1	2.5	5	15.5 V 8	"
Fuel Oil Transfer Pump.	1	15	1	25	59	15.5 V 4	"
Fuel Oil Circulating pumps.	2	1.8	1	2.5	9	15.5 V 20	"
Winches (Aft).	5	33	1	70	125	125 V 14	"
" (Midships).	2	33	1	70	125	125 V 12	"
" (Ford).	4	33	1	70	125	125 V 14	"
Windlass	1	58	1	185	217	235 V 40	"
Boiler Fan	1	2	1	2.5	9	15.5 V 6	"
Emergency Air compressor	1	3	1	2.5	13	15.5 V 10	"

All other motors wired in accordance with the rules.



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.

AKTIESELSKABET  
NAKSKOV SKIBSVÆRFT

R. Ørsholm

Electrical Contractors. Date.....

COMPASSES.

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

Yes

AKTIESELSKABET  
NAKSKOV SKIBSVÆRFT

R. Ørsholm

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..... Yes If not, state date of approval..... ✓

Certificates. Are certificates of test for motors engaged on essential sea services and generators forwarded herewith..... Yes

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

The electric installation has been made under special Survey in accordance with the Rules, the Approved Plans, and the Secretary's letter

The material used is in accordance with the requirements of the Rules, and the workmanship is good.

On completion the whole installation was examined under full power working conditions, and found in efficient condition.

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

Noted 98  
30/11/53

Total Capacity of Generators..... 510 ✓ Kilowatts.

The amount of Fee ... Kr. 2370 <sup>00</sup> : When applied for,

16/11 1953

When received,

Travelling Expenses (if any) Kr. 25 <sup>00</sup> : 19

Surveyor to Lloyd's Register of Shipping.

R. K. Bolton

FRIDAY - 4 DEC 1953

Committee's Minute.....

Assigned.....

See minute on  
full Fe. att.