

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 11 OCT 1951

Date of writing Report 8-10-1951 When handed in at Local Office 1951 Port of Oslo

No. in Survey held at 25765 on the Wood SS M.V. SANTO Date, First Survey 16-9-50 Last Survey 30-12-1950

Reg. Book. (No. of Visits 163)

Tons Gross 163 Net 56

Built at 25765 on the Wood SS M.V. SANTO By whom built J. Mornis Yard No. When built 1942

Owners Alf Mortensen Port belonging to Oslo

Installation fitted by Sørø Slip og Mek. Verksted When fitted 1950

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

Plans, have they been submitted and approved. System of Distribution 2 wire insulated Voltage of Lighting 220

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

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

with a trip switch. Generators, are they compound wound, and level compounded under working conditions.

if not compound wound state distance between generators and from switchboard. Are the generators arranged to run

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

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

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

Position of Generators one Port one Starboard

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

damage from water, steam and oil. Switchboards, where are main switchboards placed. Side aft.

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

steam and oil. what insulation is used for the panels. Sindangs, 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. Description of Main Switchgear

for each generator and arrangement of equaliser switches. DP knife switches and DP fuses

and the switch and fuse gear (or circuit breakers) for each outgoing circuit. D.P. knife switch and DP fuses

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule. Instruments on main switchboard 2

ammeters 1 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. Earth Testing, state means provided E-lamps

coupled to earth through switches & fuses.

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

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

overload do they operate. and at what current do the reversed current protective devices operate.

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

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

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

area of 0.01 square inch and above provided with soldering sockets. 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. are any cables laid under machines or floorplates. if so, are they

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

or of the "HR" type. State how the cables are supported or protected. HCA cables clipped to

surfaces & trays as practicable in machinery space & open deck.

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

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

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

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 Yes Is an alternative supply provided Yes

Secondary Batteries, are they constructed and fitted as per Rule _____, are they adequately ventilated _____

state battery capacity in ampère hours _____

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 if so, how are they protected _____

and where are the controlling switches fitted _____ Are all fittings suitably ventilated _____

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

Heating and Cooking, is the general construction as per Rule _____, are the frames effectually earthed _____, 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 _____

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 _____

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

Control Gear and Resistances, are they constructed and fitted as per Rule _____ Lightning Conductors, where required are they fitted as per Rule _____

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 Yes, 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 _____ Are the cables lead covered as per Rule _____

E.S.D., if fitted state maker _____ location of transmitter _____ and receiver _____

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

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

DESCRIPTION OF GENERATOR.		No. of	MAKER.	RATED AT				PRIME MOVER.	
				Kilowatts per Generator.	Volts.	Amps.	Revs. per Min.	TYPE.	MAKER.
MAIN ...	1		12	220	54	1000	Diesel	Cumsey	
	1		15	220	68	1000	"	Dayland	
EMERGENCY ...									
ROTARY TRANSFORMER									

GENERATOR CABLES.								
DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
		No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. in. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR		2	2x16	681		15	VIR	L.C.A.
" " EQUALISEE								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR...								

[illegible][illegible]

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.

Builder's Signature. Date

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

Is this installation a duplicate of a previous case. If so, state name of vessel.

Plans. Are approved plans forwarded herewith. If not, state date of approval.

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

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

The electrical installation of this vessel has been converted in accordance with the approved plans and Secretary's letters.

Noted 23/10/51

Total Capacity of Generators. 27 Kilowatts.

The amount of Fee ...

£100.00

When applied for,

12-2-1951

When received,

19

Travelling Expenses (if any) £

Surveyor to Lloyd's Register of Shipping.

Committee's Minute. TUES. 30 OCT 1951

Assigned

See Rpt 9