

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

17 DEC 1953

Date of writing Report 30-11-1953 When handed in at Local Office 10-12-1953 Port of ANTWERP

No. in Survey held at ANTWERP Date, First Survey 11-3-53 Last Survey 5-10-1953

Reg. Book.

(No. of Visits 9)

18989 on the S/T "MARITIME TRADER" Tons { Gross 7523.3.. Net 7623..

Built at Hoboken By whom built A. J. M. Cockrell Yard No. 759 When built 1953

Owners Maritime Transportation Co. P. A. Port belonging to Monrovia

Installation fitted by Electro Marine et Industrielle When fitted 1953

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 Twin wire Voltage of Lighting 110

Heating 110 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

Are the generators arranged to run in parallel Is the compound winding connected to the negative or positive pole negative

Have machines 100 kw. and over 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 Two turbo generators on

platform star side of main engine room and one Diesel motor generator on floor

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 on platform star side

of main engine room

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 lead paint type "Resam", 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 Double pole circuit breakers with linked

equaliser switches

and the switch and fuse gear (or circuit breakers) for each outgoing circuit double pole circuit breakers on

double pole linked switches with fuses on each pole

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

ammeters five voltmeters two Ohm meters synchronising devices For compound machines in parallel are the ammeters and reverse current

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

Ohm meters Preference Tripping, state if provided no, and tested

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

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

overload do they operate 50% - 1 min, and at what current do the reverse current protective

devices operate 10% of full load 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 7 volts 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 State

type of cables (if in conduit this should also be stated) in machinery spaces V.I.R.-LC&A/V.C.-LC&Aalleys V.I.R.-LC&A

and laundries V.I.R.-LC&A State how the cables are supported or protected cables clipped to bulkheads

or to galvanised perforated steel trays all cables on fore and after gangways

are lead alloy sheathed and armoured

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

Have refrigeration fan motors been constructed under survey and test certificates supplied

Are the motors accessible for maintenance at all times

17 DEC 1953

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule 2 Emergency Supply, state position none

Navigation Lamps, are they separately wired 2 controlled by separate double pole switches and fuses 2 Are the switches and fuses in a position accessible only to the officers on watch 2 Is an automatic indicator fitted 2 Is an alternative supply provided 2 Secondary Batteries, are they constructed, fitted and adequately ventilated as per Rule none state battery capacity in ampere hours none Where required to do so does it comply with 1948 International Convention none Lighting, is fluorescent lighting fitted no If so, state nominal lamp voltage none and compartments where lamps are fitted none

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof 2

Searchlights, No. of one, whether fixed or portable fixed, are they of the carbon arc or of the filament type filament

Heating and Cooking, is the general construction as per Rule 2, are the frames effectually earthed 2, are heaters in the accommodation of the convection type 2 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 2

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 2 Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing none

Have certificates of test for motors under 100 BHP intended for essential sea services been supplied and the results found as per Rule 2

Lightning Conductors, where required are they fitted as per Rule none

Ships carrying Oil having a Flash Point of less than 150° F. Have all the special requirements of the Rules for such ships been complied with 2 are all fuses of an Approved Cartridge Type 2 make of fuse Cable Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships 2 Are all cables lead covered as per Rule 2

E.S.D., if fitted state make Raytheon Manuf. Co. Location of transmitter and receiver Cofferdam H.B.

Spare Gear, if the vessel is for open sea service have spares been provided as per Rule and suitably stored in dry situations 2

Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory 2

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	MAKER.	RATED AT			PRIME MOVER.		
			Kw. per Generator.	Volts.	Ampères.	Revs. per Min.	TYPE.	MAKER.
MAIN	two	Siemens - Schuckert Werke A.G.	300	220	1334	1600	Steam Turbine	Siemens - Schuckert Werke
Aux.	one	Siemens - Schuckert Werke A.G.	150	220	653	650	Diesel Motor	Anglo Belgian Co.
EMERGENCY ROTARY TRANSFORMER	two	Siemens - Schuckert	50	220/110	455	1440	Electric Motor	Siemens - Schuckert

GENERATOR CABLES.

DESCRIPTION.	No. of	Kw.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return) in m.	INSULATION.	PROTECTIVE COVERING.
			No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR	2	300	7	19/083	1334	1414V	8	Cambic	LC.A.
" EQUALISER	7		7	19/083		1414V		"	"
Aux. Generator	1	150	4	19/083	682	808V	26	"	"
" EQUALISER	4		4	19/083		808V		"	"
EMERGENCY GENERATOR	2		2	19/083	285	404V	34	"	"
ROTARY TRANSFORMER: MOTOR	2		2	19/083	455	606V	24	"	"
" GENERATOR	2	50	2	19/083		404V		"	"

MAIN DISTRIBUTION CABLES (to Auxiliary Switchboards, etc.).

DESCRIPTION.	No. of	Kw.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return) in m.	INSULATION.	PROTECTIVE COVERING.
REN.1/REN.2/REN.3/REN.4/REN.5 to dist. a	1		7/064	58	80V	60	Cambic LC.A.
dist. fuse boards T1C/T1D/T1E/T1F/T1G/T1H/T1I							
PM.13/PM.20/PM.21 to dist. board & turning gear	1		19/064	114.5	143V	50	"
PM.19/PM.20/PM.21 to dist. board T1G/T1H/T1I/T1J	1		19/083	190	202V	55	"
5th. E.P. shore connection	4		19/083	700	808V	64	"
PM.4/PM.5 to section board T4	2		19/083	255	404V	180	"
REN.6 to dist. fuse board T6	1		7/052	20	27V	20	V.L.R.
REN.14/REN.15/REN.16/REN.17/REN.18 to dist. boards T14/T15/T16/T17	1		7/044	26	31V	30	"
PM.22 to dist. fuse board T20	1		19/052	88.5	110V	10	Cambic
PM.21 to searchlight	1		19/064	27	83V	260	V.L.R.

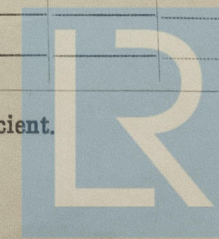
DISTRIBUTION CABLES (to Section-Boards and Distribution-Fuse-Boards, etc.).

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return ^{100%} in)	INSULATION.	PROTECTIVE COVERING.
	No. in Parallel per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
DISTRIBUTION CABLES FROM SECTION BOARDS TO DISTRIBUTION FUSE BOARDS.							
4N.1/2N.1 to dist. fuse board T1	1	3/.036	3	10 ✓	20	V.L.R.	LC.A.
4N.2 to dist. fuse board T2	1	19/.044	75	92 ✓	25	Cambic	" "
4EN.3 to dist. fuse board T3	1	19/.044	45.5	53 ✓	7	V.L.R.	" "
12EN.7/12EN.8/4EN.10 to dist. board T7, 8, 10	1	7/.064	22	80 ✓	62	Cambic	" "
Navigation lights	1	3/.029	0.54	4 ✓		V.L.R.	LC & A
Lighting from dist. fuse boards	1	3/.029	3	4 ✓		"	LC & A & LC
to light points & heating	1	3/.036	5	7 ✓		"	" " " "
	7	7/.029	6	11 ✓		"	" " " "
	1	7/.036	5	17 ✓		"	" " " "

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.	MOTOR DATA.						
PM.01 Comb. circ. & ext. pump	1	17	1	19/044	66	92V	60	Cambic	LC. & A.
PM.03/PM.04 Lubr. oil pump	2	19	1	19/052	73	110V	50	"	" "
PM.05 Circ. pump	1	30	1	19/064	114	143V	32	"	" "
PM.06/PM.07 extraction pump	2	20	1	19/052	77	110V	34	"	" "
PM.08 air comp.	1	25	1	19/064	95	143V	60	"	" "
PM.09/PM.10 Forced draught fan	2	24	1	19/052	91	110V	74	"	" "
PM.011/PM.012 Main extn. pumps	2	20	1	19/064	114	143V	35	"	" "
PM.14 Main circ. pump	1	90	2	19/083	333	404V	56	"	" "
PM.19 Gen. rev. pump	1	85	2	19/083	312	404V	52	"	" "
PM.21/PM.22 Moto Gen.	2	75	2	19/083	280	404V	34	"	" "

NOTE.—Use Rpt. 13 Continuation Sheet if the above space is insufficient.



© 2020

Lloyd's Register Foundation

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 2-12-53

COMPASSES.

Have the compasses been adjusted under working conditions.

SOCIÉTÉ ANONYME JOHN COCKERILL

Division du Centre Naval
HOBOLTE - rue de la Vierge

Builder's Signature.

Date 3-12-53

Secrétaire
L. BARBIER

Have the foregoing descriptions and schedules been verified and found correct. 2

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

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

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

General Remarks. (State quality of workmanship and materials, opinions as to class, etc.) The electrical equipment of this vessel has been constructed and installed under Special Survey of the Society's Surveyors in accordance with the Rules, the approved plans and the Secretary's letters. The materials and workmanship are good. Insulation and other tests have been carried out with satisfactory results in accordance with the Rule requirements. The electrical installation of this vessel is eligible, in my opinion, to be incorporated in the class assigned to the machinery.

Noted JS
11/1/54

Total Capacity of Generators 750 v Kilowatts.

The amount of Fee ... fr. 28250.- When applied for, 25-11-1953

Travelling Expenses (if any) fr. 1165.- When received, 5-12-1953

Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRIDAY 15 JAN 1954

Assigned See Rpt. 4a.