

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office.

Date of writing Report 20-4-1954 When handed in at Local Office 28-4-1954 Port of ANTWERP

No. in Survey held at ANTWERP Date, First Survey 6-1-54 Last Survey 17-3-1954
(No. of Visits 14)

Reg. Book. 40809 on the M/T "SALAMIS" Tons { Gross 12826
Net 7435

Built at Hoboken By whom built J.A. J.M. Cockrell Yard No. 764 When built 1954

Owners W/S A/S Eikland & A/S Salamis Port belonging to Cuba

Installation fitted by Electric Marine When fitted 1954

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

Plans, have they been submitted and approved Yes System of Distribution Twin wire DC Voltage of Lighting 110

Heating Power 110 D.C. or A.C., Lighting DC Power DC If A.C. state frequency —

Prime Movers, has the governing been found as per Rule when full load is thrown on and off Yes Are turbine emergency governors fitted with a trip switch — Generators, are they compound wound Yes, and level compounded under working conditions Yes

Are the generators arranged to run in parallel Yes 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 Yes Have certificates of test for machines under 100 kw. been supplied and the results found as per Rule Yes Position of Generators Two steam engine generators sets on foredeck P.S. engine room

is the ventilation in way of generators satisfactory Yes are they clear of inflammable material and protected from mechanical injury and damage from water, steam and oil Yes Switchboards, where are main switchboards placed advent ship at forward end of foredeck P.S. 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 Yes, what insulation is used for the panels hard front type "Recluse", if of synthetic insulating material is it an Approved Type Yes, 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 double pole circuit breaker with linked equaliser switches (manufactured by Brandt-Pain)

double pole linked switches with fuses on each pole and the switch and fuse gear (or circuit breakers) for each outgoing circuit double pole circuit breaker and

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes Instruments on main switchboard 6 ammeters 4 voltmeters — synchronising devices. For compound machines in parallel are the ammeters and reverse current protection devices connected on the pole opposite to the equaliser connection Yes Earth Testing, state means provided two with indicating lamps and clear nuts Preference Tripping, state if provided no, and tested —

Switches, Circuit Breakers and Fuses, are they as per Rule Yes, are the fuses an Approved Type Yes make of fuses English electric, are all fuses labelled Yes If circuit breakers are provided for the generators, at what overload do they operate 50% - 3000, and at what current do the reverse current protective devices operate 10% of full load Cables, are they insulated and protected as per Rule Yes, 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 6 volts. Are all paper insulated and varnished cambric insulated cables sealed at the ends Yes

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 State type of cables (if in conduit this should also be stated) in machinery spaces V.I.R. LCXA / V.C. LCX galleys V.I.R. LCXA / V.C. LCXA and laundries V.I.R. LCXA State how the cables are supported or protected clipped to bulkheads at steel perforated trays. In screwed conduit. Where exposed to mechanical damage heavy steel protection plates have been fitted. On fore and aft jamways LCXA with adequate expansion possibilities

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

Are the motors accessible for maintenance at all times —

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 portable, 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 none 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 English Electric 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 maker Hughes location of transmitter and receiver Forward pump room cofferdam

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	1	Thos. B. Thirpe	90	115	780	540	Recip. Eng.	Burniston & Bain
	2	Sumner Scott Clark	75	115	652	500	Steam Eng.	Pecker Dow Ltd.
EMERGENCY ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	No. of	Kw.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return <u>feet</u>)	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	one	90	2	500 mm ²	780	950	20	V.L.R.	LC & A
"	"	EQUALISER	1	500	"	475	10	"	"
"	two	75	2	500	"	652	25	"	"
"	"	equaliser	1	500	"	475	15	"	"
EMERGENCY GENERATOR									
ROTARY TRANSFORMER: MOTOR									
"		GENERATOR							

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

DESCRIPTION.	No. of	Kw.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return <u>feet</u>)	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.	
Circ. 1 & 2 Steering Gear	1	185 mm ²	200	235	105	V.L.R.	LC & A
Circ. 3 Galley	2	185	552	470	85	"	"
Circ. 4, 7 & 15 Repaired Turning Eng.	1	70	185	125	60	"	"
Circ. 5 & 6 Fans	1	95	160	150	50	"	"
Circ. 8 & 9 Navigation boards S7 & S4	1	47/083	125	314	205	Cambis	"
Circ. 10 & 11 " " S2 & S3	1	95 mm ²	125	150	55	V.L.R.	"
Circ. 13 Rep. equipment Dist. board P10	1	70	100	125	80	"	"
Circ. 14 Deckshop Dist. board P18	1	50	100	99	70	"	"
Circ. 17 Radar	1	71/044	20	314	220	"	"
Circ. 18 Navigation Dist. board N:4	1	71/029	10	15	220	"	"
Circ. 19 Gyra Compass	1	81/086	10	10	220	"	"
Circ. 20 Day light	1	19/064	35	33	340	"	"
Circ. 21 Trawl	1	19/088	35	202	220	Cambis	"
Circ. 23 Dist. board L70	1	25 mm ²	50	63	6	V.L.R.	"
Circ. 27 & 32 Dist. fuse board P9 & 11/12/13/14	1	25 mm ²	60	63	50	"	"

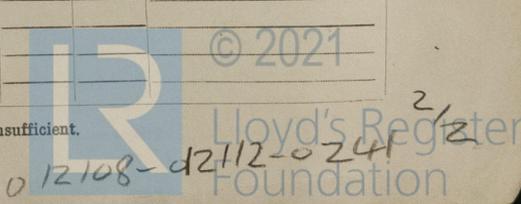
MAIN DISTRIBUTION CABLES (to Section-Boards and Distribution-Fuse-Boards, etc.).

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return <u>feet</u>)	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.			
Circ. 24 & 29 Dist. boards P15 & P8	1	16 mm ²	60	49	25	V.L.R.	LC & A
Circ. 25, 28, 30, 31 Dist. boards P11, P12, 14, 16	1	10 mm ²	35	38	50	"	"
Circ. 26 to Dist. board P14	1	6 mm ²	35	29	40	"	"
DISTRIBUTION CABLES FROM SECTION BOARDS TO DISTRIBUTION FUSE BOARDS							
Circ. 12 from Dist. board S7 to Dist. board L7	1	25 mm ²	60	63	4	V.L.R.	LC & A
Circ. 13 " " " S2 " " " L3	1	16	35	49	20	"	"
Circ. 14 " " " S1 " " " L4	1	19/044	25	53	110	"	"
Circ. 15 " " " S2 " " " L5	1	35 mm ²	60	78	14	"	"
Circ. 17 " " " S2 " " " L7	1	35	50	78	4	"	"
Circ. 16 " " " S3 " " " L6	1	35	60	78	14	"	"
Circ. 18 " " " S3 " " " L8	1	35	50	78	4	"	"
Circ. N2 " " " S4 " " " N2	1	25	50	63	45	"	"
Circ. P17 " " " S4 " " " P17	1	6	25	29	45	"	"
Circ. P2 " " " S4 to hot plate	1	16	50	49	6	"	"

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.	CONDUCTORS.	MAXIMUM CURRENT IN AMPERES.	APPROX. LENGTH (lead plus return <u>feet</u>)	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.			
Circ. N:1 & 2 Steering Gear	2		1	185 mm ²	200	235	105	V.L.R.	LC & A

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



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.

ELECTRO - MARINE P. v. b. a.
3, Hardenvoort, 3
ANTWERPEN

[Signature]
Electrical Contractors. Date

COMPASSES.

Have the compasses been adjusted under working conditions...
S.A. JOHN COCKERILL
CHANTIER NAVALS
HOBOKEN-LEZ-ANVERS

[Signature]
Directeur Technique

Builder's Signature. Date

Have the foregoing descriptions and schedules been verified and found correct... *[Signature]*

Is this installation a duplicate of a previous case... *[Signature]* If so, state name of vessel

Plans. Are approved plans forwarded herewith... *[Signature]* If not, state date of approval

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

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 the special survey of the Society's surveyors in accordance with the Rules, the approved plans and the Secretary's letter. The materials and workmanship are good. Insulation and other tests have been carried out with satisfactory results in accordance with the Rules requirements.

[Handwritten]
23/6/54

Total Capacity of Generators 240 ✓ Kilowatts.

The amount of Fee ... fr. 19690.-

When applied for, 15-4 1954

Travelling Expenses (if any) fr. 265.-

When received, 21-4 1954

[Signature]
Surveyor to Lloyd's Register of Shipping.

FRIDAY 9-JUL 1954

Committee's Minute

Assigned See Rpt. 4b.

3m.1251.-Transfer (MADE AND PRINTED IN ENGLAND.)
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

[Handwritten]
26.5.54

