

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report MAY/AUGUST 60 When handed in at Local Office 8th Aug. 19 60 Port of MarseillesNo. in Survey held at La Seyne S/Mer Date, First Survey 28.12.59 Last Survey 29.4.19 60
Reg. Book. (No. of Visits 10)42646 on the "L A E S T A N C I A" Tons { Gross 9485,62
Net 5956,66Built at La Seyne-sur-Mer By whom built Soc. des For. de la Méditerranée - La Seyne Yard No. 1340 When built 1960Owners Burles Markes Ltd Port belonging to LondonInstallation fitted by Soc. des For. de la Méditerranée La Seyne When fitted 1960Is vessel 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 YesPlans, have they been submitted and approved Yes System of Distribution direct current 2 wire Voltage of Lighting 220Heating --- Power 220 D.C. or XX, Lighting DC 220 Power DC 220 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 225/230 VAre the generators arranged to run in parallel Yes Is the compound winding connected to the negative or positive pole negativeHave 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 three generators installedon starboard side forward in engine room at lower floor levelis 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 one engine roomstarboard side platform, directly above the 3 diesel - generators.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 dead front type panel, 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 double poles, plus one equalizer pole circuit breakerrating 1250 A, with overload and reverse current trips (overload trips: instantaneous and delayed).and the switch and fuse gear (or circuit breakers) for each outgoing circuit double pole circuit breaker with overloadtrips (inst. and delay) for each outgoing circuit over 200 A / a rotary switch with fuse(approved type) for outgoing circuit below 200 AAre compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes Instruments on main switchboard 8ammeters 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 earthindicat. lamps, metal filament, Preference Tripping, state if provided yes, and tested yesbelow 30 WSwitches, Circuit Breakers and Fuses, are they as per Rule yes, are the fuses an Approved Type yesmake of fuses "Cehess" Marine, are all fuses labelled yes If circuit breakers are provided for the generators, at whatoverload do they operate Nos. 1, 2, 3 : 1350 A, and at what current do the reverse current protective-devices operate No. 1: 125 A, No. 2: 110 A, No. 3: 110 A Cables, are they insulated and protected as per Rule noif otherwise than as per Rule are they of an Approved Type yes, state maximum fall of pressure between bus bars and any pointunder maximum load 11,8 volts. Are all paper insulated and varnished cambric insulated cables sealed at the ends yesand asbestos siliconeAre 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 no, if so, are they adequately protected --- Statetype of cables (if in conduit this should also be stated) in machinery spaces { marine lead armoured galleys asbestos siliconeand laundries marine lead armour State how the cables are supported or protectedcable clipped to steel trays in machinery spaces, clipped to hull structure in holds,protected in casing in accommodation spaces.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 yesHave refrigeration fan motors been constructed under survey --- and test certificates supplied ---Are the motors accessible for maintenance at all times ---

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Lloyd's Register
Foundation

Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule YES Emergency Supply, state position not required to be provided

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, fitted and adequately ventilated as per Rule YES (W.T. only) state battery capacity in ampere hours 2 batteries, 150AH (each) Where required to do so does it comply with 1948 International Convention yes

Lighting, is fluorescent lighting fitted no If so, state nominal lamp voltage --- and compartments where lamps are fitted ---

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

Searchlights, No. of 5 whether fixed or portable 3 fixed are they of the carbon arc or of the filament type filament

Heating and Cooking, is the general construction as per Rule --- are the frames effectually earthed --- are heaters in the accommodation of the convection type --- 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 none > 100 BHP

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

Lightning Conductors, where required are they fitted as per Rule not required

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 --- 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 all cables lead covered as per Rule ---

E.S.D., if fitted state maker Submarine Signal location of transmitter and receiver (fwd. engine room DB. frames 36/38 & Co. (London) as per approved plan EL 5/3 dated 8/5/5)

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				TYPE.	PRIME MOVER.
			Kw. per Generator.	Volts.	Amps.	Revs. per Min.		
MAIN	I	Brush Electrical	200	230	869	600	three	
	II	Engineering Coy Ltd	200	230	869	600	oil eng.	Mirrless Pickerton
	III	England	200	230	869	600	4SA 6cyl	and Day Ltd
EMERGENCY							8 1/2"x13"	England
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	No. of	Kw.	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. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR	3	200	3	150 mm2	869	3x392	8m	asbestos silicone	
EQUALISER			2	95 mm2		2x294	8m	asbestos silicone	
EMERGENCY GENERATOR									
ROTARY TRANSFORMER: MOTOR									
GENERATOR									

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

DESCRIPTION.									
Galley and Ventilation switchboard	I	95mm2	155	294	36m	asbestos silicone			
Fore load winches junction boxes	I	95 "	256	294	108	"	"		
Middle " " "	I	95 "	256	294	71	"	"		
Starters ventilation holds 1-2-3	I	8	18	64	32	"	"		
Starters ventilation holds 4-5	I	5.5	12	21	31	rubber-lead-steel braided			
Mach. shop switchboard	I	8	23.5	64	34	asbestos silicone			
Donkey boiler switchboard	I	8	60	64	37	"	"		
Aft load winches junction boxes	I	60	208	223	28	"	"		
Hydrophores switchboard	I	8	50	64	12	"	"		
Provision refig. switchboard	I	88	16	64	31	"	"		

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

DESCRIPTION.		CONDUCTORS.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATION.	PROTECTIVE COVERING.
				In the Circuit.	Rule.			
Lighting:								
Lighting board	Nos. 1 & 2	I	22	89.3	121	56	asbestos silicone	
"	Nos. 3 & 4	I	14	73.6	91	46	"	"
"	No. 5	I	14	30.7	91	294	"	"
Navigation light		I	2	5.5	11	37.5	marine lead	armour
Navigation apparatus board		I	8	60	64	42	asbestos silicone	

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
Air compressor	I	50	I	50mm2	190	200	16m	asbestos silicone	
"	2	"	I	50 "	190	200	17m	"	"
Windlass		63	I	95 "	232	294	135m	"	"
L.O. pump	I	52	I	50 "	193	200	38m	"	"
"	2	"	I	50 "	193	200	33m	"	"
Fresh water cooling pump		25	I	22 "	102	121	30m	"	"
sea		25	I	22 "	102	121	35m	"	"
Reserve cooling pump		25	I	22 "	102	121	35m	"	"
Steering gear	I	20	I	40 "	152	175	65m	"	"
"	2	"	I	40 "	152	175	38m	"	"
Bilge and fire pump	I	35	I	40 "	160	175	21m	"	"
"	2	"	I	40 "	160	175	26m	"	"
Ballast pump		29	I	30 "	122	147	42m	"	"
Injector cooling pump	I	2	I	2 "	8.9	11	35m	marine lead armour	
"	2	2	I	2 "	8.9	11	35m	"	"
L.O. Transfer pump		2.5	I	3.5	10.5	16	40m	"	"
F.O. " "		12.5	I	8	50	64	58m	asbestos silicone	
Warping winch		40	I	40	157	175	97m	"	"
Middleship load winches		42	I	95	256	294	143m	"	"
Aft " "	(each)		I	60	208	235	57m	"	"
Fore " "			I	95	256	294	217m	"	"
Generators cooling pump		8	I	8	33	64	40m	"	"
D.O. transfer pump		2.75	I	3.5	11.4	16	35m	marine lead armour	
Main engine feeding pump		2	I	3.5	8.4	16	40m	"	"
F.O. separator		7	I	8	30	64	54m	asbestos silicone	
Storage separator		7	I	8	30	64	66m	"	"
D.O. " "		7	I	8	30	64	78m	"	"
L.O. " "		7	I	8	30	64	68m	"	"
Tackle			I	5.5	14	21	31m	marine lead armour	
Turning gear		8	I	8	31	64	58m	asbestos silicone	

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.

L'Ingénieur Principal
Chef du Service "ÉLECTRICITÉ"
Signé: RODIÈRE

Electrical Contractors.

Date 26 Aout 1960



COMPASSES.

L'Ingénieur en Chef
Signé: GUILLONDE

Have the compasses been adjusted under working conditions

Yes

Builder's Signature.

Date 26 Aout 1960

Guillonde

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

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

yes

General Remarks. (State quality of workmanship and materials, opinions as to class, etc.)

The electrical equipment of this vessel has been installed on board under special survey, in accordance with the approved plans and the applicable requirements of the rules and Secretary's letters

The materials and workmanship are good.

The completed installation was examined under working conditions tested and found satisfactory and in our opinion, is suitable for a classed ship.

Total Capacity of Generators 600 Kilowatts.

The amount of Fee ... NF 3.300 - When applied for,

10.5.19.60

When received,

Travelling Expenses (if any) NF : 264,- 31.8.19.60

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRIDAY - 7 OCT 1960

Assigned

See Rpt. 1.