

with insulating compound Yes or waterproof insulating tape 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 cables laid under machines or floorplates Yes, if so, are they adequately protected Yes. Are cables in machinery spaces, galleys, laundries, etc., lead covered Yes or run in conduit Yes. State how the cables are supported and protected All cables lead covered and armoured - on deck installed under gangway in conduit; in machinery spaces clipped to saddles, trays; leads or direct to structure; in accommodation etc. clipped to saddles or direct to structure.

Are all lead sheaths, armouring and conduits effectually bonded and earthed Yes. Refrigerated chambers, are the cables and fittings as per Rule 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 and with what material Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule Yes. Emergency Supply, state position and method of control. A 50KW A.C. Generator for

Port service is installed on this vessel. Navigation Lamps, are they separately wired Yes controlled by separate double pole switches Yes 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. Secondary Batteries, are they constructed and fitted as per Rule Yes, are they adequately ventilated Yes what is the battery capacity in ampere hours 500.

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof Yes. Are fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present Yes, if so, how are they protected in flameproof fittings.

and where are the controlling switches fitted in accommodation decks above, are all fittings suitably ventilated Yes, are all fittings and accessories constructed and installed as per Rule Yes. Searchlight Lamps, No. of 2, whether fixed or portable portable, are their fittings as per Rule Yes. 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 None. Motors, are all motors constructed and installed as per Rule Yes and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water, steam and oil Yes, if situated near unprotected combustible material state minimum distance from same horizontally Yes and vertically Yes. Are motors coupled to oil fuel transfer and unit 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 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 Yes, are all fuses of the cartridge type Yes, are they of an approved type Yes. Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships Yes. Are the cables lead covered as per Rule Yes. Spare Gear, if the vessel is for open sea service have spares been provided as per Rule Yes (Spare gear on board considered sufficient). 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	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN A.C.	2	400	450	642	1200	Steam Turbine.	—	
* D.C.	2	75	110	682	1200			
* D.C.	2	55	120	458	1200			
Port Gen: A.C. EMERGENCY	1	50	450	80	3600	Steam Turbine.	—	
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
		No. in Parallel Per Pole.	Sectional Area or No. and Dia. of Strands.	In the Circuit.	By Comp. Rule.			
MAIN GENERATOR ... (A.C.)	400	1	1,000,000	642	725	40	V.C.	Lead Covered and Armoured
" " EQUATOR ... (D.C.)	75	1	1,000,000	652	725	45	"	" " " "
" " (D.C.)	55	1	750,000	458	592	45	"	" " " "
Port Service Generator (A.C.)	50	1	1,060,000	80	158	30	"	" " " "
EMERGENCY GENERATOR ...								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR ...								

* Used for Propulsion Excitation.

MAIN DISTRIBUTION CABLES.

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
	No. in Parallel Per Pole.	Sectional Area or No. and Dia. of Strands.	In the Circuit.	By Comp. Rule.			
AUX. SWITCHBOARDS AND SECTION BOARDS ...							
Main Ship Power Panel (440v)	1	10,400	9.3	25	120	V.C.	Lead Covered and Armoured
Galley Power (15KVA Trans. 440/220)	1	66,400	20	99	45	"	" " " "
" " 220 volt mains.	1	300,000	105	279	150	"	" " " "
Shore Connection 440v.	1	650,000	—	466	45	"	" " " "
Mains from 440v Emg. Bus to 15KVA Lighting Tr.	1	66,400	18	99	180	"	" " " "
" " 120v L. Trans. 6 Emg. held	1	450,000	49	367	15	"	" " " "

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS ...	1	33,100	15	75	300	V.C.	Lead Covered and Armoured
NAVIGATION LIGHTS ...	1	10,400	1.5	37	250	"	" " " "
LIGHTING AND HEATING ...							
Midship and Forecastle Lighting	1	66,400	30	99	400	"	" " " "
Port Deck Lighting Panel	1	33,100	20	95	90	"	" " " "
Upper Deck " "	1	66,400	25	99	100	"	" " " "
Engine Room " "	1	66,400	15	99	40	"	" " " "
Boiler Room " "	1	26,300	12	55	80	"	" " " "
Cable Reels	1	6,530	3.4	20	75	"	" " " "
Main Motor Meters	1	6,530	13	20	24	"	" " " "
Generator " "	1	6,530	13	20	30	"	" " " "
Engine Room Emergency Lighting	1	10,400	10	37	40	"	" " " "
Upper Deck Area: " "	1	4,100	4	12	70	"	" " " "
Emg. Radio and gyro supply	1	26,300	15	55	350	"	" " " "

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.						
Boiler and Engine Room Ventilators	4	2	1	6,530	3.1	20	60	V.C. Lead Covered and Armoured
Ship service air compressor	1	5	1	6,530	7.2	20	30	" " " "
Turning Gear	1	3	1	6,530	4.5	20	20	" " " "
Engine Room Bilge Pumps	2	10	1	10,400	13.7	25	110	" " " "
Main Circulating Pump	1	125	1	300,000	16.0	279	60	" " " "
Main shaft turning gear	1	5	1	6,530	7.2	20	100	" " " "
Main propulsion motor cooling fan	1	15	1	16,500	21	41	95	" " " "
Port oil service pumps	2	5	1	6,530	7.2	20	60	" " " "
Starboard oil service pumps	1	2	1	6,530	3.1	20	120	" " " "
Fire and Bottomwater pumps	2	50	1	66,400	60.5	99	60	" " " "
Steering Gear Motors	2	20	1	26,300	26	55	165	" " " "
Main Condensate pumps	2	25	1	26,300	32	55	50	" " " "
Aux. Circulating pump	1	30	1	33,100	39	65	90	" " " "
" Condensate "	1	15	1	16,500	19	41	60	" " " "
Fuel oil service pumps	2	7.5	1	6,530	10	20	45	" " " "
Forward Drift fans	3	50/20	1	106,000	63/29	134	80	" " " "
Evaporator feed pump	1	1	1	6,530	1.7	20	90	" " " "
Ammonia Vent fans	2	2	1	6,530	3.1	20	50	" " " "
Boiler water pumps	2	2	1	6,530	3.1	20	90	" " " "
Refig. Compressor	1	7.5	1	6,530	10	20	150	" " " "
" Air: Pump	1	1	1	6,530	1.7	20	150	" " " "
Dist. water service pump	1	7.5	1	6,530	10	20	150	" " " "
Sanitary pump	1	7.5	1	6,530	10	20	125	" " " "
Drinking Water pumps	2	15	1	16,500	19	41	90	" " " "
Cargo Pumps	3	200	1	450,000	243	367	60	" " " "
Stripper pumps	2	50	1	66,400	63	99	45	" " " "
Fuel oil transfer pumps	2	20	1	16,500	26	41	50	" " " "

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 Engineers. Date _____

COMPASSES.

Minimum distance between electric generators or motors and standard compass _____

Minimum distance between electric generators or motors and steering compass _____

The nearest cables to the compasses are as follows:—

A cable carrying _____ Ampères _____ feet from standard compass _____ feet from steering compass.

A cable carrying _____ Ampères _____ feet from standard compass _____ feet from steering compass.

A cable carrying _____ Ampères _____ feet from standard compass _____ feet from steering compass.

Have the compasses been adjusted with and without the electric installation at work at full power _____

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted _____

The maximum deviation due to electric currents was found to be _____ degrees on _____ course in the case of the standard compass, and _____ degrees on _____ course in the case of the steering compass.

Builder's Signature. Date _____

Is this installation a duplicate of a previous case? ^{Installation generally similar to other T2 Tankers} If so, state name of vessel "EL MORRO"

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

Certificates. Are certificates of test for motors engaged on essential 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

Equipment of this vessel appears to have been installed in accordance with American practice and with the typical plans of T2 Tankers.

The following repairs and alterations have been carried out to comply with Rule requirements:—

Centre castle turn deck space:— All fittings replaced by certified flameproof type and switches removed to deck above. Locked outlets removed.

Cargo and Stripping Pump Motors overhauled; Alternative supply to Navigation lights fitted; Circuits having "low insulation" tests rectified; Main line pump motor overhauled.

Insulation tests on all equipment after repairs were satisfactory and the installation was tested under working conditions satisfactorily.

The installation appears in good & efficient condition and whilst not strictly in accordance with the Society's Rules, it is, in my opinion, eligible to be accepted for classification.

Note:— In connection with the auxiliary motor starter pilot lights mentioned in Circular No 1903 the Owners Superintendent states that his engineers have been informed of the danger associated with the pilot lights and that modifications will be carried out at the first opportunity when the necessary material is available.

$(2 \times 450 + 2 \times 55 + 1 \times 50)$

Total Capacity of Generators = 960 Kilowatts.

X. Note:— The 55 KW Generators supply Main Gen: Excitation and auxiliary D.C. circuits.

(See report .9.)

The amount of Fee ... £ : : When applied for,19.....

Travelling Expenses (if any) £ : : When received,19.....

J.H. Tuckell
 Surveyor to Lloyd's Register of Shipping.

Notes sent 28/1/49.

FEB 4 1949

Committee's Minute _____

Assigned See minute on fe. made rpt.

5m.4.31.—Transfer. (MADE AND PRINTED IN ENGLAND.)
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)

