

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

13 APR 1948

Received at London Office.....

Date of writing Report. 10<sup>th</sup> April 1948 When handed in at Local Office. 10<sup>th</sup> April 1948 Port of Bordeaux

Survey held at La Rochelle Date, First Survey 20<sup>th</sup> Aug 47 Last Survey 4<sup>th</sup> March 1948  
Reg. Book. (Number of Visits. 7)

2894 on the Ennis Lerun Motor Gunner "EL KARIM" or "ELAFRIT" Tons {Gross 632  
Net 334

Built at Rochester By whom built Odenbach Ship Build Corp Yard No. When built 1943

Owners C. Marocaine de Transport Maritime Port belonging to Toulon

Electrical Installation fitted by Odenbach Ship Building Contract No. When fitted 1944

Vessel fitted for carrying Petroleum in bulk yes Is vessel equipped with D.F. yes E.S.D. No Gy.C. No Sub.Sig. No

Have plans been submitted and approved yes System of Distribution 220 volts & 110 volts Voltage of supply for Lighting 110

Feeding Power Direct or Alternating Current, Lighting Power If Alternating Current state periodicity Prime Movers,

Has the governing been tested and found as per Rule when full load is suddenly thrown on and off yes Are turbine emergency governors fitted with a

trip switch as per Rule yes Generators, are they compound wound yes, are they level compounded under working conditions yes,

not compound wound state distance between generators and from switchboard Where more than one generator is fitted are they

arranged to run in parallel yes, are shunt field regulators provided yes Is the compound winding connected to the negative or positive pole

Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing 6. Each Have certificates of

test for machines under 100 kw. been supplied No and the results found as per rule yes Are the lubricating arrangements and the construction

of the generators as per rule yes Position of Generators One Starboard, One Port side in forward part of engine

room, is the ventilation in way of generators satisfactory yes, are they clear of inflammable material yes, if situated

near unprotected combustible material state distance from same horizontally No and vertically No, are the generators protected from mechanical

injury and damage from water, steam and oil yes, are the bedplates and frames earthed and the prime movers and generators in metallic

contact Switchboards, where are main switchboards placed in forward part of the engine

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

and oil yes, if situated near unprotected combustible material state distance from same horizontally No and vertically No, what insulation

material is used for the panels along asbestos base, 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 yes Is the frame effectually earthed yes

the construction as per Rule yes, including accessibility of parts yes, absence of fuses on the back of the board yes, individual fuses

pilot and earth lamps, voltmeters, etc. yes locking of screws and nuts yes, labelling of apparatus and fuses yes, fuses on the "dead"

ends of switches yes Description of Main Switchgear for each generator and arrangement of equaliser switches Panels 1 & 2

with synchronous switch breakers, etc.

and for each outgoing circuit Alternating current supplied by both generators delivered

used for motors to 220 volts Current transformed for lighting to 110V

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule yes Instruments on main switchboard 6

ammeters 10 voltmeters 2 synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection yes Earth Testing, state means provided ordinary

switches, Circuit Breakers and Fuses, are they as per Rule yes, are the fuses an approved type yes, are all fuses labelled as

per Rule yes If circuit breakers are provided for the generators, at what overload current did they open when tested 220V, are the reversed current

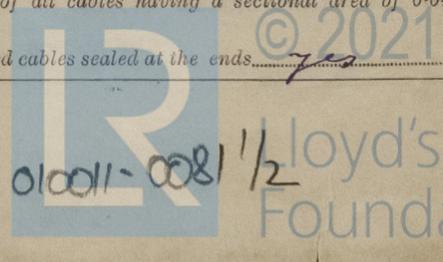
protection devices connected on the pole opposite to the equaliser connection yes, have they been tested under working conditions, and at what current

do they operate yes Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule yes

tables, are they insulated and protected as per the appropriate Tables of the Rules yes, if otherwise than as per Rule are they of an approved type yes,

the maximum fall of pressure between bus bars and any point under maximum load, are the ends of all cables having a sectional area of 0.04

square inch and above provided with soldering sockets yes Are paper insulated and varnished cambric insulated cables sealed at the ends yes



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with insulating compound yes or waterproof insulating tape no. Are all the cable runs in accessible positions, not exposed to drip or acc of water or oil, high temperatures or risk of mechanical damage. no cables laid under machines or floorplates no, if so, are they ac protected no. Are cables in machinery spaces, galleys, laundries, etc., lead covered yes or run in conduit no. State how the supported and protected supported in beams & well protected.

Are all lead sheaths, armoring 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 beams, etc., are the holes effectively bushed yes and with what material insulating material. Alternative Light the groups of lights in the engine and boiler rooms arranged as per Rule yes. Emergency Supply, state position after part the engine room and method of control current breakers fitted charging circuits. Navigation Lamps, are they separately wired yes controlled by double pole switches yes and fuses yes. Are the switches and fuses in a position accessible only to the officers on watch yes 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 24 x.

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof yes. Are installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present yes, if so, how are they protected proof types of apparatus in pump room & in engine room and where are the controlling switches fitted in engine room, are all fittings suitably ventilated yes are all fittings and accessories constructed and installed as per Rule yes. Searchlight Lamps, No. of no, whether fixed or portable no, are their fittings as per Rule no. 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 yes. Motors, are all motors constructed installed as per Rule yes and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from steam and oil yes, if situated near unprotected combustible material state minimum distance from same horizontally no and vertically no 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 100 BHP intended for essential services been supplied and the results found as per Rule no Control Gear and Resistances, are they constructed 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 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, are they 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	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	2	60	220	60	1250	oil motors	gas oil	
EMERGENCY								
ROTARY TRANSFORMER	2	110						

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. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR			3" 250 MCM	250	✓			Lead & Armoured Cables
" " EQUALISER								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

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. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
BOARDS AND SECTION BOARDS							
oil transfer pump		3" 14	9	✓			Lead & Armoured Cables
room fans		3" 12	11.6	✓			d°
service pump		3" 12	4.5	✓			d°
service pump		3"	1.5	✓			d°
service pump		3" 6	2.7	✓			d°
fan blowers		3" 12	8.4	✓			d°
service pump		3" 14	1.5	✓			d°
gear		3" 8	2.2	✓			d°
gear		3" 10	13.5	✓			d°
bilge pump		3" 10	13.5	✓			d°
bilge pump		3" 2	50	✓			d°
mindless		3" 2	48	✓			d°
water pump		3" 14	2.5	✓			d°
water pump		3" 8	20	✓			d°
water pump		3" 2	60	✓			d°

LIGHTING AND HEATING, ETC., CABLES.

DESCRIPTION.	AMPERES.	FEET.
...	110	3.3
...	110	
...	110	

MOTOR CABLES.

IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.

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..... *yes* ..... If so, state name of vessel "*M. Assau*".....

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

Certificates. Are certificates of test for motors engaged on essential services and generators forwarded herewith..... *No*.....

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

*in main Officers & Crew accommodation fitted with cables under rule of material of good quality; workmanship good. No modifications were made to generators, motors, switch boards & general plant.*

*All plant verified, satisfactorily megged & installation & couplings examined under working condition.*

*In my opinion, the electrical equipment merits to be classed.*

*Noted Oct 20/48*

Total Capacity of Generators..... *120* ✓ ..... Kilowatts.

The amount of fee included  
*See shown on RPT. 9*  
 Travelling Expenses (if any) £ *18.3.48* :  
 When applied for, .....19.....  
 When received, .....19.....

*J. Reure*  
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute..... *FRID 23 APR 1948*.....

Assigned..... *See minute on Vol. 30422*.....

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