

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

25 FEB 1948

Received at London Office

Date of writing Report... 23.2.1948 When handed in at Local Office... 25.2.1948 Port of... Southampton

No. in Survey held at... Southampton Date, First Survey... 9th May 1947 Last Survey... 11-2-1948
Reg. Book. (Number of Visits... 514...)

on the... MV URANIA ex MMS 1084 Tons { Gross... 297.02 Net... 104.71

Built at... Wivenhoe By whom built... Rawledge Ironworks Yard No. When built... 1944

Owners... W. A. Phillips Anderson & Co. Port belonging to... Southampton

Electrical Installation fitted by... Risdon Blazley Ltd Contract No. When fitted

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

Have plans been submitted and approved... System of Distribution... 2 Wire Double Contact Voltage of supply for Lighting... 220

Heating... 220 Power... 220 Direct or Alternating Current, Lighting... DC Power... DC 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... Generators, are they compound wound... yes, are they level compounded under working conditions... yes

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

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

Positive Have machines over 100 kw. 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... Are the lubricating arrangements and the construction

of the generators as per rule... yes Position of Generators... Starboard Side 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... and vertically... are the generators protected from mechanical

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

contact... yes Switchboards, where are main switchboards placed... Port Side of 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... and vertically... what insulation

material is used for the panels... (Stated) Tuffnoid Compositon, 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

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

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

side of switches... yes Description of Main Switchgear for each generator and arrangement of equaliser switches... One Generator

No. equalising switches fitted... 1 Main Switch between Generator and

Switchboard, and independent Switches and fuses to each circuit

and for each outgoing circuit

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule... yes Instruments on main switchboard... 2

ammeters... 1 voltmeters... 1 synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection... Earth Testing, state means provided... Earth Lamp on Switchboard

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... are the reversed current

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

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

Cables, 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

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

square inch and above provided with soldering sockets... Metallic Contact paper insulated and varnished cambric insulated cables sealed at the ends... nil

Handwritten note: 23.3.48

with insulating compound... or waterproof insulating tape... 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... if so, are they adequately protected... Are cables in machinery spaces, galleys, laundries, etc., lead covered... or run in conduit... State how the cables are supported and protected. Clip and Conduit in way of Tank spaces.

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. Fibre bushes and Brass Glands. Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule. Emergency Supply, state position. No emergency lighting fitted. and method of control.

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. No. Secondary Batteries, are they constructed and fitted as per Rule. Nil, are they adequately ventilated. Yes what is the battery capacity in ampere hours.

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. Screwed conduit and Gas tight fittings (Passing through Tank room and where are the controlling switches fitted. At Entrance of Hatch, are all fittings suitably ventilated. Yes, are all fittings and accessories constructed and installed as per Rule. Yes. Searchlight Lamps, No. of Nil, whether fixed or portable. Yes, 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. Yes. 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. clear and vertically. clear. 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.

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. 90%, 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, 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	1	25	220	114	No. 1 Light Diesel Eng. Light Gasoline			
EMERGENCY								
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. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR	30.22	1	19/16	112	112	135 feet	Oil Paper	Lead Covered
" " 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.			
AUX. SWITCHBOARDS AND SECTION BOARDS ...		10225					
From Main Switchboard to Section Board for Heaters	1	7/064	60	75	40ft	Oil Paper	Lead Covered

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS	1	0042	not fitted	123 feet	Rubber	Lead covered
NAVIGATION LIGHTS	1	7/029	3	100 feet	Plastic	Lead covered
LIGHTING AND HEATING	1	0042				
From Main Switchboard to Distribution Box for Engine room Lighting	1	7/029		35 feet	Plastic	Lead covered
From Main Switchboard to Distribution Box Midship Lighting	1	7/029	3	86 feet	Plastic	Lead covered
From Main Switchboard to after Distribution Box Lighting	1	7/029	3	90 feet	Plastic	Lead covered
From Main Switchboard to Fish Hold and Forecastle Lighting	1	7/029	3 1/4	140 feet	Plastic	Lead covered

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.					
Windlass Electric Motor	1	12	1	022	150	75	155 feet Ciled Paper Lead covered
Refrigerator	1	5	1	070	20	24	24 feet V.I.R. In conduit
Steering Gear	1	3	1	042	10	15	80 feet Paper Lead covered
Winch	1	5 3/4	1	070	20	24	20 feet V.I.R. In conduit

Report submitted to Electrical Department 23.3.48

[Signature]
23.3.48

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 5 Ampères 11 feet from standard compass 5 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 not yet.

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..... If so, state name of vessel

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 installation of this vessel has been examined throughout and sizes of cables checked and found as per this report. The electrical installation was examined under full working conditions and tested with satisfactory results. Material and Workmanship appear good, and the electrical installation is eligible in my opinion to be classed L.M.C 2-48, with the machinery of this vessel.

Noted
[Signature]
23.3.48.

Total Capacity of Generators 26 Kilowatts.

The amount of Fee £ 15 : : When applied for, 24/2/1948.
Travelling Expenses (if any) £ : : When received,19.....

G. M. Macdonald.
Surveyor to Lloyd's Register of Shipping.

Committee's Minute 27. 9 APR 1948

Assigned Su F.E. Mely rph.

5m. 430.—Transfer. (MADE AND PRINTED IN ENGLAND.) (The Surveyors are requested not to write on or below the space for Committee's Minute.)

