

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

25 AUG 1926

Received at London Office

Date of writing Report _____ When handed in at Local Office 24/8/26 Port of NEWCASTLE-ON-TYNE

No. in Survey held at Newcastle Date, First Survey 8 April Last Survey 13 Aug 19 26
(Number of Visits 17)

Reg. Book Suff. 88854 on the "EL AMIR FAROUK" Tons { Gross _____ Net _____

Built at Newcastle By whom built Hawthorn Leslie & Co. Ltd Yard No. 543 When built 1926

Owners Egyptian Government Port belonging to _____

Electric Light Installation fitted by Hawthorn Leslie & Co. Ltd. Contract No. 543 When fitted 1926

System of Distribution Double wire system ✓
Pressure of supply for Lighting 110 volts, Heating 110 volts, Power 110 volts.

Direct or Alternating Current, Lighting Direct ✓ Power Direct ✓

If alternating current system, state frequency of periods per second _____

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off yes ✓

Generators, do they comply with the requirements regarding rating yes ✓, are they compound wound yes ✓

are they over compounded 5 per cent. yes ✓, if not compound wound state distance between each generator _____

Where more than one generator is fitted are they arranged to run in parallel yes ✓, is an adjustable regulating resistance fitted in series with each shunt field yes ✓

Are all terminals accessible, clearly marked, and furnished with sockets yes ✓, are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched yes ✓

Are the lubricating arrangements of the generators as per Rule yes ✓

Position of Generators Engine room aft
is the ventilation in way of the generators satisfactory yes ✓, are they clear of all inflammable material yes ✓

if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the generators _____ and _____, are the generators protected from mechanical injury and damage from water, steam or oil yes ✓

are their axes of rotation fore and aft yes ✓

Earthing, are the bed-plates and frames of the generating plant efficiently earthed yes ✓, are the prime movers and their respective generators in metallic contact yes ✓

Main Switch Boards, where placed Engine room aft

If the generators and main switchboard are not placed in the same compartment, is each generator provided with a fuse on each insulated pole as near as possible to the terminals of the generator, additional to that provided on the main switchboard _____

Switchboards, are they placed in accessible positions, free from inflammable gases and acid fumes yes ✓

are they protected from mechanical injury and damage from water, steam or oil yes ✓, if situated near unprotected woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards _____ and _____

are they constructed wholly of durable, non-ignitable non-absorbent materials yes ✓, is all insulation of high dielectric strength and of permanently high insulation resistance yes ✓

if semi-insulating material is used, are all conducting parts insulated from the slab with mica or micaite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework _____

and is the frame effectively earthed yes ✓. Are the fittings as per Rule regarding:— spacing or shielding of live parts _____

accessibility of all parts yes ✓, absence of fuses on back of board yes ✓, proportion of omnibus bars yes ✓

individual fuses to voltmeter, pilot or earth lamp yes ✓, connections of switches yes ✓

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches 2-400 amp D.C. circuit breaker fitted with overload reverse current trip interlocked with S.P. equaliser switch on main dynamo.

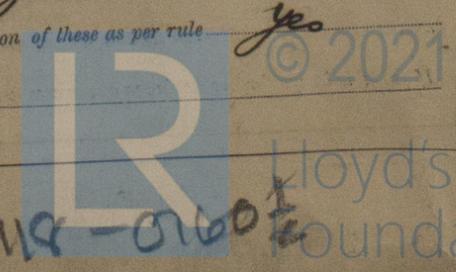
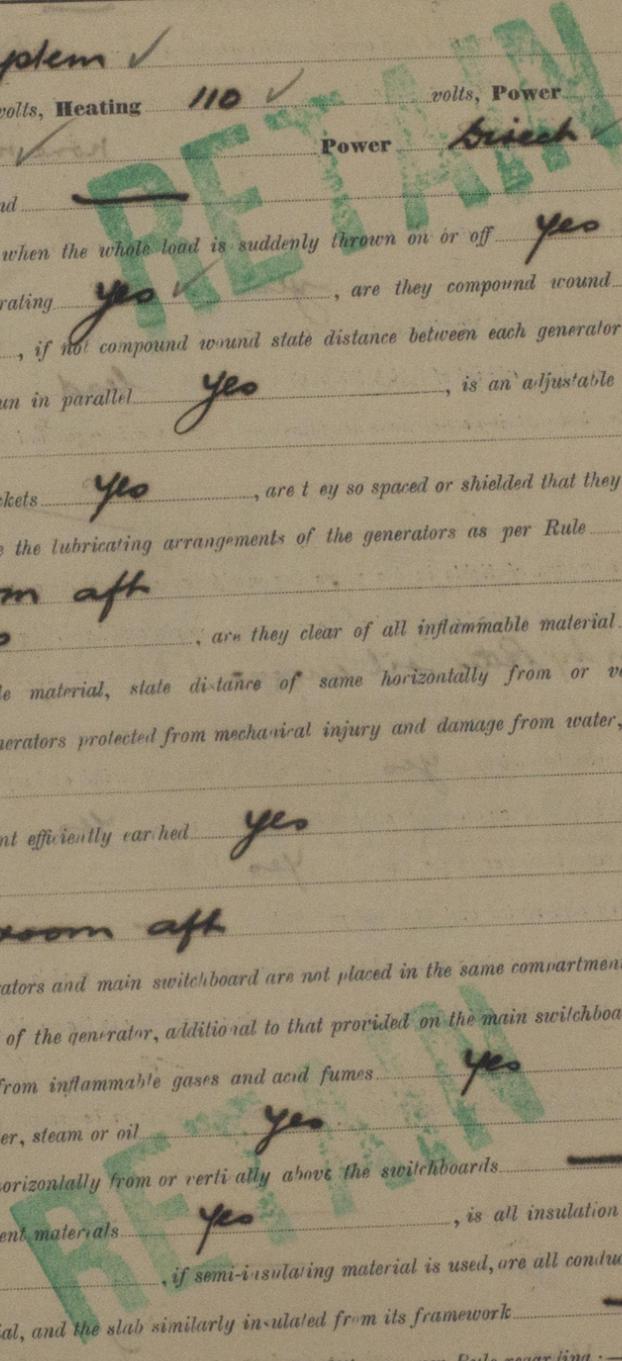
Double pole fuses & single pole switches on each outgoing circuit.

Instruments on main switchboard 2 ammeters 2 voltmeters _____ synchronising device for paralleling purposes.

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system Earth lamps coupled to earth through switches & fuses

Switches, Circuit Breakers and Fusible Cut-outs, do these comply with the requirements of the Rules yes ✓

Joint Boxes Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule yes ✓



W118-0160

Cables: Single, twin, concentric, or multicore single are the cables insulated and protected as per Tables IV or V of the Rules yes

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 4.6 volts

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets yes

Paper Insulated Cables. If cables are paper covered, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound yes

Cable Runs, are the cables fixed as far as possible in accessible positions not exposed to drip or accumulation of water or oil, or to high temperature from boilers, steam pipes, valves or other hot objects, or to avoidable risk of mechanical damage yes

Support and Protection of Cables, state how the cables are supported and protected Main cables run on tray plating clipped up with brass clips lead covered cable. Lead covered cable in cabins

If cables are run in wood casings, are the casings and caps secured by screws yes, are the cap screws of brass yes, are the cables run in separate grooves yes. If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VIII yes

Refrigerated Chambers, if lights are fitted, are the cables and fittings in accordance with the special requirements yes

Joints in Cables, state if any, and how made, insulated, and protected none made

Watertight Glands and Deck Tubes, are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands yes

Bushes in Beams and Non-watertight Partitions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed yes, state the material of which the bushes are made lead

Earthing Connections, state whether earthing connections are fitted and their respective sectional areas yes

Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule yes

Emergency Supply, state position and method of control of the emergency supply and how the generator is driven fitted in engine room on portside, driven by Peter oil engine

Navigation Lamps, are these separately wired yes, controlled by separate switch and separate fuses yes, are the fuses double pole yes, are the switches and fuses grouped in a position accessible only to the officers on watch yes

has each navigation lamp an automatic indicator as per Rule yes

Secondary Batteries, are they constructed and fitted as per Rule yes

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

are any fittings placed in spaces in which goods are liable to be stacked in close proximity to them; if so, how are they protected yes

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected yes

where are the controlling switches situated yes

Searchlight Lamps, No. of yes, whether fixed or portable fixed, are their fittings as per Rule yes

Arc Lamps, other than searchlight lamps, No. of yes, are their live parts insulated from the frame or case yes, are their fittings as per Rule yes

Motors, are their working parts readily accessible yes, are the coils self-contained and readily removable for replacement yes, are the brushes, brush holders, terminals and lubricating arrangements as per Rule yes, are the motors placed in well-ventilated compartments in which inflammable gases cannot accumulate and clear of all inflammable material yes

are they protected from mechanical injury and damage from water, steam or oil yes, are their axes of rotation fore and aft yes

if situated near unprotected woodwork or other combustible material, are the motors of the totally enclosed, pipe ventilated, forced draught, drip or flame proof type yes, if not of this type, state distance of the combustible material horizontally or vertically above the motors yes

Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed and fitted as per Rule yes

Lightning Conductors, where lightning conductors are required, are these fitted as per Rule yes

Ships carrying Oil having a Flash Point less than 150° F. Have the special requirements of the Rules been complied with regarding switches, joint boxes, section and distribution boards, protection of cables, method of distribution, lead of cables, lights and fittings yes

If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office yes

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR	No of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE	
		Kilowatts	Volts	Ampères	R.P.M. per Min.		Fuel Used	Flash Point of Fuel
MAIN	2	40	110	364	350	Steam engines open type		
AUXILIARY								
EMERGENCY	1	1	110	9.1	1000	Vickers Peter oil engine start on paraffin, run on petrol		
ROTARY TRANSFORMER								

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION	No. of Conductors	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND		Total Maximum Current in Amps.	Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR	2	.6062	91	.093	364	40	V.I.R	Lead covered, armoured.
	EQUALISER CONNECTIONS	2	.6062	91	.093	364	40	V.I.R	do
	AUXILIARY GENERATOR								
	EMERGENCY GENERATOR	2	.00701	7	.036	9.1	30	V.I.R	do
	ROTARY TRANSFORMER								
	AUXILIARY SWITCHBOARDS								
	ENGINE ROOM	2	.01046	7	.044	12.7	36	V.I.R	do
	BOILER ROOM								
	ACCOMMODATION (FORP)	2	.0396	19	.052	27.0	260	V.I.R	do
	" (AFT)	2	.06	19	.064	33.0	70	V.I.R	do
	Navigation	2	.00701	7	.036	11.4	50	V.I.R	do
	WIRELESS	2	.02214	7	.064	30	210	V.I.R	do
	SEARCHLIGHT	2	.1009	19	.083	100	335	V.I.R	do
	MASTHEAD LIGHT	2	.00194	3	.029	1.0	220	V.I.R	Lead covered
	SIDE LIGHTS	2	.00194	3	.029	1.0	130	V.I.R	do
	COMPASS LIGHTS	2	.00194	3	.029	1.0	20	V.I.R	do
	Navigation LIGHTS	2	.00194	3	.029	1.0	360	V.I.R	do
	CARGO LIGHTS	2	.01046	7	.044	3.3	60	V.I.R	do
	ARC LAMPS								
	HEATERS Forward	1	.1009	19	.083	105	260	V.I.R	Lead covered, armoured
	AFT	1	.1009	19	.083	89	70	V.I.R	do

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION	No. of Motors	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND		Total Maximum Current in Amps.	Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP								
	MAIN BILGE LINE PUMPS								
	GENERAL SERVICE PUMP								
	EMERGENCY BILGE PUMP								
	SANITARY PUMP								
	CIRC. SEA WATER PUMPS								
	CIRC. FRESH WATER PUMPS								
	AIR COMPRESSOR								
	FRESH WATER PUMP								
	ENGINE TURNING GEAR								
	ENGINE REVERSING GEAR								
	LUBRICATING OIL PUMPS								
	OIL FUEL TRANSFER PUMP								
	WINDLASS								
	WINCHES, FORWARD								
	WINCHES, AFT								
	STEERING GEAR								
	(a) MOTOR GENERATOR								
	(b) MAIN MOTOR								
	WORKSHOP MOTOR								
	VENTILATING FANS								
	Refrigerator motor	1	.07592	19	.072	73	45	V.I.R	Lead covered, armoured
	Sounding machine	1	.00701	7	.036	16	300	V.I.R	Lead covered.

All Conductors are of annealed copper conforming to British Standard Specification No. 7.

The Insulated Conductors are guaranteed to withstand the immersion and resistance tests specified in the Rules.

The foregoing is a correct description.

John T. Salway

J.W.H.

Electrical Engineers.

Date 23rd August 1926.

COMPASSES.

Distance between electric generators or motors and standard compass 135 feet

Distance between electric generators or motors and steering compass 127 feet

The nearest cables to the compasses are as follows:—

A cable carrying .26 Amperes on the standard compass 8 feet from steering compass.

A cable carrying .26 Amperes 8 feet from standard compass on the steering compass.

A cable carrying 11.4 Amperes 12 feet from standard compass 9 feet from steering compass.

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

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

The maximum deviation due to electric currents was found to be nil degrees on each course in the case of the standard

compass, and nil degrees on each course in the case of the steering compass.

R. & W. HAWTHORN, LESLIE & CO. LIMITED.

John T. Salway

J.W.H.

Builder's Signature.

Date 23rd August 1926

Is this installation a duplicate of a previous case no If so, state name of vessel _____

General Remarks (State quality of workmanship, opinions as to class, &c.)

The above installation is in accordance with the Society's Rules. The vessel is eligible in my opinion for notation elec light, wireless

It is submitted that this vessel is eligible for THE RECORD. Elec light.

W.T. Badger
26/8/26

Total Capacity of Generators 81 Kilowatts.

The amount of Fee ... £ 34 : 11 : 11/8/1926

Travelling Expenses (if any) £ : : 13/8/1926

W.T. Badger

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Elec light

Im. 1. 20. Transfer. (The Surveyors are requested not to write on or behind the space for Committee's Minute.)



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