

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 19 When handed in at Local Office 19 Port of *Lewcastle on Tyne*
 No. in Survey held at *Lewcastle* Date, First Survey *16/4/28* Last Survey *21/5/28* 1928
 Reg. Book. *28352* on the *M.V. Jenny* (Number of Visits.....)
 Built at *Wallsend* By whom built *Swan Hunter & W.R. Ltd* Yard No. *1325* Tons { Gross *4706*
 Owners *A/S Olyefarth II.* Port belonging to *Oslo* { Net *2682*
 When built *1928*
 Electric Light Installation fitted by *Swan Hunter & W.R. Ltd.* Contract No. *1325* When fitted *1928*.

System of Distribution

Pressure of supply for Lighting *110* volts, Heating *—* 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*

Position of Generators

Are the lubricating arrangements of the generators as per Rule *Yes*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 bedplates 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 Port Side*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 micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework *Yes*and is the frame effectively earthed *Yes*. Are the fittings as per Rule regarding:— spacing or shielding of live parts *Yes*, 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 *3 pole circuit breakers**For generator, one pole acting as an equaliser switch. Outgoing circuits having double pole knife switches & cartridge fuses.*Instruments on main switchboard *3* 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 through switches & fuses to earth*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*.

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Lloyd's Register

Foundation

010478-010483-00721/2

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.	45.	110	407	375	Diesel Engine		
AUXILIARY								
EMERGENCY								
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, Amperes.	Approximate Length, (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR...	2	.7435	91	.103	461	80	K.I.R	Lead covered.
	EQUALISER CONNECTIONS	2	.3024	37	.103	240	40	do	do
	AUXILIARY GENERATOR								
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER...								
	AUXILIARY SWITCHBOARDS								
	ENGINE ROOM	2	.00455	7	.029	9.5	30	do	do
	BOILER ROOM								
	ACCOMMODATION	2	.00701	7	.036	18.4	150	do	do
	Navigation	2	.00701	7	.036	7.5	450	do	Lead covered.
	Midship forward	2	.01462	7	.052	12.0	420	do	do
	WIRELESS	2	.01462	7	.052	15	450	do	do
	SEARCHLIGHT								
	MASTHEAD LIGHT...	2	.00194	3	.029	5	350	do	do
	SIDE LIGHTS...	2	.00194	3	.029	5	70	do	Lead covered
	COMPASS LIGHTS...	2	.00194	3	.029	2	50	do	do
	POOP LIGHTS	2	.00194	3	.029	5	540	do	Lead covered.
	CARGO LIGHTS	2	.00194	3	.029	3.0	50	do	Lead covered.
	ARC LAMPS								
	HEATERS								

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor, Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current, Amperes.	Approximate Length, (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP								
	MAIN BILGE LINE PUMPS	1	.10990	19	.088	114	120	K.I.R	Lead and braided
	GENERAL SERVICE PUMP								
	EMERGENCY BILGE PUMP								
	SANITARY PUMP	1	.24650	37	.093	186	95	do	do
	CIRC. SEA WATER PUMPS								
	CIRC. FRESH WATER PUMPS								
	AIR COMPRESSOR								
	FRESH WATER PUMP	1	.03960	19	.052	60	200	do	do
	ENGINE TURNING GEAR								
	ENGINE REVERSING GEAR	1	.24650	37	.093	186	108	do	do
	LUBRICATING OIL PUMPS								
	OIL FUEL TRANSFER PUMP								
	WINDLASS								
	WINCHES, FORWARD								
	WINCHES, AFT								
	STEERING GEAR—								
	(a) MOTOR GENERATOR...	1	.1168	37	.064	115	300	do	do
	(b) MAIN MOTOR	1	.01046	7	.044	24	90	do	do
	WORKSHOP MOTOR								
	VENTILATING FANS								
	OIL PURIFIER	1	.00701	7	.036	20	60	do	do
	BOILER FEEDPUMP	1	.00701	7	.036	18	200	do	do
	REFRIG. MOTOR	1	.03960	19	.052	48	300	do	do
	OIL FUEL MOTOR	1	.00299	3	.006	9	120	do	do

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 3 bolts

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, uptakes 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 Cables in acc. lead covered clipped
Cables on deck L. Chain in galvanized pipe. Cables in engine room covered and clipped
 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 VII 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 what earthing connections are fitted and their respective sectional areas are their connections made as per Rule

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 Yes

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 wherever 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 in pump room
special gas tight fittings
in galvanized iron pipe in outside pump room
 where are the controlling switches situated midship accommodation box

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

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

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 —, if not of this type, state distance of the combustible material horizontally or vertically above the motors — and —

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

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.

FOR
SWAN. HUNTER. & WIGHAM RICHARDSON. LTD.

Electrical Engineers.

Date

COMPASSES.

Distance between electric generators or motors and standard compass

136 feet

Distance between electric generators or motors and steering compass

145 feet.

The nearest cables to the compasses are as follows:—

A cable carrying 2 Ampères on the ~~12~~ feet from standard compass 12 feet from steering compass.

A cable carrying 2 Ampères 12 feet from standard compass on the ~~12~~ feet from steering compass.

A cable carrying 7.5 Ampères 12 feet from standard compass 8 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 all course in the case of the standard compass, and nil degrees on all course in the case of the steering compass.

FOR
SWAN. HUNTER. & WIGHAM RICHARDSON. LTD.

Builder's Signature.

Date

R. L. Clark.

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 has been fitted under special survey. The instal has been tested under working conditions & the result in my opinion is eligible for record of wireless & elec light

Noted

W. T. Badger. 19/4/24

Total Capacity of Generators

90.

Kilowatts.

The amount of Fee

£ 31

:

—

When applied for,

30.5 19.28

Travelling Expenses (if any)

£

:

:

When received,

1.6 19.28

W. T. Badger.

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Elec. Lt.