

Rpt. 13.

No. 30449

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

[4 SEP 1930]

Received at London Office

Date of writing Report

19

When handed in at Local Office

19

Port of *Sunderland.*

No. in Survey held at

Sunderland.

Date, First Survey

29/6/30

Last Survey

27/8/

1930

Reg. Book.

77054 on the

M.V. "Longwood."

(Number of Visits...)

19

Tons

Gross *9463*Net *5559*

Built at

Sunderland.

By whom built

J. Haining & Son Ltd.

Yard No.

712

When built

1930

Owners

Oil & Molasses Tankers Ltd.

Port belonging to

London

Electric Light Installation fitted by

Sunderland Forge & Eng Co. Ltd.

Contract No.

*712*When fitted *1930***System of Distribution***DOUBLE WIRE.***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

No

, 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.*

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.*

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*D.P.S.T. KNIFE SWITCH & D.P. ZED TYPE FUSES FOR EACH GENERATOR. D.P.E.O. KNIFE SWITCHES & D.P. ZED TYPE FUSES FOR EACH 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*LAMPS CONNECTION THRO' SWITCH & FUSE ON EACH POLE 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

002165-002173-018012

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	18	110	164	320	STANDARD OPEN TYPE ENGINE.			
AUXILIARY	1	18	110	164	450	ROSTON - OIL ENGINE	B.S. FUEL OIL No. 1		
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	.2	37	.083.	164	60	RUBBER	L.C.A.B.
	EQUALISER CONNECTIONS								
	AUXILIARY GENERATOR	2	.2	37	.083	164	60	"	"
	EMERGENCY GENERATOR								
	ROTARY TRANSFORMER... ..								
	AUXILIARY SWITCHBOARDS								
	ENGINE ROOM								
	BOILER ROOM	2	.01	7	.044	268	60	"	"
	ACCOMMODATION ENGINEERS... ..	2	.0225	7	.064.	30.3.	100	"	"
	SALOON ACCOMMODATION	2	.0225	7	.064	24.45	600	"	"
	NAVIGATION	2	.007	7	.036	4.3	600	"	"
	1 per pole								
	WIRELESS	2	.0225	7	.064		600	"	"
	SEARCHLIGHT								
	MASTHEAD LIGHT... ..								
	SIDE LIGHTS								
	COMPASS LIGHTS								
	POOP LIGHTS								
	CARGO LIGHTS	2	.0225	7	.064	24	100	"	"
	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								
	GENERAL SERVICE PUMP								
	EMERGENCY BILGE PUMP								
	SANITARY PUMP	1	.01	7	.044	30		RUBBER	L.C.A.B.
	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	1	.01	7	.044	30		"	"
	VENTILATING FANS								
	OIL PUMPS	2	.01	7	.044	24		"	"
	REFRIG. MACHINE	1	.0225	7	.064	46		"	"
	CRANE MOTOR	1	.01	7	.044	24		"	"

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.

A. PRO THE SONDERLAND FORGE & ENGINEERING CO. LTD.

Thos. Thompson

Electrical Engineers.

Date

26 AUG 1930

COMPASSES.

Distance between electric generators or motors and standard compass 260 FEET.

Distance between electric generators or motors and steering compass 256 FEET.

The nearest cables to the compasses are as follows:—

A cable carrying 4.5 Ampères 8 feet from standard compass 6 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 *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 *any* course in the case of the standard compass, and *nil* degrees on *any* course in the case of the steering compass.

SIR JAMES LING & SONS, LIMITED.

W. Richardson

Builder's Signature.

Date

SECRETARY.

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.)

This installation has been fitted on board under special survey. Tested under full working conditions and found satisfactory. The materials and workmanship were found to be good and sound.

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

(S)
10/9/30

Total Capacity of Generators 36. Kilowatts.

The amount of Fee ... £240.00 : When applied for, 7.8.1930.
Travelling Expenses (if any) £ : : When received, 14.9.1930.

J. Chaikin for W. T. Badger.
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

Elec. Light