

Rpt. 13.

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report

19

When handed in at Local Office

7/5/10

28

Port of

Newcastle-on-Tyne

Received at London Office

10 MAY 1928

SUNDERLAND.

No. in Survey held at

Sunderland

Date, First Survey

9 Sept 1927

Last Survey

3 April

1928

Reg. Book. *Supp*

(Number of Visits) *12*

40020 on the M.V. BRITISH RENOWN.

Tons { Gross 6995  
Net 4165

Built at SUNDERLAND.

By whom built SIR J LAING & SONS LTD.

Yard No. 700

When built 1928.

Owners BRITISH TANKER CO LTD.

Port belonging to LONDON.

Electric Light Installation fitted by MESSRS THE SUNDERLAND FORGE & ENG CO LTD.

Contract No. 700

When fitted 1928

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 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 IN 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 IN 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. BOTH POLES INSULATED WITH MICANITE

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. 1. STANDARD GENERATOR WITH

C/O SWITCH & DP FUSES. 2 MAIN GENERATORS EACH WITH TRIPLE POLE CIRCUIT BREAKER FITTED, OVERLOADS ON 2 POLES, REVERSE CURRENT &

TIME LAG. 3RD POLE ACTS AS SR. OUTGOING CIRCUITS EACH FITTED WITH DP SWITCH & DP FUSES.

Instruments on main switchboard 4 (1 FOR STEERING) ammeters.

3

voltmeters.

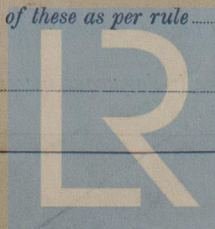
— synchronising device for paralleling purposes.

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system. EARTH LAMP, SWITCH &

FUSE ON EACH POLE.

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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W1645-0084 1/2



If portable lamps for use in dangerous spaces are supplied, are they of a type approved by the Home Office..... NO PORTABLES

MOTOR CONDUCTORS.									
Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current in area.	Approximate Length. (Local in Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP ... ..								
	MAIN BILGE LINE PUMPS ...	1	.06000	✓ 19	.064	80	165	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	GENERAL SERVICE PUMP ...								
	EMERGENCY BILGE PUMP ...								
	SANITARY PUMP ... ..	1	.06000	✓ 19	.064	80	160	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	CIRC. SEA WATER PUMPS ...	1	.30240	✓ 37	.103	240	128	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	CIRC. FRESH WATER PUMPS								
	AIR COMPRESSOR ... ..	1	.40640	✓ 61	.093	288	45	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	FRESH WATER PUMP ...								
	ENGINE TURNING GEAR ...								
	ENGINE REVERSING GEAR ...								
	LUBRICATING OIL PUMPS ...	1	.01046	✓ 7	.044	28	145	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	OIL FUEL TRANSFER PUMP ...								
	WINDLASS ... ..								
	WINCHES, FORWARD ...								
	WINCHES, AFT ... ..								
	STEERING GEAR—								
	(a) MOTOR GENERATOR ...	-							
	(b) MAIN MOTOR ... ..	1	.19640	✓ 37	.083	176	300	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	WORKSHOP MOTOR ... ..	1	.02214	✓ 7	.064	40	70	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	VENTILATING FANS ... ..								
	FORCED DRAUGHT FAN ...	1	.02214	✓ 7	.064	40	60	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	CRANE ... ..	1	.00701	✓ 7	.036	16	65	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	REFRIG. MOTOR ... ..	1	.06000	✓ 19	.064	64	200	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	JACKET WATER COOLING PUMP	1	.11680	✓ 37	.064	120	128	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	OIL PURIFIERS ... ..	2	.00701	✓ 7	.036	20	50	V.I.R.	LEAD COVERED ARMOURD & BRAIDED
	CLEAN OIL PUMP ... ..	1	.00701	✓ 7	.036	8	30	V.I.R.	LEAD COVERED ARMOURD & BRAIDED



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.

p.p.c. THE SUNDERLAND FORGE & ENGINEERING CO. LTD.

Electrical Engineers.

Date 20th April 1928.

*K. Stappes*

#### COMPASSES.

Distance between electric generators or motors and standard compass 200 FEET

Distance between electric generators or motors and steering compass 120 FEET

The nearest cables to the compasses are as follows:—

A cable carrying 6.4 Ampères 10 feet from standard compass 15 feet from steering compass.

A cable carrying 0.18 Ampères 10 feet from standard compass LED INTO feet from steering compass.

A cable carrying 0.18 Ampères LED INTO feet from standard compass 10 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.

**SIR JAMES LAING & SONS, LIMITED.**

*James Laing*

Builder's Signature.

Date 23rd April 1928.

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 electric light wireless

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

*W.D.*  
10/5/28

Total Capacity of Generators 130 Kilowatts.

The amount of Fee ... £ 33 : : When applied for, 5 April 1928

Travelling Expenses (if any) £ : : When received, 18 April 1928

*W.T. Badger*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

*Electric light*



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