

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

MAY 31 1937

Date of writing Report

10

When handed in at Local Office

27/5/37

Port of

Newcastle-on-Tyne

No. in Survey held at

Newcastle.

Date, First Survey

22 Feb.

Last Survey

21 May 1937.

Reg. Book. Supp.

90046 on the

M.V. "Regent Panther"

(Number of Visits.....15.....)

Tons

Gross 9556

Net 5799

Built at

Newcastle.

By whom built

Swan H. Wiggin Richd & Co

Yard No.

1523

When built

1937

Owners

C. T. Bowring & Co Ltd

Port belonging to

London.

Electric Light Installation fitted by

Swan Hunter Wiggin Richardson

Contract No.

1523

When fitted

1937.

Is the Vessel fitted for carrying Petroleum in bulk

Yes.

System of Distribution

Double wire system

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 temperature rise

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 (3 in ho enclosed herewith)

Have certificates of test results for machines under 100 kw. been submitted and approved

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 starboard

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

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 starboard.

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

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

Yes

, 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

is it of an approved type

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

, is the non-hygroscopic insulating material of an approved

type

Yes

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

, temperature rise of

omnibus bars

Yes

, individual fuses to voltmeter, pilot or earth lamp

Yes

, are moving parts of switches alive in the

"off" position

No

are all screws and nuts securing connections effectively locked

Yes

are any fuses fitted on the live side of

switches

No

Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches

D.P.S. fuses on each generator. D.R.C.O.S. & D.P. fuses on each outgoing circuit

Are turbine driven generators fitted with emergency trip switch as per rule

Are cupboards or compartments containing switchboards composed of

fire-resisting material or lined with approved material

Instruments on main switchboard

3

ammeters

3

volumeters

synchronising device for paralleling purposes. For compound machines is the ammeter connected on the opposite pole to equaliser connection

Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system

E lamps coupled to E through switches & fuses

Switches, Circuit Breakers and Fusible Cut-outs,

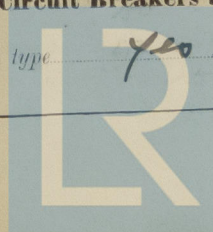
do these comply with the requirements of the Rules

Yes

are the fusible cutouts of an approved type

Yes

have the reversed



current protection devices been tested under working conditions

construction, protection, insulation, material, and position of these as per rule

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

If the cables are insulated otherwise than as per Rule, are they of an approved type

any point of the installation under maximum load

area of 0.04 square inch and above provided with soldering sockets

If conductors are paper or varnished cambric insulated, is the dielectric at the exposed ends of the conductor protected from moisture by being suitably sealed with insulating compound

or waterproof insulating tape

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

Are cables in machinery spaces, galleys, lavatories, bathrooms and lavatories lead covered or run in conduit

Support and Protection of Cables, state how the cables are supported and protected

secured by teak clips: L.C. clipped up in acc: L.C. & A in machinery spaces clipped up

If cables are run in wood casings, are the casings and caps secured by screws

are the cap screws of brass

are the cables run in separate grooves

If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VIII

Refrigerated Chambers, are the cables and fittings in accordance with the special requirements

Joints in Cables, state if any, and how made, insulated, and protected

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

Bushes in Beams and Non-watertight Partitions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed

state the material of which the bushes are made

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

position and method of control of the emergency supply and how the generator is driven

Navigation Lamps, are these separately wired

controlled by separate switch and separate fuses

are the switches and fuses grouped in a position accessible only to the officers on watch

has each navigation lamp an automatic indicator as per Rule

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

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

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

special gas tight fittings

in galvanised gas tight tubing outside pump rooms

where are the controlling switches situated

are all fittings suitably ventilated

are all switches and lampholders constructed wholly of non-ignitable, non-absorbent materials

Heating and Cooking Appliances, are they constructed and fitted as per Rule

Searchlight Lamps, No. of

Are Lamps, other than searchlight lamps, No. of

Motors, are their working parts readily accessible

are the brushes, brush holders, terminals and lubricating arrangements as per Rule

inflammable gases cannot accumulate and clear of all inflammable material

water, steam or oil

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

have machines of over 100 BHP been inspected by the Surveyors during manufacture and testing

field and motor speed regulators, starters and controllers constructed and fitted as per Rule

are required, are these fitted as per Rule

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

If portable lamps for use in dangerous spaces are supplied, are they of a self-contained, battery-fed type approved by the Home Office

Spare Gear, if the vessel is for open sea service have spares been supplied as per Rule

Joint Boxes, Section and Distribution Boards, is the

Fall of Pressure, state maximum between bus bars and

Cable Sockets, are the ends of all cables having a sectional

Paper Insulated and Varnished Cambric Insulated Cables.

Cable Runs, are the cables fixed as far as possible in accessible positions

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Control Gear and Resistances, are the generator

Lightning Conductors, where lightning conductors

Ships carrying Oil having a Flash Point less than 150 F. Have the special requirements of

are all fuses of the fitted cartridge type

are they of an approved type

are they of an approved type

are they of an approved type

are they of an approved type

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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	22	110	200	685	Steam engine		
AUXILIARY	1	5	110	46	800	Diesel engine		
EMERGENCY								
ROTARY TRANSFORMER								

GENERATOR, LIGHTING AND HEATING CONDUCTORS.

DESCRIPTION.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT.		Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
	No. per Pole.	Total Nominal Area per Pole Sq. Ins.	No.	Diameter.	Circuit.	Rule.			
MAIN GENERATOR	1	.25	37	.093	200	214	40	V. I. R.	L. C. & A.
EQUALISER CONNECTIONS									
AUXILIARY GENERATOR	1	.04	19	.052	46	64	40	do	do
EMERGENCY GENERATOR									
ROTARY TRANSFORMER									
ENGINE ROOM	1	.01	7	.044	16	31	200	do	do
STEAM ROOM	1	.01	7	.044	13	31	120	do	do
AUXILIARY SWITCHBOARDS									
Navigation	1	.007	7	.036	6	24	600	do	do
Capt & midships Port	1	.0225	7	.064	26	46	530	do	do
midships Stbd	1	.04	19	.052	34	64	510	do	do
Aft acc ⁿ port	1	.0145	7	.052	37	37	210	do	do
do stbd	1	.007	7	.036	24	24	190	do	do
ACCOMMODATION									
Shore Supply	1	.1	19	.083	100	118	200	do	do
WIRELESS	1	.0225	7	.064	15	46	540	do	do
SEARCHLIGHT	1	.002	3	.029	2	7.8	80	do	L. C.
MASTHEAD LIGHT	1	.002	3	.029	3	7.8	370	do	L. C. & A.
SIDE LIGHTS	1	.002	3	.029	3	7.8	120	do	L. C.
COMPASS LIGHTS	1	.002	3	.029	1	7.8	50	do	do
DECK LIGHTS	1	.002	3	.029	3	7.8	480	do	L. C. & A.
CARGO LIGHTS									
ARC LAMPS									
HEATERS									

MOTOR CONDUCTORS.

DESCRIPTION.	No. of Motors.	CONDUCTORS.		COMPOSITION OF STRAND.		TOTAL MAXIMUM CURRENT.		Approximate Length (Lead and Return) Feet.	Insulated with	HOW PROTECTED.
		No. Per Pole.	Total Nominal Area per Pole Sq. Ins.	No.	Diameter.	In Circuit.	Rule.			
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	1	1	.04	19	.052	60	64	180	V. I. R.	L. C. & A.
VENTILATING FANS	1	1	.003	3	.036	10	12	65	do	do
" " aft	1	1	.003	3	.036	10	12	112	do	do
" " Eng Room	1	1	.007	7	.036	24	24	224	do	do
Oil purifiers	2	1	.007	7	.036	20	24	50	do	do
Refing Air pump	1	1	.002	3	.029	6	7.8	40	do	do
Refing motor	1	1	.04	19	.052	36	64	120	do	do

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All Conductors are of annealed copper conforming to British Standard Specification No. 7 (or International Electro-technical Commission Publication No. 28).

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

19th May 37.

COMPASSES.

Distance between electric generators or motors and standard compass 225 feet.

Distance between electric generators or motors and steering compass 222 feet.

The nearest cables to the compasses are as follows:—

A cable carrying .1 Ampères on the feet from standard compass 6 feet from steering compass.

A cable carrying .1 Ampères 6 feet from standard compass on the 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. So he filled in after adjustment of compasses W.B.

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.

Wm. Buckie.

Builder's Signature.

Date 19.5.37.

Is this installation a duplicate of a previous case. Yes. If so, state name of vessel M.V. Regent Lion

General Remarks (State quality of workmanship, opinions as to class, &c. The above instⁿ has been fitted under special survey. The workmanship & materials used are good. The insulation resistance was satisfactory. The dynamos, governors main board, fuses, cables & fittings have been ex^d tested under working conditions & found satisfactory. This vessel is eligible in my opinion for notation OFV E.S.D.

W.T. Badger

L.Y.

31/5/37.

Total Capacity of Generators 49 Kilowatts.

The amount of Fee ... £ 27.5

When applied for,

20.12.1937

Travelling Expenses (if any) £

When received,

2.6.1937

Committee's Minute

TUE 1 JUN 1937

Assigned

See Nwc J.C. 95088

W.T. Badger

Surveyor to Lloyd's Register of Shipping.



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