

Rpt. 13.

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

No. 16835

Date of writing Report 22nd May 1926 When handed in at Local Office

Port of HAMBURG

Received at London Office 25 MAY 1926

No. in Survey held at HAMBURG

Date, First Survey 7th May 1925 Last Survey 11th May 1926

Reg. Book.

39602 on the Steel Twin Sc. Motor Vessel JAPANESE PRINCE

(Number of Visits 1)

Tons Gross 6376

Net 3874

When built 1926

Built at HAMBURG

By whom built Deutsche Werft A.G. Yard No. 94

Owners RIO-CAPE-LINE, Ltd.

Port belonging to LONDON

Electric Light Installation fitted by DEUTSCHE WERFT A.G.

Contract No. When fitted 1926

System of Distribution Two wire insulated

Pressure of supply for Lighting 220 volts, Heating

volts, Power 220 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

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 port side

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 aft on elevated platform

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, kenacite

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

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 10 x 60 mm, 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 For each generator:

a double pole circuit breaker with overload and reversed current trips, and an equalizer switch interlocked with

a switch in the negative main leading from the dynamo to the switchboard.

For each outgoing circuit: a fuse on each pole and a single pole switch on one pole

Instruments on main switchboard 3 ammeters 5 voltmeters

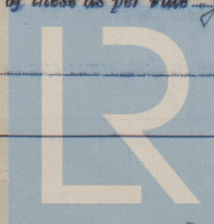
synchronising device for paralleling purposes.

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

is fitted with a Ohm scale for measuring of the insulation

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



© 2019

Lloyd's Register Foundation

W246-0048 (1/2)

The German standards have been applied

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

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load about 3 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 no paper insulated cables

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 armoured cables supported by clips, in accommodation room lead covered cables or rubber insulated cables in wooden casings

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 yes watertight joint boxes

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 armoured cables 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 yes

Emergency Supply, state position and method of control of the emergency supply and how the generator is driven

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

Fittings, are all fittings on weather decks, in storerooms 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 no

are any fittings placed in spaces where inflammable or explosive dust or gases are liable to be present, if so, how are they protected no

how are the cables led

where are the controlling switches situated

Searchlight Lamps, No. of none, whether fixed or portable, are their fittings as per Rule

Are Lamps, other than searchlight lamps, No. of none, 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 steel masts

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

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

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMPRESSION ENGINE	
		Kilowatts.	Volts.	Amperes.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN	3	100	225	445	300/400	Gas Diesel Motor 4 c.c.	Gas Diesel Motor oil	170° F.
AUXILIARY	✓							
EMERGENCY	✓							
ROTARY TRANSFORMER	✓							

LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor. Sq. mm.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Lead and Return.) Feet. m.	Insulated with	HOW PROTECTED.
				No.	Diameter. mm.				
	MAIN GENERATOR	4	2 x 120	37	2.05	445	15/20/25		
	EQUALISER CONNECTIONS	✓							
	AUXILIARY GENERATOR	✓							
	EMERGENCY GENERATOR	✓							
	ROTARY TRANSFORMER	✓							
	AUXILIARY SWITCHBOARDS	see below							
	ENGINE ROOM	12 x 2	1.5	1	1.4	12 x 4	20-50		
	BOILER ROOM	✓							
	ACCOMMODATION incl. Nav. Lamps	2	2.5	7	2.1	15	75		
	Fore castle	2	2.5	1	1.8	4	140	rubber	lead covered & armoured
	Officers Quarters	2	16	7	1.7	20	25		
	Subdivisions 1	2	4	1	2.25	4	25		
	" 2	2	4	1	2.25	4	25		
	" 3	2	4	1	2.25	4	20		
	" 4	2	4	1	2.25	4	28		
	Winches forward	4	2 x 150	37	2.15	600	2 x 60		
	" midship	4	2 x 300	61	2.15	1200	2 x 72	half hour rating	
	" aft	4	2 x 120	37	2.05	400	2 x 24		
	WIRELESS	2	4	1	2.25	7	40		
	SEARCHLIGHT	✓							
	MASTHEAD LIGHT. only for main	2	1.5	1	1.4	0.15	170		
	SIDE LIGHTS	2	1.5	1	1.4	0.30	20		
	COMPASS LIGHTS	2	1.5	1	1.4	0.10	20		
	POOP LIGHTS	2	1.5	1	1.4	0.15	170		
	CARGO LIGHTS	18 x 2	1.5	1	1.4	2.5	10-20		
	ARC LAMPS								
	HEATERS								

MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor. Sq. mm.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Lead and Return.) Feet. m.	Insulated with	HOW PROTECTED.
				No.	Diameter. mm.				
	BALLAST PUMP	1	70	19	2.15	120	50		
	MAIN BILGE LINE PUMPS	2	16	7	1.7	53.5	40		
	CH. Compressor	1	16	7	1.7	34	42		
	GENERAL SERVICE PUMP	1	16	7	1.7	34	42		
	Shut-off oil separator	3	2.5	1	1.8	8	3 x 8		
	EMERGENCY BILGE PUMP	1	2.5	1	1.8	8	36		
	Sanitary pumps	2	95	19	2.5	154	60		
	SANITARY PUMP	1	35	19	1.55	82	50		
	CIRC. SEA WATER PUMPS	1	1.5	1	1.4	43	30		
	CIRC. FRESH WATER PUMPS	2	6	1	2.75	35	20		
	AIR COMPRESSOR	✓							
	FRESH WATER PUMP	2	35	19	1.55	73	12		
	OIL FUEL TRANSFER PUMP	2	16	7	1.7	24.5	40		
	WINDLASS	1	95	19	2.5	180	40	rubber	lead covered & armoured
	WINCHES, FORWARD	see below							
	WINCHES, AFT								
	STEERING GEAR								
	(a) MOTOR GENERATOR	2	35	19	1.55	82	5		
	(b) MAIN MOTOR	2	35	19	1.55	82	95		
	WORKSHOP MOTOR	1	4	1	2.25	18	16		
	VENTILATING FANS	3	1.5	1	1.4	2	40		
	5 ton winch No. I & II port	2	35	19	1.55	80	16		
	5 " " No. I & II starboard	2	35	19	1.55	80	26		
	3 " " No. III port	1	16	7	1.7	50	40		
	3 " " No. III starboard	1	16	7	1.7	50	50		
	3 " " No. IV port	1	16	7	1.7	50	46		
	3 " " No. IV starboard	1	16	7	1.7	50	50		
	5 " " No. V port	1	35	19	1.55	80	12		
	5 " " No. V starboard	1	35	19	1.55	80	28		
	5 " " No. VI port	2	35	19	1.55	80	16		
	5 " " No. VI starboard	2	35	19	1.55	80	28		
	Captain	1	35	19	1.55	80	46		
	Shut-off oil transfer pump	1	2.5	1	1.8	3	16		
	Latrine pumps	2	6	1	2.75	70	80+30		
	Boiler fan	1	1.5	1	1.4	2.5	28		

© 2019

Lloyd's Register Foundation

1246-0048 (2/2)

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.

The Builders are the Electrical Engineers.

Date

COMPASSES.

Distance between electric generators or motors and standard compass 25 m

Distance between electric generators or motors and steering compass 26 m

The nearest cables to the compasses are as follows:—

A cable carrying 0.5 Ampères close to feet from standard compass close to 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 with

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

DEUTSCHE WERFT
AKTIENGESELLSCHAFT.

Builder's Signature.

Date 18.5.26

Is this installation a duplicate of a previous case yes If so, state name of vessel Faranah Prince

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

of this installation are of good quality. All the conductors used are of "German Standard". The Society's Rules respecting conductors have been applied generally. The installation have been fitted in accordance with the approved plans, the Secretary's letters and otherwise in conformity with the requirements of the Rules and having been built and fitted under Special Survey, it is eligible in my opinion for record of "ELECTRIC LIGHT."

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

26/5/26

Total Capacity of Generators 300 Kilowatts.

The amount of Fee ... £ 39: 0: 0
When applied for, 12.5.19.26
When received, 8.6.26 RZA

Travelling Expenses (if any) £

A. Carstens
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

WED. 26 MAY 1926

Assigned

Elec light

1m. 26. — Transfer.
(The Surveyors are requested not to write on or below the space for Committee's Minute.)



© 2019

Lloyd's Register
Foundation