

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

No 16991

Received at London Office 14 JUL 1926

Date of writing Report 10th July 1926 When handed in at Local Office

10 Port of HAMBURG

No. in Survey held at HAMBURG
Reg. Book. 38543 on the Twin Screw Motor VesselDate, First Survey 23rd March Last Survey 26th June 1926
(Number of Visits 17)

CHINESE PRINCE

Tons { Gross 6734
Net 3656

Built at HAMBURG

By whom built Deutsche Werft A.G.

Yard No. 95

When built 1926

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 main insulated 220 volts, Heating 220 volts, Power 220 volts.

Pressure of supply for Lighting 220 volts, Heating 220 volts, Power direct

Direct or Alternating Current, Lighting 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 they so spaced or shielded that they cannot be accidentally earthed,

Are all terminals accessible, clearly marked, and furnished with sockets yes, are the lubricating arrangements of the generators as per Rule yes

short circuited, or touched yes

Position of Generators Engine room port side, are they clear of all inflammable material 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

are the generators protected from mechanical injury and damage from water, steam or oil yes

are their axes of rotation fore and aft yes, are the prime movers and

Earthing, are the bedplates and frames of the generating plant efficiently earthed yes

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, if situated near unprotected

are they protected from mechanical injury and damage from water, steam or oil yes, and

woodwork or other combustible material, state distance of same horizontally from or vertically above the switchboards

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

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 equaliser switches For each generator: a double

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

in the negative main leading from the dynamo to the switch board.

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

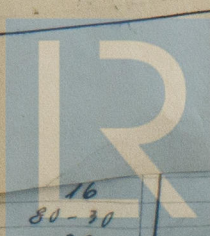
Instruments on main switchboard 3 ammeters 5 voltmeters synchronising device for paralleling purposes.

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

is fitted with an 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



© 2020

Lloyd's Register Foundation

1	1.5	1	2.25	30	16
		1	1.4	2.5	80-30
					28

W126-0174 1/2

W126-0174 2/2

The German standards have been applied generally

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

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 water-tight 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 stokeholds 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* *with exception of the turning gear*, 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 COMBUSTION ENGINE.		
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.	
MAIN ...	3	100	225	445	300/400	Diesel motor 4 C. I. A.	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. ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Lead and Return.) Feet. m.	Insulated with	HOW PROTECTED.
				No.	Diameter. inches.				
	MAIN GENERATOR... ..	4	2 x 120	37	2.05	445	15/20/25		
	EQUALISER CONNECTIONS ...	✓							
	AUXILIARY GENERATOR ...	✓							
	EMERGENCY GENERATOR ...	✓							
	ROTARY TRANSFORMER... ..	✓							
	AUXILIARY SWITCHBOARDS ...	24 below							
	ENGINE ROOM	12 x 2	1.5	1	1.4	12 x 4	20 - 50		
	BOILER ROOM	✓							
	ACCOMMODATION OFFICERS ...	2	16	7	1.7	20	25		
	Subdivisions 1	2	4	1	2.25	4	25		
	" 2	2	4	1	2.25	4	20		
	" 3	2	4	1	2.25	4	25		
	" 4	2	4	1	2.25	4	25	rubber	lead covered & armoured
	Nas. Lamps incl.	2	25	7	2.1	15	75		
	Fore castle	2	2.5	1	1.8	4	140		
	Winches forward	4	2 x 150	37	2.25	600	2 x 60		
	" midship	4	2 x 300	61	2.5	1800	2 x 72	half hour sailing	
	" aft	4	2 x 120	37	2.05	400	2 x 24		
	WIRELESS	2	4	1	2.25	7	40		
	SEARCHLIGHT	✓							
	MASTHEAD LIGHT. 1 for mast	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	0.60	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. ins.	COMPOSITION OF STRAND.		Total Maximum Current. Amperes.	Approximate Length. (Lead and Return.) Feet. m.	Insulated with	HOW PROTECTED.
				No.	Diameter. inches.				
	BALLAST PUMP	1	20	19	2.5	120	50		
	MAIN PUMP LINE PUMPS ...	2	16	7	1.7	53.5	40		
	Oil Compressor	1	16	7	1.7	34	42		
	Handless Oil Separator	3	2.5	1	1.8	8	3 x 8		
	Emergency Diesel Pump	1	2.5	1	1.8	8	36		
	Brine pump	1	2.5	1	1.8	8	36		
	SANITARY PUMP	1	95	19	2.5	154	60		
	CIRC. SEA WATER PUMPS ...	1	35	19	1.55	82	50		
	CIRC. FRESH WATER PUMPS	1	35	19	1.55	82	50		
	AIR COMPRESSOR	✓							
	FRESH WATER PUMP	1	1.5	1	1.4	4.3	20		
	ENGINE TURNING GEAR ...	2	6	1	2.75	35	20		
	ENGINE REVERSING GEAR ...	✓							
	LUBRICATING OIL PUMPS ...	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		
	WINCHES, FORWARD	24 below						rubber	lead covered & armoured.
	WINCHES, AFT	"							
	STEERING GEAR—								
	(a) MOTOR GENERATOR...	2	35	19	1.55	85	5		
	(b) MAIN MOTOR	2	35	19	1.55	85	95		
	WORKSHOP MOTOR	1	4	1	2.25	18	16		
	VENTILATING FANS	3	1.5	1	1.4	2	4		
	5 kW Winches I & E port	2	35	19	1.55	80	16		
	5 " " I & E starb	2	35	19	1.55	80	26		
	3 " " III port	1	16	7	1.7	50	40		
	3 " " III starb	1	16	7	1.7	50	57		
	3 " " IV port	1	16	7	1.7	50	46		
	3 " " IV starb	1	16	7	1.7	50	50		
	5 " " V port	1	35	19	1.55	80	12		
	5 " " V starb	1	35	19	1.55	80	28		
	5 " " VI port	2	35	19	1.55	80	16		
	5 " " VI starb	2	35	19	1.55	80	28		
	5 " " VII port	2	35	19	1.55	80	46		
	5 " " VII starb	2	35	19	1.55	80	46		
	Capstan	1	2.5	1	1.8	3	16		
	Handless oil pump/separator	1	6	1	2.75	30	80-90		
	Boiler fan	1	1.5	1	1.4	2.5	28		

© 2020

Lloyd's Register Foundation

4710-9211M

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 10.7.26

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.

Total Capacity of Generators 300 Kilowatts.

The amount of Fee ... £ 39:0-0:

When applied for,

28th June 1926.

When received,

27/7/26

Travelling Expenses (if any) £ :

N. Carstensen

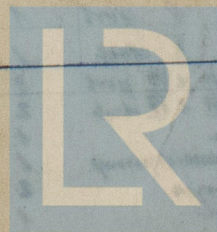
Surveyor to Lloyd's Register of Shipping.

TUES. 20 JUL 1926

Committee's Minute

Assigned

Im. 123. — Transfer.
(The Surveyors are requested not to write on or below the space for Committee's Minute.)



© 2020

Lloyd's Register
Foundation