

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report 11<sup>th</sup> March 1926 When handed in at Local Office 13-3-1926 Port of Rouen Received at London Office 15 MAR 1926No. in Survey held at Rouen Date, First Survey November 2<sup>nd</sup> Last Survey February 6<sup>th</sup> 1925-6  
Reg. Book. (Number of Visits 12)

on the M.V. "TIJUCA"

Tons { Gross 537 1/2  
Net 325 1/2

Built at Rouen By whom built Ch. de Normandie Yard No. E-5 When built 1926

Owners Will. Wilhelmsen Port belonging to Lonsburg

Electric Light Installation fitted by Chantiers de Normandie Contract No. When fitted 1926

## System of Distribution

Two wire insulated system

Pressure of supply for Lighting 110 volts, Heating - volts, Power 220 volts.

Direct or Alternating Current, Lighting Direct current Power Direct current

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 Outside of 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 On platform at forward end of 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? Yes

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? Yes 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? Marble slab, if semi-insulating material is used, are all conducting parts insulated from the slab

with mica or micaite 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 Double pole

circuit breakers with overload and reversed current trips, central pole equalizer switch

interlocked with circuit breaker so that switch closes before and opens after main circuit

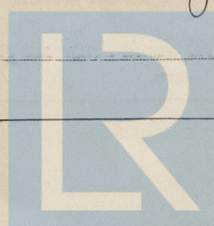
breaker.

Instruments on main switchboard Light ammeters Disc 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 lamps

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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Foundation

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

MOTOR CONDUCTORS.									
Ref. No.	DESCRIPTION.	No of Motors.	Effective Area of each Conductor <i>mm<sup>2</sup></i>	COMPOSITION OF STRAND.		Total Maximum Current in am. amp.	Approximate Length (Length Return.) <i>Meters</i>	Insulated with	HOW PROTECTED.
				No	Diameter				
	BALLAST PUMP ... ..	1	25.2 ✓	19	13/10	59	30	Rubber	Lead and armoured
	MAIN BILGE LINE PUMPS ...	1	14.1 ✓	7	16/10	40	30	"	"
	GENERAL SERVICE PUMP ..	✓							
	EMERGENCY BILGE PUMP ...	✓							
	SANITARY PUMP ... ..	✓							
	CIRC. SEA WATER PUMPS ...	2	74.0	37	16/10	132	8	"	"
	CIRC. FRESH WATER PUMPS	✓							
	AIR COMPRESSOR ... ..	1	4.45 ✓	7	9/10	20	17	"	"
	FRESH WATER PUMP ... ..	1	2.01 ✓	1	16/10	10	6	"	"
	ENGINE TURNING GEAR ...	2	14.1 ✓	7	16/10	40	30	"	"
	ENGINE REVERSING GEAR ...	✓							
	LUBRICATING OIL PUMPS ...	<i>Drawn off direct from water pump &amp; motor</i>							
	OIL FUEL TRANSFER PUMP	1	14.1 ✓	7	16/10	40	9	"	"
	WINDLASS ... ..	1	212.0 ✓	37	27/10	180	92	"	"
	WINCHES, FORWARD ... ..	8	74.0 ✓	37	16/10	120	60	"	"
	WINCHES, AFT ... ..	4	74.0 ✓	37	16/10	120	62	"	"
	STEERING GEAR—								
	(a) MOTOR GENERATOR ...	1	74.0 ✓	37	16/10	100	109	"	"
	(b) MAIN MOTOR ... ..	1	74.0 ✓	37	16/10	90	10	"	"
	WORKSHOP MOTOR ... ..	1	4.45 ✓	7	9/10	13.5	32	"	"
	VENTILATING FANS ... ..	2	53.9 ✓	19	19/10	100	17	"	"
	C.O <sub>2</sub> Compressor (Main)	2	212.0	37	27/10	252	404.50	"	"
	" " (Provision)	1	14.1 ✓	7	16/10	29	20	"	"
	Brim pumps (Main)	3	14.1	7	16/10	47	25-29	"	"
	" " (Provision)	1	14.1 ✓	7	16/10	5.6	20	"	"
	De Laval separator	1	2.01 ✓	1	16/10	5.5	8	"	"



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.

Electrical Engineers.

Date 12 mas 1926

#### COMPASSES.

Distance between electric generators or motors and standard compass 20 metres

Distance between electric generators or motors and steering compass 20 metres

The nearest cables to the compasses are as follows:—

A cable carrying 8 Amperes 2 metres feet from standard compass 2 metres feet from steering compass.

A cable carrying 1 Amperes 1 feet from standard compass 1 feet from steering compass.

A cable carrying 1 Amperes 1 feet from standard compass 1 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  $+1\frac{1}{2}^{\circ}$  degrees on N.N.E. & E.N.E. course in the case of the standard compass, and  $+5^{\circ}$  degrees on S.E. course in the case of the steering compass.

Builder's Signature.

Date 12 mas 1926

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 Electric Installation of this

vessel has been fitted in accordance with the Society's Rules, and to approved wiring plan with the exception of the amendment to the size of the main cables, the original size of cable being retained as per Secretary's letter of 12<sup>th</sup> January 1926. The material and workmanship is satisfactory and the installation is eligible in my opinion to be classed and the vessel to have the notation in the Register Book of "Electric Light" also "Wireless"

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

Total Capacity of Generators 279 Kilowatts.

The amount of Fee ... 1260 :  
When applied for, 13-3 1926  
Travelling Expenses (if any) £ 85.00  
When received, 14 1926

Surveyor to Lloyd's Register of Shipping.

Committee's Minute 19 MAR 1926

Assigned



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