

# REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

No. 2750

Date of writing Report

19

When handed in at Local Office

12<sup>th</sup> Oct. 1926

Port of

DUNKIRK

Received at London Office 14 Oct. 1926

No. in Survey held at

DUNKIRK

Reg. Book.

Date, First Survey

23<sup>rd</sup> June 16

Last Survey

29<sup>th</sup> Sept. 1926

(Number of Visits.....)

79744 on the M.V. "PAUL EMILE JAVARY"

Built at

Dunkirk

By whom built

"Chantier de France"

Yard No. 137

Tons

Gross 2471

Net 1452

When built

1926

Owners

Société Anonyme de Puissance &amp; d'Armement

ort belonging to

Dunkirk

Electric Light Installation fitted by "Chantier de France"

Contract No.

When fitted

1926

System of Distribution

Two wire Continuous Current

Pressure of supply for Lighting

220

volts, Heating

None

volts, Power

220

volts.

Direct or Alternating Current, Lighting

Direct

Power

Direct

If alternating current system, state frequency of periods per second

N

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 overload

Yes

, are they compound wound

Yes

are they over compounded 5 per cent.

Yes

, if not compound wound state distance between each generator

N

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 and clearly marked

Yes

, are they so spaced or shielded that they cannot be accidentally earthed,

or short circuited

Yes

Are the lubricating arrangements of the generators as per Rule

Yes

Position of Generators

On Lower Engine platform

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

No woodwork N

N

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

Yes.

are their axis 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

Lower Engine platform, forward End, front Side

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

Same Compartment

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

No woodwork

N

are they constructed wholly of durable, incombustible non-absorbent materials

Yes

, is all insulation of high dielectric strength and of

permanently high insulation resistance

Marble

insulated from the slab with mica or micanite and the slab similarly insulated from its framework

Yes.

frame effectively earthed

Yes

Are the following fittings as per Rule, viz. :— spacing or shielding of live parts

Yes.

, accessibility of all parts

Yes

, absence of fuses on back of board

Yes

, proportion of omnibus

bars 50 x 3 1/2 Double

, 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

Two sets of 3 bars

one for Lighting, one for power. Dynamot Connected to one or the other through 3 pole, 2 way switches. Automatic cut out for Each Dynamo.

Instruments on main switchboard

3

ammeters

3

volts

N

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.

Section and Distribution Boards, is the construction, protection, insulation, material, and position of these as per rule

Yes.

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Insulation of Cables, state type of cables, single or twin *twin* are the cables insulated and protected as per Tables III or IV of the Rules *Yes*

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load *5. Volts*

Cable Sockets and other connections, are the ends of all cables having a sectional area of 0.007 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 *None*

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 *In Cabins Cased in wood, Elsewhere lead covered and armoured, supported by brass clips spaced 20 and 25 cm.*

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 *No*. If armoured and lead covered cables are secured by metal clips, are the clips spaced as per Table VI *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 *No joints in cables*

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 Positions, where unarmoured cables pass through beams and non-watertight partitions, are the holes efficiently bushed *Yes* state the material of which the bushes are made *Wood or Lead*

Earthing Connections, state what earthing connections are fitted and their respective sectional areas *Yes*

are their connections made as per Rule

Alternative Lighting, are the groups of lights in the propelling machinery space arranged as per Rule *Yes. Groups 1, 2 and 3 lamps.*

Emergency Supply, state position and method of control of the emergency supply and how the generator is driven *None*

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 *Chart Room*

has each navigation lamp an automatic indicator as per Rule *Yes*, are separate screens provided for the use of oil and electric side lights *Chart Room*

are separate oil lanterns provided for the mast head lights and side lights *Yes*

Fittings, are all fittings on weather decks, ~~in engine rooms~~ and engine rooms and wherever 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 fittings. The wirings for forecastle lamps are led under the deck beams along the hatchways & protected by the L guides.*

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 *on the main switchboard with cut outs in passage way on main deck.*

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

Arc Lamps, other than searchlight lamps, No. of *None*, are their live parts insulated from the frame or case *Yes*, are their fittings as per Rule *Yes*

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 Bottom platform*

are they protected from mechanical injury and damage from water, steam or oil *Yes* are their axis of rotation fore and aft *Yes except steering gear.*

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 *No woodwork*, if not of this type, state distance of the combustible material horizontally or vertically above the motors *Yes* and *Yes*

Control Gear and Resistances, are the generator field and motor speed regulators, starters and controllers constructed as per Rule *Yes*

Lightning Conductors, where lightning conductors are required, are these fitted as per Rule *One on each mast. 25 x 5/8" = 125% □*

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 *Flash point of Oil stated to be 97°C*

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

## 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	33	220	150	400	Diesel motors	Crude oil	97°C.
AUXILIARY	None							
EMERGENCY	None							
ROTARY TRANSFORMER	None							

## LIGHTING AND HEATING CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Conductors.	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	MAIN GENERATOR	Each 2	105	✓	37	150	15	Lead Covered & Armoured	By Armour
	AUXILIARY GENERATOR	None							
	EMERGENCY GENERATOR	None							
	ROTARY TRANSFORMER	None							
	AUXILIARY SWITCHBOARDS	None							
	ENGINE ROOM	1	2	✓	1	16/10	4.43	Lead Covered & Armoured	By Armour
	BOILER ROOM	✓							
A1	Feeding box	1	9.3	✓	7	13/16	9.30	Do.	Do.
A2	Arrangement Bridge	6	2	✓	1	13/16	3.80	Vulcanized Rubber in wood casing	Do.
A3	Bridge Deck	2	2	✓	1	13/16	3.	Do.	Do.
A4	Commander's Quarters	1	2	✓	1	13/16	2.50	Do.	Do.
A5	Bridge & Chart Room	1	2	✓	1	13/16	1.	Do.	Do.
B.1	Crew Space	2	2	✓	1	13/16	3.40	Lead & Armoured	By Armour
B.2	Steering gear Space	1	2	✓	1	13/16	1.	Do.	Do.
C1	Forward Store Rooms	2	2	✓	1	13/16	1.2	Do.	Do.
E1	Navigating, Compass, etc.	1	2	✓	1	13/16	2.	Do.	Do.
	WIRELESS	1	9.3	✓	7	13/16	30	Do.	Do.
	SEARCHLIGHT	✓							
	MASTHEAD LIGHT	2	1.13	✓	1	13/16	.33	Do.	Do.
	SIDE LIGHTS	✓							
	COMPASS LIGHTS	✓							
	POOP LIGHTS	✓							
	CARGO LIGHTS	6	2	✓	1	13/16	4.50	Do.	Do.
	ARC LAMPS	✓							
	HEATERS	✓							

## MOTOR CONDUCTORS.

Ref. No.	DESCRIPTION.	No. of Motors.	Effective Area of each Conductor Sq. Ins.	COMPOSITION OF STRAND.		Total Maximum Current Ampères.	Approximate Length. (Lead and Return.) Feet.	Insulated with	HOW PROTECTED.
				No.	Diameter.				
	BALLAST PUMP	1	25.2	✓	19	13/16	60	Lead Covered & Armoured	By Armour
	MAIN BILGE LINE PUMPS	1							
	GENERAL SERVICE PUMP	✓							
	EMERGENCY BILGE PUMP	✓							
	SANITARY PUMP	✓							
	LUBRICATING and CIRC. SEA WATER PUMPS	1	14	✓	7	13/16	43.5	Do.	Do.
	CIRC. FRESH WATER PUMPS	✓							
	AIR COMPRESSOR	✓							
	FRESH WATER PUMP	✓							
	ENGINE TURNING GEAR	3	9.3	✓	7	13/16	36.6	Do.	Do.
	ENGINE REVERSING GEAR	✓							
	LUBRICATING OIL PUMPS	1	9.3	✓	7	13/16	30	Do.	Do.
	OIL FUEL TRANSFER PUMP	✓							
Box 4	WINDLASS	2	105	✓	37	19/16	154	Do.	Do.
Box 1	WINCHES, FORWARD	2	105	✓	37	19/16	154	Do.	Do.
	WINCHES, AFT	1	105	✓	37	19/16	110	Do.	Do.
	STEERING GEAR	✓							
	WORKSHOP MOTOR	✓							
	VENTILATING FANS	✓							
	WINCHES FORWARD BRIDGE	2	105	✓	37	19/16	154	Do.	Do.
	" AFT "	2	105	✓	37	19/16	154	Do.	Do.
	STEERING GEAR	1	9.3	✓	7	13/16	25	Do.	Do.
	WINCH AFT STABED	1	38.2	✓	19	13/16	77	Do.	Do.
Box 1	" " PORT	1	38.2	✓	19	13/16	77	Do.	Do.
	STEERING GEAR	1	9.3	✓	7	13/16	25	Do.	Do.

Please See: Schema General de distribution 137 EL. 3815  
Plan Installation Electrique 137 EL. 1915, and Liste de Bites de derivation. 12.10.26  
forwarded herewith & attached to list & plan approved 7. 4. 26



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.

S<sup>rs</sup> DES ATELIERS & CHANTIERS DE FRANCE

Electrical Engineers.

Date 12 Octobre 1926

#### COMPASSES.

Distance between electric generators or motors and standard compass 14<sup>m</sup> 80<sup>cm</sup>

Distance between electric generators or motors and steering compass 13<sup>m</sup> 50<sup>cm</sup>

The nearest cables to the compasses are as follows:—

A cable carrying 0.33 Ampères fitted in feet from standard compass feet from steering compass.

A cable carrying 0.33 Ampères feet from standard compass fitted in feet from steering compass.

A cable carrying 0.33 Ampères feet from standard compass fitted in feet from steering compass. aft

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 courses in the case of the standard compass, and Nil degrees on all courses in the case of the steering compass.

S<sup>rs</sup> DES ATELIERS & CHANTIERS DE FRANCE

LE DIRECTEUR

Builder's Signature.

Date 12 octobre 1926

Is this installation a duplicate of a previous case. No If so, state name of vessel. N

General Remarks (State quality of workmanship, opinions as to class, &c. This installation has been fitted on)

board in accordance with the requirements of the Rules for Electric Fittings, although there is a slight deviation from the approved plans and London letter 'E' of 7th April 1926 the material and workmanship are good, worthy in my opinion to receive the favourable consideration of the Committee. The approved and modified plans are forwarded herewith.

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

Total Capacity of Generators 99. Kilowatts

The amount of Fee ...

Fr. 5449.

When applied for,

4.10.26

Travelling Expenses (if any) :

When received,

5/11/26

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUES. 19 OCT 1926

Assigned

Im. 8. 12. Transfer.  
(The Surveyors are requested not to write on or below the space for Committee's Minute.)



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