

REPORT ON ELECTRIC FITTINGS.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office... JAN 17 1939

Date of writing Report 15/12/38 When handed in at Local Office 15/12/38 Port of Hong Kong

No. in Survey held at Hong Kong Date, First Survey 22/9/38 Last Survey 8/12/38 1938
 Reg. Book. on the M/V "GOVERNOR WRIGHT" (Number of Visits... 8)

Built at Hong Kong By whom built W.S. Bailey & Co. Ltd Yard No. 291 When built 1938

Owners La Naviera Filipina Snc Port belonging to Cebu, P.I.

Electric Light Installation fitted by Wm C Jackson & Co Ltd Contract No. 291 When fitted 1938

Is the Vessel fitted for carrying Petroleum in bulk No.

System of Distribution Two wire

Pressure of supply for Lighting 115.00 volts, Heating 115 volts, Power 115 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

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

Position of Generators Port side engine room, are the lubricating arrangements of the generators as per Rule 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 Yes

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, 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 Forward engine room bulk head Port 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 —

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, 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 micamite 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 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 switches

with Equalizer switches inter connected to make & break before & after main switch is broken. All out

going switches Double Pole with DP fuses. Both generators protected with overload & R/C circuit breakers

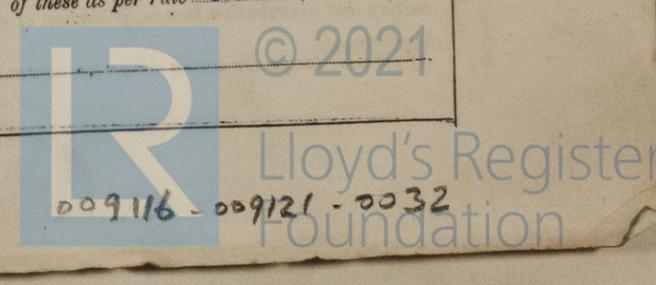
Instruments on main switchboard Two ammeters Two voltmeters — synchronising device for paralleling purposes.

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

indicating 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.



009116 - 009121 - 0032

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

Fall of Pressure, state maximum between bus bars and any point of the installation under maximum load 2 1/2 maximum

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 Yes

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 Cables supported with metal clips spaced 6" apart. All engine room cables in steel conduit - other main cables are armoured

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 Yes

Refrigerated Chambers, if lights are fitted, are the cables and fittings in accordance with the special requirements —

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

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 Yes state the material of which the bushes are made Lead

Earthing Connections, state what earthing connections are fitted and their respective sectional areas The installation is earthed throughout, are their connections made as per Rule Yes

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 Nil

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 Nil

Fittings, are all fittings on weather decks, in stokeholds 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 Brass Guards

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

how are the cables led —

where are the controlling switches situated —

Searchlight Lamps, No. of One, whether fixed or portable Fixed, are their fittings as per Rule Yes

Arc Lamps, other than searchlight lamps, No. of —, 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 All essential pumps

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 Yes

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. | Amperes. | Revs. per Min. | | Fuel Used. | Flash Point of Fuel. |
| MAIN | One | 25 | 115 | 217 | 1100 | Diesel engine | Grade oil | Above 150° F |
| AUXILIARY | One | 15.5 | 115 | 135 | 750 | " | " | " |
| EMERGENCY | — | | | | | | | |
| ROTARY TRANSFORMER | | | | | | | | |

GENERATOR, LIGHTING AND HEATING CONDUCTORS.

| DESCRIPTION. | No. per Pole. | CONDUCTORS. Total Effective Area per Pole Sq. Ins. | COMPOSITION OF STRAND. | | TOTAL MAXIMUM CURRENT. AMPERES. | | Approximate Length (Lead and Return) Feet. | Insulated with | HOW PROTECTED. |
|------------------------------------|---------------|--|------------------------|-----------|---------------------------------|-------|--|----------------|-----------------------|
| | | | No. | Diameter. | In Circuit. | Rule. | | | |
| MAIN GENERATOR | 1 | .3024 | 37 | .103 | 217 | 240 | 40 | Rubber | L.C. & Steel Armored |
| EQUALISER CONNECTIONS | 1 | .1009 | 19 | .083 | | 148 | 40 | " | " |
| AUXILIARY GENERATOR | 1 | .1478 | 37 | .072 | 135 | 152 | 40 | " | " |
| EMERGENCY GENERATOR | — | | | | | | | | |
| ROTARY TRANSFORMER MOTOR GENERATOR | — | | | | | | | | |
| ENGINE ROOM | 1 | .00299 | 3 | .036 | 5.4 | 12 | 30 | " | Steel conduit |
| BOILER ROOM | — | | | | | | | | |
| AUXILIARY SWITCHBOARDS | — | | | | | | | | |
| Saloon, Base A | 1 | .01046 | 7 | .044 | 29.65 | 31 | 20 | " | L.C. Braided |
| " B | 1 | .00701 | 7 | .036 | 21.25 | 24 | 36 | " | " |
| ACCOMMODATION | — | | | | | | | | |
| After circuit | 1 | .00299 | 3 | .036 | 9.75 | 12 | 120 | Rubber | L.C. Braided Marconia |
| Machinery Room circuit | 1 | " | " | " | 9.9 | 12 | 10 | " | " |
| Bridge deck circuit | 1 | " | " | " | 9.75 | 12 | 36 | " | " |
| Saloon | 1 | " | " | " | 11.5 | 12 | 10 | " | " |
| WIRELESS | 1 | .00701 | 7 | .036 | 18 | 24 | 140 | " | " |
| SEARCHLIGHT | 1 | .00299 | 3 | .036 | 8.8 | 12 | 60 | " | " |
| MASTHEAD LIGHT | 1 | .00194 | 3 | .029 | 5 | 7.8 | 60 | " | L.C. Braided |
| SIDE LIGHTS | 1 | " | " | " | 5 | 7.8 | 50 | " | " |
| COMPASS LIGHTS | 1 | " | " | " | 2 | 7.8 | 30 | " | " |
| POOP LIGHTS | 1 | " | " | " | 5 | 7.8 | 120 | " | " |
| CARGO LIGHTS | 1 | " | " | " | 1.8 | 7.8 | 40 | " | " |
| ARO LAMPS | — | | | | | | | | |
| HEATERS | — | | | | | | | | |

MOTOR CONDUCTORS.

| DESCRIPTION. | No. of Motors. | CONDUCTORS. No. Per Pole. | Total Effective Area per Pole Sq. Ins. | COMPOSITION OF STRAND. | | TOTAL MAXIMUM CURRENT. AMPERES. | | Approximate Length (Lead and Return) Feet. | Insulated with | HOW PROTECTED. |
|------------------------|----------------|---------------------------|--|------------------------|-----------|---------------------------------|-------|--|----------------|----------------------|
| | | | | No. | Diameter. | In Circuit. | Rule. | | | |
| BALLAST PUMP | — | | | | | | | | | |
| MAIN BILGE LINE PUMPS | 1 | 1 | .06 | 19 | .064 | 79 | 83 | 60 | Rubber | Steel Conduit |
| GENERAL SERVICE PUMP | 1 | 1 | .06 | 19 | .064 | 79 | 83 | 40 | " | " |
| EMERGENCY BILGE PUMP | — | | | | | | | | | |
| SANITARY PUMPS | 2 | 1 | .0045 | 7 | .029 | 13 | 18.2 | 40 | " | " |
| CIRC. SEA WATER PUMPS | 1 | 1 | .0396 | 19 | .052 | 62 | 64 | 25 | " | " |
| FRESH WATER PUMPS | 1 | 1 | .00299 | 3 | .036 | 9 | 12 | 40 | " | " |
| AIR COMPRESSOR | 1 | 1 | .06 | 19 | .064 | 79 | 83 | 60 | " | " |
| SEA WATER PUMP | 1 | 1 | .0045 | 7 | .029 | 13 | 18.2 | 40 | " | " |
| ENGINE TURNING GEAR | — | | | | | | | | | |
| ENGINE REVERSING GEAR | — | | | | | | | | | |
| LUBRICATING OIL PUMPS | 1 | 1 | .01046 | 7 | .044 | 27 | 31 | 40 | " | " |
| LUB. OIL PURIFIER | 1 | 1 | .00299 | 3 | .036 | 9 | 12 | 40 | " | " |
| OIL FUEL TRANSFER PUMP | — | | | | | | | | | |
| WINDLASS | 1 | 1 | .1168 | 37 | .064 | 123 | 130 | 130 | " | L.C. & Steel Armored |
| WINCHES, FORWARD | 1 | 1 | .2465 | 37 | .093 | 196 | 214 | 70 | " | " |
| WINCHES, AFT | 1 | 1 | .02214 | 7 | .064 | 47 | 46 | 70 | " | " |
| WINCHES, AFT | 1 | 1 | .02214 | 7 | .064 | 47 | 46 | 80 | " | " |
| STEERING GEAR | — | | | | | | | | | |
| (a) MOTOR GENERATOR | — | | | | | | | | | |
| (b) MAIN MOTOR | — | | | | | | | | | |
| WORKSHOP MOTOR | — | | | | | | | | | |
| VENTILATING FANS | — | | | | | | | | | |

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.

WILLIAM F. JACK & CO., LTD.
W. F. Jack

Electrical Engineers.

Date *16* December 1938

COMPASSES.

Distance between electric generators or motors and standard compass
 Distance between electric generators or motors and steering compass *30 ft*
 The nearest cables to the compasses are as follows:—
 A cable carrying *.25* Ampères feet from standard compass *4* feet from steering compass.
 A cable carrying *4* Ampères feet from standard compass *10* feet from steering compass.
 A cable carrying *10* Ampères feet from standard compass *10* 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 degrees on course in the case of the standard compass, and *nil* degrees on *any* course in the case of the steering compass.

FOR W. S. BAILEY & Co., LTD.

W. S. Bailey
 Manager

Builder's Signature.

Date *16 Dec 1938*

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. *This electric installation has been*)

efficiently fitted on board in accordance with the rules & approved plans the materials & workmanship being sound & good

On completion the installation was megger tested, tried under working conditions & found satisfactory

See New York certificates dated 17/3/38 29/10/37 for aux comp motor & essential pump motors

We have been advised makers test sheets for generators have been forwarded direct to London by Messrs Electromotoren Werke A.G. Serial N° 500,370 25KW N° 500,375 15.5KW.

*Note
 J.P.
 18/1/39.*

Total Capacity of Generators *40.5* Kilowatts.

The amount of Fee £ *\$ 810* : { When applied for, 19.....
 Travelling Expenses (if any) £ *\$:20* : { When received. 21.12.38
\$ 830

Chas. R. Rowcliffe
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI 20 JAN 1939

Assigned

See Hvy. J.E. Rpt. 8242



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2m, 3.31. — Transfer The Surveyors are requested not to write on or below the space for Committee's Minute.