

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 5-OCT-1956

Date of writing Report 27.9.1956 When handed in at Local Office 29.9.1956 Port of TRIESTE

No. in Survey held at Trieste Date, First Survey 9.7.56 Last Survey 9.9.1956

Reg. Book. (No. of Visits 15)

56 90121 on the M.V. "CAPO FARO" Tons Gross 1914

Built at Trieste By whom built Cantiere Navale Giuliano San Giusto Yard No. 45 When built 1956-8

Owners GENS-Gestione Esercizio Navi Sicilia Port belonging to Palermo

Installation fitted by Cantiere Navale Giuliano San Giusto When fitted 1956

Is vessel equipped for carrying Petroleum in bulk no Is vessel equipped with D.F. yes E.S.D. yes Gy.C. yes Sub.Sig. Radar yes

Plans, have they been submitted and approved yes System of Distribution Two wire insulated Voltage of Lighting 220

Heating Steam Power 220 D.C. or A.C., Lighting D.C. Power D.C. If A.C. state frequency

Prime Movers, has the governing been found as per Rule when full load is thrown on and off yes Are emergency governors fitted

with a trip switch yes Generators, are they compound wound yes, and level compounded under working conditions yes

Are the generators arranged to run in parallel yes Is the compound winding connected to the negative or positive pole negative

Have machines 100 kw. and over been inspected by the Surveyors during manufacture and testing none Have certificates of test for machines

under 100 kw. been supplied and the results found as per Rule yes Position of Generators 2 80 Kwt Portside

forward and aft. 1-80 Kwt. stbdside forward. 1-24 Kwt. stbdside aft

Is the ventilation in way of generators satisfactory yes are they clear of inflammable material and protected from mechanical injury and

damage from water, steam and oil yes Switchboards, where are main switchboards placed in engine room portside, starting platform level

are they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water,

steam and oil yes, what insulation is used for the panels. dead front type, if of synthetic insulating

material is it an Approved Type, if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom as

per Rule Is the construction as per Rule, including locking of screws and nuts yes Description of Main Switchgear

for each generator and arrangement of equaliser switches three pole linked circuit breaker with overload and

reverse current release. Third pole used as equaliser

and the switch and fuse gear (or circuit breakers) for each outgoing circuit two pole linked circuit breaker with

overload current release or two pole linked knife switch with fuse on each pole.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule yes Instruments on main switchboard 8

ammeters 5 voltmeters synchronising devices. For compound machines in parallel are the ammeters and reverse current

protection devices connected on the pole opposite to the equaliser connection yes Earth Testing, state means provided two

lamps with selector switch Preference Tripping, state if provided yes, and tested yes

Switches, Circuit Breakers and Fuses, are they as per Rule yes, are the fuses an Approved Type yes

make of fuses F.E.R Milan-Croci Marinelli, are all fuses labelled yes If circuit breakers are provided for the generators, at what

overload do they operate 10% preference 20% instantaneous, and at what current do the reverse current protective

devices operate 10% Cables, are they insulated and protected as per Rule yes

if otherwise than as per Rule are they of an Approved Type yes, state maximum fall of pressure between bus bars and any point

under maximum load 3 volts. Are all paper insulated and varnished cambric insulated cables sealed at the ends yes

Are all the cable runs in accessible positions not exposed to drip or accumulation of water or oil, high temperatures or risk of mechanical

damage yes, are any cables laid under machines or floorplates yes, if so, are they adequately protected yes State

type of cables (if in conduit this should also be stated) in machinery spaces V.I.R. lead covered steel braided. In conduit as

and laundries. State how the cables are supported or protected supported as per Rules and

in conduit as and where required

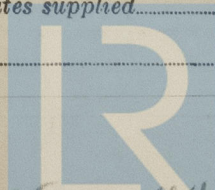
Are all lead sheaths, armouring and conduits effectually bonded and earthed yes Are all cables passing through decks and watertight

bulkheads provided with deck tubes or watertight glands yes, where unarmoured cables pass through beams, etc., are the holes

effectively bushed yes Refrigerated chambers, are the cables and fittings as per Rule yes

Have refrigeration fan motors been constructed under survey and test certificates supplied

Are the motors accessible for maintenance at all times yes



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Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule yes Emergency Supply, state position portable lights

Navigation Lamps, are they separately wired yes controlled by separate double pole switches and fuses yes Are the switches and fuses in a position accessible only to the officers on watch yes is an automatic indicator fitted yes Is an alternative supply provided yes

Secondary Batteries, are they constructed, fitted and adequately ventilated as per Rule yes, state battery capacity in ampere hours 2 at 20 Amp./24 hrs. Where required to do so does it comply with 1948 International Convention yes

Lighting, is fluorescent lighting fitted no If so, state nominal lamp voltage and compartments where lamps are fitted

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof yes

Searchlights, No. of 1, whether fixed or portable semi-portable, are they of the carbon arc or of the filament type filament

Heating and Cooking, is the general construction as per Rule yes, are the frames effectually earthed yes, are heaters in the accommodation of the convection type steam Motors, are all motors constructed and installed as per Rule and placed in well-ventilated compartments in which inflammable gases cannot accumulate and protected from damage from water, steam and oil yes

Are motors coupled to oil fuel transfer and pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment yes Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing none

Have certificates of test for motors under 100 BHP intended for essential sea services been supplied and the results found as per Rule yes

Lightning Conductors, where required are they fitted as per Rule yes

Ships carrying Oil having a Flash Point of less than 150° F. Have all the special requirements of the Rules for such ships been complied with yes, are all fuses of an Approved Cartridge Type yes, make of fuse yes Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships yes Are all cables lead covered as per Rule yes

E.S.D., if fitted state maker Craphette location of transmitter and receiver Frames 35 & 36

Spare Gear, if the vessel is for open sea service have spares been provided as per Rule and suitably stored in dry situations yes

Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory yes

#### PARTICULARS OF GENERATING PLANT.

| DESCRIPTION OF GENERATOR. | No. of | MAKER.           | RATED AT           |        |       |                | PRIME MOVER. |                   |
|---------------------------|--------|------------------|--------------------|--------|-------|----------------|--------------|-------------------|
|                           |        |                  | Kw. per Generator. | Volts. | Amps. | Revs. per Min. | TYPE.        | MAKER.            |
| MAIN                      | 3      | C.R.D. Adriatico | 80                 | 220    | 364   | 500            | D.160        | NUOVA SAN GIORGIO |
|                           | 1      | SAN GIORGIO S.A. | 24                 | 220    | 109   | 800            | -            | NUOVA SAN GIORGIO |
| EMERGENCY                 |        |                  |                    |        |       |                |              |                   |
| ROTARY TRANSFORMER        |        |                  |                    |        |       |                |              |                   |

#### GENERATOR CABLES.

| DESCRIPTION.        | No. of | Kw. | CONDUCTORS.               |  | MAXIMUM CURRENT IN AMPERES. |       | APPROX. LENGTH (lead plus return feet). | INSULATION. | PROTECTIVE COVERING. |
|---------------------|--------|-----|---------------------------|--|-----------------------------|-------|---|-------------|----------------------|
|                     |        |     | No. in Parallel per Pole. | Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm. | In the Circuit.             | Rule. |   |             |                      |
| MAIN GENERATOR      | 3      | 80  | 2                         | 125  | 364                         | 352   | 6                                       | V.I.R.      | Lead and steel       |
| " " EQUALISER       | 3      | 40  | 1                         | 125  | 182                         | 176   | 6                                       | do          | braided              |
| EMERGENCY GENERATOR | 1      | 24  | 1                         | 63   | 109                         | 116   | 8                                       | do          | do                   |
| EQUALISER GENERATOR | 1      | 12  | 1                         | 63   | 55                          | 116   | 8                                       | do          | do                   |

#### MAIN DISTRIBUTION CABLES (to Auxiliary Switchboards, etc.).

| DESCRIPTION.                    | No. of | Kw. | No. in Parallel per Pole. | Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm. | In the Circuit. | Rule. | APPROX. LENGTH (lead plus return feet). | INSULATION. | PROTECTIVE COVERING. |
|---------------------------------|--------|-----|---------------------------|--|-----------------|-------|---|-------------|----------------------|
| F1 Power to Eng. room sub-board | 1      | 50  |                           |  | 90              | 97    | 6                                       | V.I.R.      | Lead & steel braided |
| F2 Power to refrig. sub-board   | 1      | 32  |                           |  | 75              | 72    | 6                                       | do          | do                   |
| F3 Power to after end of vessel | 1      | 80  |                           |  | 120             | 136   | 30                                      | do          | do                   |
| F4 Power to upper dk. central   | 1      | 25  |                           |  | 50              | 62    | 12                                      | do          | do                   |
| F5 Power to forward winches     | 2      | 125 |                           |  | 293             | 176   | 30                                      | do          | do                   |
| F6 Power to workshop            | 2      | 4   |                           |  | 10              | 42    | 12                                      | do          | do                   |
| F8 Power to Eng. room sub-board | 2      | 125 |                           |  | 320             | 352   | 10                                      | do          | do                   |
| F9 Power to bridge deck         | 1      | 16  |                           |  | 40              | 48    | 18                                      | do          | do                   |

#### DISTRIBUTION CABLES (to Section-Boards and Distribution-Fuse-Boards, etc.).

| DESCRIPTION.               | CONDUCTORS.               |  | MAXIMUM CURRENT IN AMPERES. |       | APPROX. LENGTH (lead plus return feet). | INSULATION. | PROTECTIVE COVERING. |
|----------------------------|---------------------------|--|-----------------------------|-------|---|-------------|----------------------|
|                            | No. in Parallel per Pole. | Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm. | In the Circuit.             | Rule. |   |             |                      |
| L1 Lighting in engine room | 2                         | 4  | 10                          | 42    | 10                                      | V.I.R.      | Lead & steel         |
| L2 Lighting after end      | 2                         | 6.3  | 12                          | 60    | 30                                      | do          | braided              |
| L3 Lighting central        | 2                         | 6.3  | 12                          | 60    | 28                                      | do          | do                   |
| L4 Lighting accommodation  | 2                         | 10   | 25                          | 42    | 15                                      | do          | do                   |
| L5 Lighting bridge         | 2                         | 10   | 25                          | 42    | 18                                      | do          | do                   |
| Navigation sub-board       | 2                         | 2.5  | 1                           | 22    | 20                                      | do          | do                   |
| Suez searchlight           | 2                         | 6.3  | 14                          | 60    | 48                                      | do          | do                   |

#### MOTOR CABLES.

| ALL IMPORTANT MOTORS TO BE<br>ENUMERATED. |   | No.  | B.H.P. | MOTOR CABLES. |     |     |    |        |                      |  |
|---|---|------|--------|---------------|-----|-----|----|--------|----------------------|--|
| Circ.pumps for M.E.cooling                | 3 | 11   | 1      | 25            | 45  | 62  | 8  | V.I.R. | Lead & steel braided |  |
| L.O. circulating pump                     | 2 | 29   | 1      | 63            | 111 | 116 | 10 | do     | do                   |  |
| Air compressor                            | 1 | 18   | 1      | 50            | 76  | 97  | 10 | do     | do                   |  |
| O.F. transfer pumps                       | 2 | 3.5  | 2      | 6.3           | 15  | 60  | 8  | do     | do                   |  |
| Bilge ballast & fire                      | 2 | 18   | 1      | 25            | 71  | 62  | 6  | do     | do                   |  |
| Steering gear                             | 2 | 4.5  | 2      | 6.3           | 15  | 60  | 30 | do     | do                   |  |
| Windlass                                  | 1 | 37.2 | 1      | 80            | 120 | 136 | 48 | do     | do                   |  |
| F.O. to main engine                       | 2 | 0.8  | 2      | 1.2           | 4   | 12  | 12 | do     | do                   |  |
| Fuel valves cooling water                 | 1 | 1.5  | 2      | 4             | 7.2 | 42  | 8  | do     | do                   |  |
| M.E. turning gear                         | 1 | 5    | 1      | 10            | 20  | 37  | 10 | do     | do                   |  |
| M.E. extraction fans                      | 2 | 1    | 3      | 1.2           | 6   | 18  | 18 | do     | do                   |  |

NOTE.—Use Rpt. 13 Continuation Sheet if the above space is insufficient.



The Electrical Equipment is installed in accordance with the approved plans and the requirements of the Rules.

All Insulated Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.

The foregoing is a correct description.

*G. Mutton*

Electrical Contractors.

Date 29/9/56

#### COMPASSES.

Have the compasses been adjusted under working conditions..... yes

CANTIERE NAVALE GIULIANO S. GIUSTO  
Sec. n. 1.  
S. AMMINISTRATORE UNICO

Builder's Signature.

Date 29/9/56.

*Carandruppi*

Have the foregoing descriptions and schedules been verified and found correct..... yes

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

Plans. Are approved plans forwarded herewith..... yes If not, state date of approval 5.6.56 & 8.8.56

Certificates. Are certificates of test for motors engaged on essential sea services and generators forwarded herewith..... yes

General Remarks. (State quality of workmanship and materials, opinions as to class, etc.)

The electrical equipment has been installed under special survey in accordance with the approved plans, the Secretary's letters and to Rule requirements.

The workmanship and materials are good.

On completion the installation was tried under full working conditions and the insulation resistance tested, all with satisfactory results.

In our opinion the installation is eligible for full classification

DUAL CLASS  
L.R. & P.I.

Total Capacity of Generators 264 Kilowatts.

4:00  
12/10/56  
Lit 244,800 less 15%  
The amount of Fee ... 208,080

2 1/2% Car fund 5,200

2 1/2% Travelling Expenses (if any) £ 5,200

Rev. Tax 3% 6,555.-

When applied for,  
27/9/56

When received,  
19

*J. Wilson* for *S. W. Skemmer*  
*S. Verdarelli* and self  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRIDAY 23 NOV 1956

Assigned See Rpt. 1.



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