

with insulating compound Yes or waterproof insulating tape 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 cables laid under machines or floorplates Yes, if so, are they adequately protected Yes. Are cables in machinery spaces, galleys, laundries, etc., lead covered Yes or run in conduit Yes. State how the cables are supported and protected Main cables L.C. or L.C.A. carried in conduit. Machinery spaces, L.C.A. clipped. Accommodation L.C. clipped. Then lead across a pump room L.C. in conduit.

Are all lead sheaths, armouring and conduits effectually bonded and earthed Yes. Refrigerated chambers, are the cables and fittings as per Rule 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 effectually bushed Yes and with what material Lead. Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule Yes. Emergency Supply, state position Yes and method of control Yes.

Navigation Lamps, are they separately wired Yes controlled by separate double pole switches Yes 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. Secondary Batteries, are they constructed and fitted as per Rule Yes, are they adequately ventilated Yes what is the battery capacity in ampere hours 25 amp. hrs.

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof Yes. Are fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present Yes, if so, how are they protected of Pump Room - Flareport fitting. Then lead across W.T. fittings. No fittings 7/4/41. and where are the controlling switches fitted Cable spaces. are all fittings suitably ventilated Yes.

are all fittings and accessories constructed and installed as per Rule Yes. Searchlight Lamps, No. of —, whether fixed or portable — are their fittings as per Rule —. Heating and Cooking, is the general construction as per Rule —. are the frames effectually earthed —, are heaters in the accommodation of the convection type —. Motors, are all motors constructed and installed as per Rule Yes and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water, steam and oil Yes, if situated near unprotected combustible material state minimum distance from same horizontally — and vertically —. Are motors coupled to oil fuel transfer and unit pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment —.

Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing —. Have certificates of test for motors under 100 BHP intended for essential services been supplied and the results found as per Rule Yes. Control Gear and Resistances, are they constructed and fitted as per Rule Yes. Lightning Conductors, where required are they fitted as per Rule Yes. Ships carrying Oil having a Flash Point less than 150° F. Have all the special requirements of the Rules for such ships been complied with Yes, are all fuses of the cartridge type Yes are they of an approved type Yes. Are the fittings for pump rooms, tween deck spaces, etc., in accordance with the special requirements for such ships Yes. Are the cables lead covered as per Rule Yes. Spare Gear, if the vessel is for open sea service have spares been provided as per Rule Yes, are they 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 | Kilowatts. | RATED AT | | | DRIVEN BY | WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE | |
|------------------------------|--------|------------|----------|----------|----------------|----------------|---|----------------------|
| | | | Volts. | Ampères. | Revs. per Min. | | Fuel Used. | Flash Point of Fuel. |
| MAIN 110 Volt | 2 | 20 | 110 | 182 | 600 | Steam Engines | — | |
| 220 Volt | 2 | 75 | 225 | 335 | 1000 | Diesel Engines | Diesel Oil above 150°F | |
| EMERGENCY ROTARY TRANSFORMER | 1 | 11 | 110 | 225 | 1000 | Electric | — | |

GENERATOR CABLES.

| DESCRIPTION. | KILOWATTS. | CONDUCTORS. | | MAXIMUM CURRENT IN AMPERES. | | APPROX. LENGTH (load plus return feet). | INSULATED WITH. | HOW PROTECTED. |
|---------------------------|------------|---------------------------|--|-----------------------------|-------|---|-----------------|----------------|
| | | No. in Parallel Per Pole. | Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm. | In the Circuit. | Rule. | | | |
| MAIN GENERATOR S | 110 Volt | 20 | 1 | 182 | 191 | 40 | V.C. | L.C.A. |
| " " EQUALISER | 220 Volt | 75 | 1 | 335 | 461 | 60 | Rubber | L.C. (AP6181A) |
| " " EQUALISER | | | 1 | 225 | 214 | 30 | " | " (AP6185A) |
| EMERGENCY GENERATOR | | | | | | | | |
| ROTARY TRANSFORMER: MOTOR | | | | | | | | |
| " " GENERATOR | | | | | | | | |

MAIN DISTRIBUTION CABLES.

| DESCRIPTION. | CONDUCTORS. | | MAXIMUM CURRENT IN AMPERES. | | APPROX. LENGTH (load plus return feet). | INSULATED WITH. | HOW PROTECTED. |
|---|---------------------------|--|-----------------------------|-------|---|-----------------|-------------------|
| | No. in Parallel Per Pole. | Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm. | In the Circuit. | Rule. | | | |
| AUX. SWITCHBOARDS AND SECTION BOARDS | | | | | | | |
| SHORE CONNECTION | 1 | 10 | 181 | 191 | 90 | V.C. | L.C.A. |
| AFT. SECT. BOARD | 1 | 10 | 105 | 191 | 90 | " | " |
| ENG. RM. LIGHTING SECT. BOARD | 1 | 0.225 | 60 | 75 | 30 | " | " |
| ENG. RM. AUXILIARIES SECT. BOARD | 1 | 0.225 | 64 | 75 | 30 | " | " |
| LOWER MIDSHIP SECTION BOARD | 1 | 10 | 50 | 191 | 600 | " | L.C.A. in Conduit |
| MIDSHIP SECTION BOARD. (IN DUPLICATE) | 1 | 10 | 50 | 191 | 600 | " | " |
| GANTRY TERMINAL BOX FEEDS - 4 L. No. FROM MAIN SWITCHBOARD. (2 FOR 2 AFT) | 1 | 15 | 150 | 152 | 2-370 | Rubber | L.C.A. in Conduit |

LIGHTING AND HEATING, ETC., CABLES.

| | | | | | | | |
|---|---|-------|------|----|-----|--------|-----------------|
| WIRELESS | 1 | 0.225 | 30 | 75 | 120 | V.C. | L.C. |
| NAVIGATION LIGHTS | 1 | 0.007 | 2.7 | 24 | 132 | Rubber | " |
| LIGHTING AND HEATING AFT. LTY. AFT. PASSAGE. D.B. 1 | 1 | 0.007 | 2.2 | 24 | 96 | " | " |
| AFT. LTY. PORT PASSAGE AFT. D.B. 13 | 1 | 0.007 | 9.6 | 24 | 60 | " | " |
| CARGO LTY. AFT. D.B. 14 | 1 | 0.007 | 4.5 | 24 | 30 | " | " |
| AFT. LTY. STAR PASSAGE D.B. 15 | 1 | 0.007 | 20.8 | 24 | 72 | " | " |
| " " " " (AFT) D.B. 16 | 1 | 0.007 | 9.8 | 24 | 60 | " | " |
| ENGINE RM. LTY. D.B. Nos 17, 18, 19, 20 (each) | 1 | 0.007 | 12.5 | 24 | 60 | " | L.C.A. |
| UPPER BRIDGE. D.B. 2 | 1 | 0.007 | 21 | 24 | 90 | " | L.C. |
| BRIDGE DECK LTY. STAR D.B. 3 | 1 | 0.007 | 21.3 | 24 | 90 | " | " |
| " " " " PORT. D.B. 5 | 1 | 0.007 | 15.2 | 24 | 60 | " | " |
| DECK LTY. D.B. 6 | 1 | 0.007 | 13 | 24 | 60 | " | " |
| LOWER MIDSHIP ACCOMMODATION LTY. D.B. 7 | 1 | 0.007 | 8 | 24 | 60 | " | L.C. in Conduit |
| " " " " " D.B. 8 | 1 | 0.007 | 8 | 24 | 60 | " | " |
| CARGO LTY. D.B. 4 | 1 | 0.225 | 27 | 75 | 75 | V.C. | L.C. |
| FORECASTLE LTY. D.B. 9 | 1 | 0.01 | 5.4 | 31 | 320 | Rubber | L.C. in Conduit |
| ROOF LTY. FORW. D.B. 10 | 1 | 0.007 | 19.9 | 24 | 90 | " | L.C. |
| " " " " " AFT. D.B. 11 | 1 | 0.007 | 6.0 | 24 | 135 | " | L.C. |

MOTOR CABLES.

| ALL IMPORTANT MOTORS TO BE ENUMERATED. | No. | B.H.P. | CONDUCTORS. | | MAXIMUM CURRENT IN AMPERES. | | APPROX. LENGTH (load plus return feet). | INSULATED WITH. | HOW PROTECTED. |
|--|-----|--------|---------------------------|--|-----------------------------|-------|---|-----------------|----------------|
| | | | No. in Parallel Per Pole. | Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm. | In the Circuit. | Rule. | | | |
| LUBRICATING OIL PURIFIERS | 2 | 2 | 1 | 0.007 | 17.8 | 24 | 90 | Rubber | L.C.A. |
| WORKSHOP MOTOR | 1 | 3 | 1 | 0.225 | 26 | 75 | 150 | V.C. | " |
| TURNING MOTOR | 1 | 10 | 1 | 10 | 90 | 191 | 120 | " | " |
| Acc. VENT. FANS AFT | 1 | 3 | 1 | 0.225 | 25 | 46 | 105 | Rubber | L.C.A. R. |
| " " " " MIDSHIP | 1 | 3 | 1 | 0.225 | 25 | 75 | 72 | V.C. | L.C. |
| GANTRY CRANE MOTORS | 8 | 40 | 1 | CABLE SUPPLIED BY ADMIRALTY DETAILS NOT AVAILABLE. | | | | | |

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.

Richardson



Electrical Engineers.

Date 27.6.41

COMPASSES.

Minimum distance between electric generators or motors and standard compass 65 ft

Minimum distance between electric generators or motors and steering compass 60 ft

The nearest cables to the compasses are as follows:—

A cable carrying 30 Ampères led into feet from standard compass led into feet from steering compass.

A cable carrying 18 Ampères 14 feet from standard compass 6 feet from steering compass.

A cable carrying 9.8 Ampères 20 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 1/2 degrees on any course in the case of the standard compass, and 1/2 degrees on any course in the case of the steering compass.

Builder's Signature.

Date 23 JUL 1941

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

Certificates. Are certificates of test for motors engaged on essential services and generators forwarded herewith Yes except 220V Generator which was supplied by Admiralty & tested by them. Cables not available.

General Remarks (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.)

The electrical equipment of this vessel has been fitted on board under special survey & in accordance with the approved plans and Secretary's letter. The installation has been tested under full working conditions & found satisfactory. The materials & workmanship are good.

Noted
L.P.
18/7/41

Total Capacity of Generators 190 Kilowatts.

The amount of Fee £ 41 : 10 : 0 When applied for, 30.6.19.41

Travelling Expenses (if any) £ : : When received, 19.

L. Haffner + C. W. Reed
Surveyors to Lloyd's Register of Shipping.

Committee's Minute LIVERPOOL 195 JUL 1941

Assigned See Minute on Liverpool J.E. Machinery Report.

5m. 4.31.—Transfer. (MADE AND PRINTED IN ENGLAND.) (The Surveyors are requested not to write on or below the space for Committee's Minute.)

