

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

2706 147

Received at London Office

Date of writing Report 16th Sept., 1947 When handed in at Local Office 23rd Sept., 1947 Port of Baltimore, Maryland
 No. in Survey held at Baltimore, Maryland Date, First Survey June 29th, Last Survey August 30th 1947
 Reg. Book. 71613 on the S.S. "OAKLAND" (ex "David F. Barry") (Number of Visits 3)
 Built at Portland, Oregon By whom built Oregon Shipbldg. Corp. Yard No. 746 Tons { Gross 7176
 Net 4380
 Owners A/S Warholm Port belonging to Oslo When built 1943
 Electric Light Installation fitted by Oregon Shipbuilding Corp. Contract No. - When fitted 1943
 Is the Vessel fitted for carrying Petroleum in bulk No

System of Distribution Two-wire Direct Current
 Pressure of supply for Lighting 120 volts, Heating - volts, Power 120 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 temperature rise A.I.E.E. Standards 40° C. Rise, are they compound wound Yes
 are they over compounded 5 per cent. No, 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
 Have certificates of test results for machines under 100 kw. been submitted and approved -
 Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing -
 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 In engine room first grating level starboard side., 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 In engine room on generator flat
 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 Ebony asbestos, is all insulation of high dielectric strength and of permanently high insulation resistance Yes, is it of an approved type Yes, if semi-insulating material is used, are all conducting parts insulated from the slab with mica or micanite or other non-hygroscopic insulating material, and the slab similarly insulated from its framework -, is the non-hygroscopic insulating material of an approved type Yes, and is the frame effectively earthed Yes
 Are the fittings as per Rule regarding:—spacing or shielding of live parts A.I.E.E. Standards, accessibility of all parts Yes, absence of fuses on back of board Yes, temperature rise of omnibus bar Yes, individual fuses to voltmeter, pilot or earth lamp on same fuses, are moving parts of switches alive in the "off" position No, are all screws and nuts securing connections effectively locked Yes, are any fuses fitted on the live side of switches No
 Main Switchgear, description of switchgear for each generator and each outgoing circuit, and arrangement of equalizer switches Each generator: 175 amp. DB breaker with overload & reverse current trips & a 3-pole isolating switch.
 Outgoing circuits: D.P. linked switches and fuses.
 Are turbine driven generators fitted with emergency trip switch as per rule -
 Are cupboards or compartments containing switchboards composed of fire-resisting material or lined with approved material Yes
 Instruments on main switchboard 3 ammeters 3 voltmeters -, synchronizing device for paralleling purposes. For compound machines is the ammeter connected on the opposite pole to equalizer connection Yes
 Earth Testing, state what means are provided at the main switchboard for indicating the state of the insulation of the system Earth lamps also voltmeter selector switch wired to give ground reading
 Are these comply with the requirements of the Rules A.I.E.E. Standards, are the fusible cutouts of an approved type A.I.E.E. Standards, have the reversed

Spare Gear, if the vessel is for open sea service have spares been supplied as per Rule.....Yes.....

American Institute of Electrical Engineers, Current rating for two and three conductor cables Table No. 9

9 / 2575
All Conductors are of annealed copper conforming to British Standard Specification No. 7 (or International Electro-technical Commission Publication No. 28).

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.....

COMPASSES.

Distance between electric generators or motors and standard compass..... 25 feet

Distance between electric generators or motors and steering compass..... 20 feet

The nearest cables to the compasses are as follows:—

A cable carrying 2 Ampères..... 75 feet from standard compass..... 75 feet from steering compass.

A cable carrying 1 Ampères..... 4 feet from standard compass..... 7 feet from steering compass.

A cable carrying Ampères..... feet from standard compass..... 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 Nil degrees on any course in the case of the standard

compass, and Nil degrees on any course in the case of the steering compass.

Builder's Signature.

Date.....

Is this installation a duplicate of a previous case..... If so, state name of vessel.....

General Remarks (State quality of workmanship, opinions as to class, &c.....)

The Electrical Installation to the requirements of the American Bureau of Shipping has been in operation since 1943. The plans attached have been examined and found in accordance with A.B.S. Standards and generally in accordance with the Rules. The materials and workmanship are good and the installation has been examined under working conditions and found to be satisfactory, except the main generator equalizer connections are below Rule size. The dimensions in this report have been taken from the A.B.S. approved plans. These dimensions have been checked as far as possible on the ship and found correct.

In my opinion, the electrical installation is such as could be accepted by the Committee for Classification, subject to the main generator equalizer connections being increased to meet Rule requirements.

Accepted

Total Capacity of Generators..... 60 Kilowatts.

The amount of Fee \$100.00

Traveling Expenses (if any) £ 5.25

When applied for,
23 Sept., 1947
When received,
- 19

Surveyor to Lloyd's Register of Shipping.

Noted
6.11.47

Committee's Minute.....

Assigned Elec light