

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 28 MAR 1949

Date of writing Report 17th Nov 1949 When handed in at Local Office 19... Port of Havre

No. in Survey held at St. Nazaire Date, First Survey 27/10/48 Last Survey 15/3/1949
Reg. Book. (No. of Visits 54)

95273 on the S.S. "ZANGUEZOUR" Tons { Gross 10448 Net 6301

Built at Portland Oregon By whom built Kaiser Co. Inc. Yard No. ✓ When built 1944

Owners French Government Port belonging to Havre

Installation fitted by Presumed by Builders When fitted 1944

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

Plans, have they been submitted and approved ✓ System of Distribution 3 phase 3 wire Voltage of Lighting 115

Heating 220 Power 440 D.C. or A.C., Lighting AC + DC Power AC If A.C. state frequency 60

Prime Movers, has the governing been found as per Rule when full load is thrown on and off Yes Are turbine emergency governors fitted with a trip switch Yes Generators, are they compound wound D.C. Yes, and level compounded under working conditions D.C. Yes

if not compound wound state distance between generators — and from switchboard — Are the generators arranged to run in parallel AC Yes, are shunt field regulators provided Yes Is the compound winding connected to the negative or positive pole negative

Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing no Have certificates of test for machines under 100 kw. been supplied no and the results found as per Rule Operation on trials satisfactory

Position of Generators Engine room port side

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 Engine room

starboard side aft 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 (micaite), 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 A.C. generators: 3-pole linked C.B.'s with o/c trip in each pole & reverse power relay also 3-pole linked separating switches. D.C. generators: Double pole linked C.B.'s with o/c trip in each pole.

and the switch and fuse gear (or circuit breakers) for each outgoing circuit A.C. circuits: 3-pole linked C.B.'s with thermal o/c trip in each pole. D.C. circuits: Double-pole switches with o/c trip in each pole.

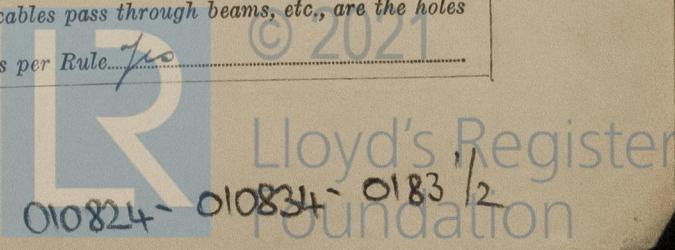
Are compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes Instruments on main switchboard 14 ammeters 7 voltmeters 1 synchronising devices. For compound machines in parallel are the ammeters and reversed current protection devices connected on the pole opposite to the equaliser connection — Earth Testing, state means provided Lamps coupled to earth for both A.C. & D.C. earth fault indication

Switches, Circuit Breakers and Fuses, are they as per Rule American, are the fuses an Approved Type American make of fuses G.E.C., are all fuses labelled Yes If circuit breakers are provided for the generators, at what overload do they operate Set at 50%, and at what current do the reversed current protective devices operate None fitted

Joint Boxes, Section Boards and Distribution Boards, is the construction as per Rule American pattern

Cables, are they insulated and protected as per Rule Cables, if otherwise than as per Rule are they of an Approved Type —, state maximum fall of pressure between bus bars and any point under maximum load < 6%, are the ends of all cables having a sectional area of 0.01 square inch and above provided with soldering sockets Mechanical clamps 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 Are cables in machinery spaces, galleys, laundries, etc., lead covered Yes or run in conduit — or of the "HR" type — State how the cables are supported or protected L.C. & A. cables clipped to racks or to surface in machinery spaces and run in conduit under fore- and aft gangway. L.C. & A. cables clipped to saddles or direct to surface in accommodation spaces

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



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.

Electrical Contractors. Date

COMPASSES.

Have the compasses been adjusted under working conditions.

Builder's Signature. Date

Have the foregoing descriptions and schedules been verified and found correct. *Yes*
 Is this installation a duplicate of a previous case. *Yes* If so, state name of vessel. *"EL MORRO"*
 Plans. Are approved plans forwarded herewith. *No* If not, state date of approval. *See typical Plans for T2 Tankers*
 Certificates. Are certificates of test for motors engaged on essential sea services and generators forwarded herewith. *No*

General Remarks. (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.) *The electrical equipment of this vessel is understood to have been constructed and installed under the supervision of the American Bureau of Shipping and in conformity with the Rules of the American Institute of Electrical Engineers and of the United States Coast Guard. The particulars reported have been derived from diagrams on board and from plans of previous similar installations and have been verified as far as possible by examination. The following modifications have been effected to achieve compliance with the Rules:- Existing lighting fittings in bridge tweendeck space replaced by flameproof fittings and the controlling switches removed to accommodation space above. The existing socket outlets in this space removed. Switch controlling forward pump room lighting removed to position in forecabin. Switches and push buttons controlling cargo and stripping pump motors removed to position on boat deck aft. Navigation light circuit rewired and alternative supply provided. Installation examined and found on place in good condition. On completion satisfactory sea trials were witnessed. The electrical installation of this vessel although not fully in accordance with the Society's Rules could in my opinion be considered eligible for a classed vessel intended to carry oil having a flash point less than 150°F.*

Total Capacity of Generators *875* Kilowatts.

The amount of Fee ... £	} See Rpt-8	When applied for,
		19
Travelling Expenses (if any) £		When received,
		19

Noted sub 29/4/49
G. Amison - J. Hobbs
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute. *FRI 6 MAY 1949*
 Assigned. *See minute on 14/5*

2m.0.40.-Transfer. (MADE AND PRINTED IN ENGLAND.) (The Surveyors are requested not to write on or below the space for Committee's Minute.)

