

T2. TANKER G.E.C. TYPE

Id.

REPORT ON ELECTRIC PROPELLING MACHINERY.

No. 106705

of writing Report 2 Nov. 1949. When handed in at Local Office 19 Port of NEWCASTLE - ON TYNE
 o. in Survey held at SOUTH - SHIELDS Date, First Survey 19 Last Survey 19
 Book. No. of Visits 19
 493 Single on Twin Triple Quadruple Screw vessel "ZEITOUN" Ex. "MOBILE BAY."
 It at MOBILE ALA. By whom built ALABAMA D.D & S.B. CO. Yard No. — When built 1945
 Electrical Machines made at LYNN MASS. By whom made GENERAL ELECT. CO. Generator No. 5840774 When made 1945
 Motor No. 5690819
 Shaft Horse Power at Full Power 6000 @ 90 & 6600 @ 92 Total Capacity of Generators 5400 kilowatts
 Machinery Numeral as per Rule — Owners BALTIC TRADING CO LTD. Port belonging to LONDON.
 Use for which Vessel is intended CARRYING PETROLEUM IN BULK.

NS.— Have plans of the Machines, Control Gear, Cables and Circuits been submitted and approved. No
 AM ENGINES.— Type of Engine Steam Turbine No. of Engines One R.P.M. 3600/3715 Is a Governor fitted Yes Is the speed
 variation as per Rule when load is thrown off Yes Is an Emergency Governor fitted Yes Is it arranged for hand tripping Yes Does it trip the throttle
 Yes If exhaust steam is admitted, is an automatic shut-off fitted — Is provision made for bled steam — and is a non-return or positive
 shut-off valve fitted Yes Lubricating Oil.— State means provided for emergency supply Steam standby Lub oil pump and gravity tank
 The emergency reserve sufficient to maintain lubrication as per Rule. Mechanical Balance.— Are the Engines and Generators balanced so as not
 to cause appreciable vibration.

ENGINES.— Type of Engines — R.P.M. — Is a Governor fitted — Is the speed variation as
 per Rule when load is thrown off — Is an Emergency Governor fitted — Does it operate as per Rule. —

ERATORS.— Direct or Alternating Current A.C. No. of Generators One If A.C. state frequency at full load 60/62.
 per Generator 5400 KVA. Volts per Generator 2300/2370 Amps. per Generator 1237/1315 Have certificates of works tests been
 supplied No and the results found as per Rule. — Ventilation.— State how arranged (open or closed system) Closed
 Are ventilating arrangements satisfactory Yes Heating when Idle.— What provision is made Resistance heaters
 Facilities for Inspection and Repair.— Are these as per Rule Yes

wear-down gauges supplied No Bilges.— Are the arrangements to prevent accumulation of bilge-water under the machines satisfactory Yes

ORS.— S.H.P. per Motor at full power 6000 No. of Motors One Single or double unit Single Volts per Motor 2300
 Amps. per Motor 1150 Have certificates of works tests been supplied No and the results found as per Rule. — A.C. Motors.— Is provision made for
 shifting the slip rings. — Do the Motors remain in synchronism under all normal conditions of running. Yes D.C. Motors.— If the system permits
 speeding at light loads are overspeed protection devices fitted. —

TATION.— Is power for excitation taken from the ship's Auxiliary Generators. Yes If so, state voltage 120 and excitation amperes at full
 682 kilowatts for excitation 75 State excitation arrangements for Propulsion Generators Exciter with amplidyne control driven by
 Alternator turbine Alternatively manual control of Excitation
 Propelling Motors Same as alternator. Is an alternative means of excitation provided. Yes
 Have certificates of works tests been supplied No and found as per Rule. —

ROL.— Position of Main Control Panel Forward end of control platform.
 Does it comply with the requirements regarding position. Yes, grouping of controls Yes, instruments Yes, insulating materials (state type
 Flat fronted board, spacing and shielding of live parts Yes, accessibility Yes, position of fuses Yes,
 of screws and nuts Yes, labelling Yes, fuses for voltmeters, pilot lamps, etc. Yes, provision for manual operation of contractors, etc.
 The method employed. Mechanically operated by lever and cams.

ing of instrument cases above 250 volts to earth. Yes, provision of renewable tips on switches subject to arcing Yes, capability of withstanding
 and inclination Yes, operation with high and low voltage Yes, rust proofing of parts. Yes Overload and Short Circuit Protection.— State means
 used. Overload current coils which trip excitation.

What load is it set to operate. 50% O.L. Has it been tripped by hand when running at full power and found satisfactory. Yes
 fuses of an approved type American pattern

h Detection.— Is the main circuit provided with means for detecting earths. Yes Are aural and visual alarms fitted. Yes Is main power interrupted
 on earth fault. Yes If a limiting resistance is in the earth detecting circuit what is the ohmic value Current transformer What earth leakage current is
 necessary to operate the device. — If a switch is used to disconnect the aural signal does it automatically give visual indication. Yes Are the
 detection circuits provided with means for earth detection. Yes Mechanical Protection.— Are circuits above 250 volts to earth protected as per Rule. Yes

or Deck Control.— Is bridge control provided. No If so, from how many stations. — Can it be operated freely without producing
 currents or loads in excess of the working capacity of the plant. — and without reference to electrical instruments. — Is an emergency control provided
 in engine room. — and can the transfer to this control be made quickly in the engine room. — Can the emergency control be rendered mechanically
 independent of the deck control. —

Instruments and Gauges.— State Instruments provided for each Generator Watt-hour Meter — One A.C. Ammeter
 A.C. Voltmeter — One D.C. Field Ammeter — One R.P.M. Turbine Speed Meter — One D.C. Voltmeter Motor & Generator Fields
 for each Motor One A.C. Ammeter — One H.P. Meter — One D.C. Field Ammeter — One Shaft Rev. Indicator

Is an Insulation Tester provided. Yes
 Large Protection.— Are all shunt field circuits protected as per Rule. Yes D.C. Systems.— If the Generators are connected in series state means
 used to prevent reversal of direction of rotation of the Prime Movers. —

Are Propulsion Generators also used alternatively for other purposes. Yes If so, is provision made for overload protection, voltage adjustment, etc. Yes

5 — No tools supplied. 7 Tappings on transformer values 0.5, 0.6, 0.8, 1.0, 1.5, 2.0 and 2.5 amps.

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Reversing Switches.—If any are provided are they interlocked as per Rule.....Yes..... **Resistances.**—Are resistances for synchronous motor fields insulated as per Rule.....Yes..... **Temperature Alarm.**—Are machines with enclosed ventilating system, etc., fitted with temperature alarm.....No..... **Visual signal by means**

CONDUCTORS & CABLES.—Are all essential Conductors stranded as per Rule Yes Are the ends of Paper and Varnished Cambric Insulated Cable sealed Yes Are all Cables carrying A.C. constructed and installed as per Rule Yes Have all Cables been tested at the makers' works —

SECONDARY BATTERIES.—Are Batteries used for starting Main Propulsion Engines.....20.....If so, have full particulars of rating been submitted and approved.....—.....Have they been tested under working conditions and do they give the required number of starts.....—.....Are they installed as per Rule.....—.....Are the charging arrangements satisfactory.....—.....

SPARE GEAR.—If engaged on open sea service has a list of spare gear been submitted and approved.....Is a list of the articles supplied attached this report No Are they stored as per Rule Yes

Spare Gear approved by American Bureau of Shipping

ELECTRIC PROPULSION EQUIPMENT CONDUCTORS.

[illegible]

*For field circuits the "Hot" and "Cold" value should be given.

The foregoing is a correct description,

Electrical Engineers.

Date.

COMPASSES.—Are Single-Conductor circuits carrying direct current arranged with lead and return Conductors fitted as close to one another as possible Rule.....

Have tests been made during adjustment of the Compasses to determine the effect of switching the main circuits on and off.

Builders' Signature.

Date _____

Is this machinery duplicate of a previous case.....Yes.....If so, state name of vessel....."THELICONUS"

General Remarks (State quality of workmanship, opinions as to class, &c.) The electrical installation to the Standards of American Bureau of Shipping has been in operation for approximately 4 years. The propulsion alternator and motor were opened up for inspection and found after cleaning to be in good order - The alternator cleaned in way of the Slip rings and Shaft where a deposit of carbon and oil collected - The motor windings were cleaned and varnished. On completion of cleaning the insulation resistance was taken and found to be satisfactory.

The materials and workmanship are satisfactory.

In my opinion the electrical propulsion equipment of this vessel is in a satisfactory condition and eligible to receive the Society's Classification of L.M.C. (with date).

Noted ent 15/2/49

			When applied for,
The amount of Entry Fee ... £	:	:19.....
Travelling Expenses (if any) £	:	:	When received,19.....

J. C. Wright & R. Stone.

Surveyor to Lloyd's Register of Shipping

Date.....TUE 8. 20 DEC 1848

Committee's
Minute.....

See minute
on p. rpt.

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