

REPORT ON ELECTRIC PROPELLING MACHINERY.

Received at London Office

3 - AUG 1948

of writing Report 16th JUNE 1948 When handed in at Local Office 18th JUNE 1948 Port of GALVESTON TEXAS
 No. in Survey held at GALVESTON TEXAS Date, First Survey 26th MAY 1948 Last Survey 9th JUNE 1948
 Book. No. of Visits CONTINUOUS

685 Single on Twin Triple Quadruple Screw vessel SS THEOBALDIUS EX SILVER CREEK Tons Gross 10662 Net 6323
 Built at PORTLAND OREGON By whom built KAISER CO INC Yard No. 145 When built 1945
 Electrical Machines made at LYNN MASS By whom made GENERAL ELECTRIC CO Generator Nos. 5840825 Motor Nos. 5690978 When made 1945
 Shaft Horse Power at Full Power 6000 Total Capacity of Generators 4925/5400 kilowatts
 Machinery Numeral as per Rule 1425 Owners ANGLO-SAXON PETROLEUM CO LTD Port belonging to LONDON
 Trade for which Vessel is intended PETROLEUM IN BULK

ANS.— Have plans of the Machines, Control Gear, Cables and Circuits been submitted and approved. ABS APPROVED. AIEE STANDARDS

TEAM ENGINES.— Type of Engine CURTIS IMPULSE TURBINE No. of Engines ONE R.P.M. 3600 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 valve YES If exhaust steam is admitted, is an automatic shut-off fitted NO Is provision made for bled steam YES and is a non-return or positive shut-off valve fitted YES Lubricating Oil.—State means provided for emergency supply STORAGE TANKS AND ELEDRIVEN 60 GPM ROTEX PUMP Is the emergency reserve sufficient to maintain lubrication as per Rule YES Mechanical Balance.—Are the Engines and Generators balanced so as not to cause appreciable vibration YES

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

GENERATORS.— Direct or Alternating Current A.C. No. of Generators ONE If A.C. state frequency at full load 60/62
 W. per Generator 4925/5400 Volts per Generator 2300/2370 Amps. per Generator 1237/1315 Have certificates of works tests been supplied ABS and the results found as per Rule AIEE STANDARDS Ventilation.—State how arranged (open or closed system) CLOSED SYSTEM

WITH SURFACE AIR COOLER Are ventilating arrangements satisfactory YES Heating when Idle.—What provision is made ONE HEATER AT EACH END OF GENERATOR Facilities for Inspection and Repair.—Are these as per Rule YES
 Are wear-down gauges supplied NO Bilges.—Are the arrangements to prevent accumulation of bilge-water under the machines satisfactory YES

MOTORS.— 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 1160 Have certificates of works tests been supplied ABS and the results found as per Rule AIEE A.C. Motors.—Is provision made for machining the slip rings YES Do the Motors remain in synchronism under all normal conditions of running D.C. Motors.—If the system permits overspeeding at light loads are overspeed protection devices fitted

EXCITATION.— Is power for excitation taken from the ship's Auxiliary Generators YES If so, state voltage 110 and excitation amperes at full power 555 kilowatts for excitation 150 State excitation arrangements for Propulsion Generators NORMALLY CONTROLLED BY A VOLTAGE REGULATOR ALSO BY A MANUALLY OPERATED RHEOSTAT IN EVENT OF THE REGULATOR BECOMING INOPERATIVE NO OVERLOAD OR SHORT CIRCUIT PROTECTION PROVIDED
 and Propelling Motors FROM SAME SOURCE AS GENERATORS Is an alternative means of excitation provided TWO 75 KWS UNITS
 Have certificates of works tests been supplied ABS and found as per Rule AIEE

CONTROL.— Position of Main Control Panel IN ENGINE ROOM THWARTSHIP ON GENERATOR FLAT LEVEL
 Does it comply with the requirements regarding position YES, grouping of controls YES, instruments YES, insulating materials (state type used) EROXY ASBESTOS AND AIEE APPROVED MATERIALS, spacing and shielding of live parts AIEE, accessibility YES, position of fuses YES, locking of screws and nuts YES, labelling YES, fuses for voltmeters, pilot lamps, etc. YES, provision for manual operation of contractors, etc. (state method employed) NO PROVISION FOR MANUAL OPERATION ON MAGNETICALLY OPERATED CONTACTORS

Earthing of instrument cases above 250 volts to earth YES, provision of renewable tips on switches subject to arcing YES, capability of withstanding shock and inclination YES, operation with high and low voltage YES, rust proofing of parts YES Overload and Short Circuit Protection.—State means provided NONE

At what load is it set to operate Has it been tripped by hand when running at full power and found satisfactory YES
 Are fuses of an approved type AIEE STANDARD RENEWABLE TYPE (SEE RTP 13)

Earth Detection.—Is the main circuit provided with means for detecting earths YES Are aural and visual alarms fitted VISUAL Is main power interrupted by an earth fault EXCITATION If a limiting resistance is in the earth detecting circuit what is the ohmic value 67 OHMS What earth leakage current is necessary to operate the device 5 AMPS If a switch is used to disconnect the aural signal does it automatically give visual indication Are the excitation circuits provided with means for earth detection NO Mechanical Protection.—Are circuits above 250 volts to earth protected as per Rule YES

Bridge 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 the 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 FIELD TEMP; STATOR TEMP; EXCITATION

VOLTMETER; AC VOLTMETER; FIELD AMMETER; AC AMMETER; TURBINE RPM INDICATOR; PHASE BALANCE RELAY AND GROUND PROTECTION RELAY
 and for each Motor STATOR TEMP; EXCITATION VOLTMETER; HPMETER; FIELD AMMETER; AC AMMETER; SHAFT RPM INDICATOR Is an Insulation Tester provided YES

Discharge Protection.—Are all shunt field circuits protected as per Rule YES D.C. Systems.—If the Generators are connected in series state means provided to prevent reversal of direction of rotation of the Prime Movers

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

