

REPORT ON ELECTRIC PROPELLING MACHINERY.

No. 8661

Writing Report 23rd June 1948 When handed in at Local Office 28th June 1948 Received at London Office 5 JUL 1948
 Port of Baltimore, Maryland
 Survey held at Baltimore, Maryland Date, First Survey 17th May, 1948 Last Survey 6th June, 1948
 No. of Visits 3
 Single ~~on Twin~~ ~~Triple~~ ~~Quadruple~~ Screw vessel "ZANGUEZOUR" (ex "FORT WOOD") Tons: Gross 10448 Net 6301
 at Portland, Oregon By whom built Kaiser Company, Inc. Yard No. 92 When built 1944
 Electrical Machines made at Lynn, Mass. By whom made General Electric Corp. (Generator Nos. 5840750) When made 1944 (Motor Nos. 6037854)
 Horse Power at Full Power 6,000 Total Capacity of Generators 5400 kilowatts
 Machinery Numeral as per Rule 1324 Owners Les Petroles D'Outre-mer Port belonging to Le Havre
 for which Vessel is intended Petroleum in bulk.

S. Have plans of the Machines, Control Gear, Cables and Circuits been submitted and approved American Bureau of Shipping

M ENGINES.— Type of Engine Curtis Impulse 10-Stage No. of Engines 1 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 Yes If emergency steam is admitted, is an automatic shut-off fitted — Is provision made for bleed steam — and is a non-return or positive off valve fitted — Lubricating Oil.— State means provided for emergency supply 1 Var. Rotary Elec. Driven 60 G.P.M. Is 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 AC No. of Generators 1 If A.C. state frequency at full load 60/62 Cyc. per second per Generator 4925/5400 Volts per Generator 2300/2370 Amps. per Generator 1237/1315 Have certificates of works tests been supplied — and the results found as per Rule A.I.E.E. Ventilation.— State how arranged (open or closed system) Closed — Surface cooler Are ventilating arrangements satisfactory Yes Heating when Idle.— What provision is made One heater at each of generator Facilities for Inspection and Repair.— Are these as per Rule Yes

Have down gauges supplied No Bilges.— Are the arrangements to prevent accumulation of bilge-water under the machines satisfactory Yes
 per Motor at full power 6000 No. of Motors One Single or double unit Single Volts per Motor 2300
 per Motor 1160 Have certificates of works tests been supplied A.I.E.E. and the results found as per Rule Yes A.C. Motors.— Is provision made for lining the slip rings Yes Do the Motors remain in synchronism under all normal conditions of running — D.C. Motors.— If the system permits speeding 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 555 kilowatts for excitation 150 State excitation arrangements for Propulsion Generators Voltage regulator and manually operated rheostat. No overload or short circuit protection provided.

Propelling Motors Same source as generators Is an alternative means of excitation provided 2-75KV exciter generators with transfer switch. Have certificates of works tests been supplied A.I.E.E. and found as per Rule —

CONTROL.— Position of Main Control Panel Engine room first grating level. Does it comply with the requirements regarding position Yes, grouping of controls Yes, instruments Yes, insulating materials (state type A.I.E.E. approved materials & ebony asbestos, spacing and shielding of live parts A.I.E.E., 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 contractors.

Is the 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. Overload and Short Circuit Protection.— State means provided None.

What load is it set to operate — Has it been tripped by hand when running at full power and found satisfactory —
 fuses of an approved type Yes

Earth Detection.— Is the main circuit provided with means for detecting earths Yes Are aural and visual alarms fitted No Is main power interrupted on earth fault removal of a limiting resistance is in the earth detecting circuit what is the ohmic value 67 What earth leakage current is necessary to operate the device .5 Ampere If a switch is used to disconnect the aural signal does it automatically give visual indication — Are the alarm 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 overloads in excess of the working capacity of the plant — and without reference to electrical instruments — Is an emergency control provided in the engine room control and can the transfer to this control be made quickly in the engine room — Can the emergency control be rendered mechanically of the deck control —

Instruments and Gauges.— State Instruments provided for each Generator Field Temp., Stator Temp., Excitation meter, AC voltmeter, field ammeter, AC ammeter, Phase balance relay, ground protection relay, turbine RPM indicator, Stator temp., excitation voltmeter, HP meter, Field ammeter, AC ammeter, Is an Insulation Tester provided

Travelling — Are all shunt field circuits protected as per Rule Yes D.C. Systems.— If the Generators are connected in series state means for reversal of direction of rotation of the Prime Movers —

Committee —
 Assigned — Generators also used alternately for other purposes Yes If so, is provision made for overload protection, voltage adjustment, etc. Yes

