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REPORT ON ELECTRIC PROPELLING MACHINERY

Received at London Office
 Date of writing Report 23.11. 1959 When handed in at Local Office 19 Port of HAMBURG
 No. in Survey held at Hamburg Date, First Survey 23.9. 1958 Last Survey 19.3. 1959
 Reg. Book No. of Visits 8
 Single on Twin Triple Quadruple } Screw vessel "MOSCOW" (MOSKVA) Tons { Gross Net
 Built at Helsingfors By whom built Wärtsilä-koncernen A/B Sandvikens Skeppsdocka Yard No. 365 When built
 Electrical Machines made at Hamburg By whom made Siemens-Schuckertwerke Generator Nos. Motor Nos. When made
 Shaft Horse Power at Full Power Total Capacity of Generators kilowatts
 Machinery Numeral as per Rule Owners Port belonging to
 Trade for which Vessel is intended Ice Breaker.

ANS.— Have plans of the Machines, Control Gear, Cables and Circuits been submitted and approved yes

TEAM ENGINES.— Type of Engine No. 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 Is it arranged for hand tripping Does it trip the throttle valve If exhaust steam is admitted, is an automatic shut-off fitted Is provision made for bleed steam and is a non-return or positive shut-off valve fitted Lubricating Oil.—State means provided for emergency supply Is the emergency supply sufficient to maintain lubrication as per Rule Mechanical Balance.—Are the Engines and Generators balanced so as not to cause appreciable vibration

FE 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 No. of Generators If A.C. state frequency at full load Kw. per Generator Volts per Generator Amps. per Generator Have certificates of works tests been supplied and the results found as per Rule Ventilation.—State how arranged (open or closed system) Heating when Idle.—What provision is made Are ventilating arrangements satisfactory Facilities for Inspection and Repair.—Are these as per Rule Are wear-down gauges supplied Bilges.—Are the arrangements to prevent accumulation of bilge-water under the machines satisfactory

MOTORS.— S.H.P. per Motor at full power No. of Motors Single or double unit Volts per Motor Amps. per Motor Have certificates of works tests been supplied and the results found as per Rule A.C. Motors.—Is provision made for machining the slip rings 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 If so, state voltage and excitation amperes at full power kilowatts for excitation State excitation arrangements for Propulsion Generators 5 - Motor/Generator Sets. One for each propulsion circuit (3) and one standby for port and starbd. circuits and one standby for middle propulsion circuit and Propelling Motors see generators Is an alternative means of excitation provided yes Have certificates of works tests been supplied and found as per Rule

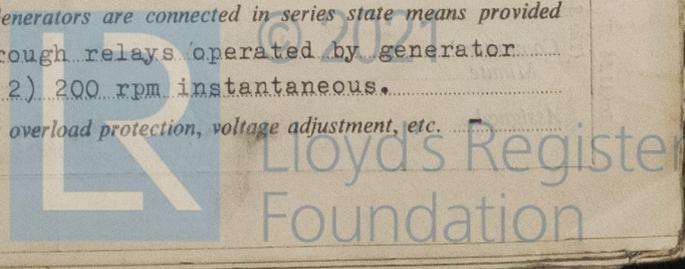
CONTROL.— Position of Main Control Panel Does it comply with the requirements regarding position, grouping of controls yes, instruments yes, insulating materials (state type used) dead front construction, spacing and shielding of live parts yes, accessibility yes, position of fuses yes, locking of screws and nuts yes, labelling yes, fuses for voltmeters, pilot lamps, etc. yes, provision for manual operation of contactors, etc. (state method employed) Air operated circuit breakers which can also be operated with hand wheels. Selection of propulsion machines through hand operated change-over knife type switches. earthing of instrument cases Bakelite, provision of renewable tips on switches subject to arcing yes, capability of withstanding shock and inclination yes, operation with high and low voltage yes, rustproofing of parts. Overload and Short Circuit Protection.—State means provided
 See remarks 1

At what load is it set to operate to be tested and Has it been tripped by hand when running at full power and found satisfactory set on board.

Are 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 yes Is main power interrupted by an earth fault no If a limiting resistance is in the earth detecting circuit what is the ohmic value see remarks 2 What earth leakage current is necessary to operate the device to be tested and set on board If a switch is used to disconnect the aural signal does it automatically give visual indication yes Are the excitation circuits provided with means for earth detection yes Mechanical Protection.—Are circuits above 250 volts D.C. or 150 volts A.C. to earth protected as per Rule yes

Bridge or Deck Control.—Is bridge control provided yes 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 switchboard yes and can the transfer to this control be made quickly in the engine room yes Can the emergency control be rendered mechanically independent of the deck control yes Instruments and Gauges.—State Instruments provided for each Generator Ammeter, voltmeter and tachometer.

and for each Motor Power instruments and ammeter (E.R. control pulpit) Is an Insulation Tester provided 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 Field circuits disconnected through relays operated by generator tachometer contacts. Two settings provided 1) 240 rpm/130secs. time lag. 2) 200 rpm instantaneous. Are the Propulsion Generators also used alternatively for other purposes If so, is provision made for overload protection, voltage adjustment, etc.



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