

# REPORT ON ELECTRIC PROPELLING MACHINERY.

13 JUN 1949

by Rules... ing Report 2nd, March 19 49 When handed in at Local Office 25th, March 19 49 Port of Baltimore, Maryland  
 Actual Survey held at Baltimore, Maryland Date, First Survey 13th May 19 48 Last Survey 21st December 19 48  
 by Rules... Single } Screw vessel  
 Actual 500 on Twin }  
 Triple }  
 Quadruple }  
 M.V. "ANNA SALEN" (ex. Archer)  
 Chester, Pa. By whom built Sun. SB & DD Co. Yard No. 184 When built 1940  
 l Machines made at - By whom made - Generator Nos. - When made 1940  
 Motor Nos. -  
 orse Power at Full Power 2063 MN Total Capacity of Generators - kilowatts  
 ry Numeral as per Rule - Owners Rederi A/B Pulp Port belonging to Stockholm  
 r which Vessel is intended Freighter

Gross 7840  
 Net 4635  
 Tons

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

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

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

TORS.— Direct or Alternating Current - No. of Generators - If A.C. state frequency at full load - Generator - Volts per Generator - Amps. per Generator - Have certificates of works tests been and the results found as per Rule - Ventilation.—State how arranged (open or closed system) - Are ventilating arrangements satisfactory - Heating when Idle.—What provision is made.

Facilities for Inspection and Repair.—Are these as per Rule. - down gauges supplied - Bilges.—Are the arrangements to prevent accumulation of bilge-water under the machines satisfactory.

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

ION.— Is power for excitation taken from the ship's Auxiliary Generators. Yes. If so, state voltage 120 and excitation amperes at full 5.5 kilowatts for excitation 18 per coupling State excitation arrangements for Propulsion Generators Magnetic Couplings a number - 18 KW each.

elling Motors - Is an alternative means of excitation provided No - tificates of works tests been supplied - and found as per Rule - L.— Position of Main Control Panel Engine Room - Lower Level - mply with the requirements regarding position - , grouping of controls - , instruments - , insulating materials (state type - screws and nuts - , labelling - , fuses for voltmeters, pilot lamps, etc - , provision for manual operation of contractors, etc. - method employed) -

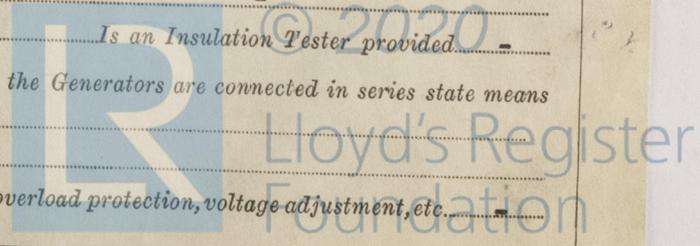
of instrument cases above 250 volts to earth - , provision of renewable tips on switches subject to arcing - , capability of withstanding is the inclination - , operation with high and low voltage - , rust proofing of parts. Overload and Short Circuit Protection.—State means - ty -

load is it set to operate - Has it been tripped by hand when running at full power and found satisfactory - of an approved type - ection.—Is the main circuit provided with means for detecting earths. Yes. Are aural and visual alarms fitted. Yes. Is main power interrupted th fault. - If a limiting resistance is in the earth detecting circuit what is the ohmic value. - What earth leakage current is to operate the device. - If a switch is used to disconnect the aural signal does it automatically give visual indication. - Are the circuits provided with means for earth detection. - Mechanical Protection.—Are circuits above 250 volts to earth protected as per Rule. -

Deck Control.—Is bridge control provided. - If so, from how many stations. - can it be operated freely without producing or loads in excess of the working capacity of the plant. - and without reference to electrical instruments. - Is an emergency control provided ine room. - and can the transfer to this control be made quickly in the engine room. - Can the emergency control be rendered mechanically ent of the deck control. - Instruments and Gauges.—State Instruments provided for each Generator.

ach Motor. - Is an Insulation Tester provided.

Protection.—Are all shunt field circuits protected as per Rule. - D.C. Systems.—If the Generators are connected in series state means to prevent reversal of direction of rotation of the Prime Movers. - Propulsion Generators also used alternatively for other purposes. - If so, is provision made for overload protection, voltage adjustment, etc.



4100-984800-614300

**Reversing Switches.**—If any are provided are they interlocked as per Rule..... **Resistances.**—Are resistances for synchronous motor field per Rule..... **Temperature Alarm.**—Are machines with enclosed ventilating system, etc., fitted with temperature alarm.....

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

**SECONDARY BATTERIES.**—Are Batteries used for starting Main Propulsion Engines... No..... If so, have full particulars of rating b and approved..... Have they been tested under working conditions and do they give the required number of starts..... Are 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 suppli this report..... Are they stored as per Rule.....

**ELECTRIC PROPULSION EQUIPMENT CONDUCTORS.**

DESCRIPTION	CONDUCTORS.		TOTAL MAXIMUM CURRENT—AMPERES.*			MAXIMUM VOLTAGE TO EARTH.	INSULATED WITH.	DI-ELECTRIC THICKNESS.	HOW PRO
	No. per Pole.	Nominal Area per Pole.	In Circuit.		Rule.				
			When Running.	When Manoeuvring.					
MAIN GENERATORS									
GENERATOR FIELDS									
MAIN MOTORS									
MOTOR FIELDS									
CONTROL CIRCUITS									
OTHER CIRCUITS:—									
Magnetic Couplers	1	312,000 CM	156.5		299 217	240	Varn. Cambric	Leaded & Plate	

\*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.....

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..... If so, state name of vessel.....

**General Remarks** (State quality of workmanship, opinions as to class, &c.)..... The magnetic couplings described herein are electrical equipment of the vessel and, as far as can be seen, the workmanship is good and the installation The couplings have been tested out under full load conditions and in manoeuvring, and it is the opinion of signed that this electrical equipment is suitable to be classed with this Society.....

The Surveyors are requested not to write on or below the space for Committee's Minute.

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

Date NEW YORK MAY 25 1949

Committee's Minute see First Entry Report attached

Surveyor to Lloyd's Register of S...  
 Lloyd's Register Foundation

Certificate (if required) to be sent to.....