

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office.....

Date of writing Report... 29th June 49... When handed in at Local Office... 30th June 49... Port of... Malmö.

No. in Survey held at... Malmö... Date, First Survey... 4th May... Last Survey... 22nd June 1949.
Reg. Book No. 96463 on the Single Screw Motor Tanker "SOYA-MARIA" Tons {Gross 10,614.
Net 6,214.

Built at... Malmö... By whom built... Kockums M. V. A. B. Yard No. 305 When built... 1949.

Owners... Rudolf A. B. Sögar Port belonging to... Stockholm

Electrical Installation fitted by... Kockums Mek. V. A. B. Contract No. ✓ When fitted... 1949.

Is vessel fitted for carrying Petroleum in bulk... Yes Is vessel equipped with D.F. Yes E.S.D. Yes Gy.C. Yes Sub.Sig. No

Have plans been submitted and approved... Yes System of Distribution... Two wires Voltage of supply for Lighting... 110
Emergency in to R. 220

Heating 110 & 220 Power 220 Direct or Alternating Current, Lighting... Direct Power... Direct If Alternating Current state periodicity... ✓ Prime Movers,

has the governing been tested and found as per Rule when full load is suddenly thrown on and off... Yes Are turbine emergency governors fitted with a trip switch as per Rule... ✓ Generators, are they compound wound... Yes, are they level compounded under working conditions... Yes, if not compound wound state distance between generators... ✓ and from switchboard... ✓ Where more than one generator is fitted are they arranged to run in parallel... Yes, are shunt field regulators provided... Yes Is the compound winding connected to the negative or positive pole Negative. Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing... Yes Have certificates of test for machines under 100 kw. been supplied... Yes and the results found as per rule... Yes Are the lubricating arrangements and the construction of the generators as per rule... Yes Position of Generators Main: One on each side. Harb. steam driven: - One a platform at port side of to R. is the ventilation in way of generators satisfactory... Yes are they clear of inflammable material... Yes, if situated near unprotected combustible material state distance from same horizontally... ✓ and vertically... ✓, are the generators protected from mechanical injury and damage from water, steam and oil... Yes, are the bedplates and frames earthed... Yes and the prime movers and generators in metallic contact... Yes Switchboards, where are main switchboards placed... One a platform at port side of to R.

are they in accessible positions, free from inflammable gases and acid fumes... Yes, are they protected from mechanical injury and damage from water, steam and oil... Yes, if situated near unprotected combustible material state distance from same horizontally... ✓ and vertically... ✓, what insulation material is used for the panels... Main: steel, if of synthetic insulating material is it an Approved Type... ✓, if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule... ✓ Is the frame effectually earthed... Yes Is the construction as per Rule... Yes, including accessibility of parts... Yes, absence of fuses on the back of the board... Yes, individual fuses to pilot and earth lamps, voltmeters, etc... Yes locking of screws and nuts... Yes, labelling of apparatus and fuses... Yes, fuses on the "dead" side of switches... Yes Description of Main Switchgear for each generator and arrangement of equaliser switches... On double pole circuit breakers with overload and reverse current trips and a single pole equaliser switch. and for each outgoing circuit... A double pole linked switch and a fuse on each pole.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule... Yes Instruments on main switchboard... 7
ammeters... 5 voltmeters... synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the equaliser connection... Yes Earth Testing, state means provided... Ohm meters.

Switches, Circuit Breakers and Fuses, are they as per Rule... Yes, are the fuses an approved type... Yes, are all fuses labelled as per Rule... Yes If circuit breakers are provided for the generators, at what overload current did they open when tested... Main: 580-600 A. are the reversed current protection devices connected on the pole opposite to the equaliser connection... Yes have they been tested under working conditions, and at what current did they operate... Main: 50-70 A. Harb: 370-380 A.

Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule... Yes Cables, are they insulated and protected as per the appropriate Tables of the Rules... Yes, if otherwise than as per Rule are they of an approved type... ✓ state maximum fall of pressure between bus bars and any point under maximum load... Less than allowed in Sec. 6 are the ends of all cables having a sectional area of 0.04 square inch and above provided with soldering sockets... Yes Are paper insulated and varnished cambric insulated cables sealed at the ends... ✓

The Electrical Equipment is installed in accordance with the approved plans and the requirements of the Rules.

All Insulated Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.

The foregoing is a correct description.

Nils E. Fremming

Electrical Engineers.

Date *29th June 1949*

COMPASSES.

Minimum distance between electric generators or motors and standard compass *48 ft*

Minimum distance between electric generators or motors and steering compass *✓*

The nearest cables to the compasses are as follows:—

A cable carrying *5* Ampères *10* feet from standard compass *✓* feet from steering compass.

A cable carrying Ampères feet from standard compass feet from steering compass.

A cable carrying Ampères feet from standard compass feet from steering compass.

Have the compasses been adjusted with and without the electric installation at work at full power *yes*

Has the effect of switching on and off circuits, motors and other electro-magnetic apparatus within the vicinity of the compasses been noted *yes*

The maximum deviation due to electric currents was found to be *0* degrees on *✓* course in the case of the standard compass, and *✓* degrees on *✓* course in the case of the steering compass.

KOCKUMS

Ant. H. Oulund / 5

Builder's Signature.

Date *29th June 1949*

Is this installation a duplicate of a previous case *No* If so, state name of vessel *✓*

Plans. Are approved plans forwarded herewith *No* If not, state date of approval *31st May 1949*

Certificates. Are certificates of test for motors engaged on essential services and generators forwarded herewith *yes*

General Remarks (State quality of workmanship, whether insulation tests, etc., have been made, opinions as to class, etc.)

The above described electrical equipment installation has been fitted onboard under cover in accordance with the Rules, approved plans and instructions.

The workmanship and the materials are good.

It is recommended to place onboard spare armatures for the 22 K.W. motor generator set 220/115 volts before the end of June, 1950.

Noted in 16/7/49

Total Capacity of Generators *315* Kilowatts.

The amount of Fee *mmr. Kr. 1256:-* When applied for, *30-6-49*
stmr. Kr. 314:-
Travelling Expenses (if any) *Kr. 30:-* When received, *19*

A. Böttling
Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FR. 22 JUL 1949*

Assigned *Sgt. F.E. Welch. rpt.*