

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office.....

Date of writing Report... 1st / 7th / 1948... 1948... When handed in at Local Office... 6 / 4 / 48... 1948... Port of... GLASGOW.No. in Survey held at... GREENOCK... Date, First Survey... 16th DECEMBER '47... Last Survey... 17th MARCH... 1948... Reg. Book.38361 on the... S.S. 'MARGARET CANNIES'... Tons { Gross... 7566
Net... 5573

Built at... SUNDERLAND... By whom built... MESSRS BARTRAM & SONS LTD... Yard No... —... When built... 1945

Owners... MARGARETA STEAMSHIP CO LTD... Port belonging to... LONDON.

Electrical Installation fitted by... MESSRS JOHN WILLIS & SONS... PORT GLASGOW... Contract No... —... When fitted... 1948

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

Have plans been submitted and approved... PLAN ATTACHED... System of Distribution... TWO WIRE... Voltage of supply for Lighting... 220

Heating... 220... Power... 220... Direct or Alternating Current, Lighting... D.C... Power... D.C... 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... YES... 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... 100... 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... ADMIRALTY MACHINES... Have certificates of

test for machines under 100 kw. been supplied... —... and the results found as per rule... —... Are the lubricating arrangements and the construction

of the generators as per rule... YES... Position of Generators... AUXILIARY MACHINERY SPACE, FORWARD OF BOILER ROOM.

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... PORT SIDE AUXILIARY MACHINERY SPACE, NEAR

GENERATORS.

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... FITTINGS MOUNTED ON INSULATED STEEL RODS... if of synthetic insulating material is it an Approved Type... YES... 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... OF *... including accessibility of parts... YES... absence of fuses on the back of the board... YES... individual fuses

to pilot and earth lamps, voltmeters, etc., SAME FUSE... 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... DIESEL GENERATORS 1000 AMP D.P.

CIRCUIT BREAKER FITTED WITH OVERLOAD REVERSE CURRENT AND NO VOLT TRIES... STEAM GENERATORS 800 AMP D.P. CIRCUIT BREAKER

FITTED WITH OVERLOAD REVERSE CURRENT AND NO VOLT TRIES

and for each outgoing circuit... 300 AMP 200 AMP OR 100 AMP D.P. KNIFE PATTERN SWITCHES WITH ADMIRALTY PATTERN

H.R.C. FUSES.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule... YES... Instruments on main switchboard... FOUR

ammeters... FOUR... voltmeters... —... synchronising devices... For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection... NO EQUALISER... Earth Testing, state means provided... EARTH LAMPS

Switches, Circuit Breakers and Fuses, are they as per Rule... YES... are the fuses an approved type... ADMIRALTY PATTERN... 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... TESTED BY HAND... are the reversed current

protection devices connected on the pole opposite to the equaliser connection... SERIES... YES... have they been tested under working conditions, and at what current

did they operate... 10% F.L... 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... ADMIRALTY PATTERN

state maximum fall of pressure between bus bars and any point under maximum load... 1.5 Volts... 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... YES

PARTICULARS OF GENERATING PLANT.								
DESCRIPTION OF GENERATOR.	No. of	RATED AT				DRIVEN BY	WHERE DRIVEN BY AN INTERNAL COMBUSTION ENGINE.	
		Kilowatts.	Volts.	Ampères.	Revs. per Min.		Fuel Used.	Flash Point of Fuel.
MAIN ...	2	200	225	890	600	DIESEL ENGINE.	OIL	Above 150°.
	2	150	225	667	500	STEAM ENGINE.	✓	✓
EMERGENCY ...								
ROTARY TRANSFORMER								

GENERATOR CABLES.								
DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
		No. in Parallel Per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rate.			
MAIN GENERATOR	200 ✓	2 ✓	6/.093 ✓	890 ✓	928 ✓	140 ✓	V.C.	L.C.
" " EQUALISEE								
MAIN GENERATOR.	150 ✓	1 ✓	9/.093 ✓	667 ✓	620 ✓	126 ✓	V.C.	L.C.
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

[illegible]

WIRELESS	B8	1	19.044	15	53	273	RUBBER	L.C.
NAVIGATION LIGHTS		1	7.086	5	24	80	RUBBER	L.C.
LIGHTING AND HEATING								
WIRELESS	C8	1	19.044	15	53	204	RUBBER	L.C.
MACHINERY SPACE LIGHTING	B6	1	19.052	20	104	132	V.C.	L.C.
MACHINERY SPACE LIGHTING	C5	1	19.052	15	104	96	V.C.	L.C.
VENTILATION	B7	1	37.083	20	296	246	V.C.	L.C.
ENGINE ROOM SMALL MOTORS	B5	1	37.083	34	296	246	V.C.	L.C.
ENGINE ROOM SMALL MOTORS	C7	1	37.083	40	296	96	V.C.	L.C.
REFRIGERATOR D.B.	C6	1	19.083	50	191	72	V.C.	L.C.
LIGHTING D.B. PORT	D2	1	37.083	45	296	90	V.C.	L.C.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.							
L.P. COMPRESSORS. B ₂ + C ₂	2	61	1	37.083	231	296	110	V.C.	L.C.
OIL FUEL TRANSFER PUMP.	1	16	1	19.052	63.5	104	140	V.C.	L.C.
FRESH WATER PUMP.	1	9	1	19.044	36	53	250	PUMPER.	L.C.
GENERATOR COOLING PUMPS.	2	3	1	7.036	13	24	120	PUMPER.	L.C.
DIESEL OIL TRANSFER PUMP.	1	2.25	1	7.036	10	24	50	PUMPER	L.C.
HOT WATER PUMP	1	.75	1	7.064	3.7	45	220	PUMPER	L.C.
REFRIG. COMPRESSOR	1	7	1	7.044	28.5	31	50	PUMPER	L.C.
REFRIG. CIRCULATING PUMP	1	2	1	3.036	9	10	40	PUMPER	L.C.
REFRIG. BRINE PUMP	1	1	1	3.029	5	5	40	PUMPER	L.C.
TRIMMARY FAN VENT FANS	3	4	1	7.064	16	45	150	PUMPER	L.C.
ENGINE ROOM + BOILER ROOM FANS.	6	3.1	1	7.036	12	24	90	PUMPER	L.C.
ACCOMMODATION VENT FANS.	2	1.75	1	3.036	6.6	10	170	PUMPER	L.C.

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.

John Willis & Sons

Electrical Engineers.

Date 2nd April 1948

9 John Wood Street Port Glasgow

COMPASSES.

Minimum distance between electric generators or motors and standard compass..... EIGHTEEN FEET

Minimum distance between electric generators or motors and steering compass..... TWELVE FEET.

The nearest cables to the compasses are as follows:—

A cable carrying 5 Ampères NINE feet from standard compass SIX feet from steering compass.

A cable carrying .07 Ampères LED. INT. feet from standard compass LED. INT. 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 NIL degrees on ANY course in the case of the standard compass, and NIL degrees on ANY course in the case of the steering compass.

Builder's Signature.

Date

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

Plans. Are approved plans forwarded herewith..... YES If not, state date of approval.....

Certificates. Are certificates of test for motors engaged on essential services and generators forwarded herewith..... NOT AVAILABLE

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

The electrical installation of this vessel was fitted on board under the supervision and to the requirements of the Admiralty and has been modified at this time, to suit the alterations made to the vessel for the cargo carrying trade. The existing generator and switchboard are being retained for the present, but all other electrical equipment — with the exception of the items noted in this Report — has been removed or disconnected from the system. A circuit for cargo lighting has been added to the installation and the lighting circuits, outwith the machinery spaces, have been modified to suit alterations to the accommodation.

On completion of this work the installation was examined, tested under working conditions and insulation resistance measured. All found to be satisfactory.

The electrical installation of this vessel, as now seen, is in safe working condition and is in my opinion such as could be accepted for classification by this Society.

Total Capacity of Generators..... 700 Kilowatts.

The amount of Fee ... £ 30 : 0 : When applied for, 19.....

Travelling Expenses (if any) £ - : 15/6 When received, 19.....

Committee's Minute

GLASGOW 13 APR 1948

Assigned

SEE ACCOMPANYING MACHINERY REPORT

Noted
30.4.48
W. Gardiner
Surveyor to Lloyd's Register of Shipping.



© 2021

Lloyd's Register
Foundation