

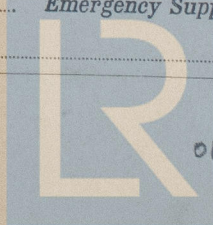
T2. TANKER G.E.C. TYPE

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

No. 106705

13.
 of writing Report 27th Oct 1949 When handed in at Local Office 14 NOV 1949 Received at London Office 10 NOV 1949
 Port of NEWCASTLE-ON-TYNE
 in Survey held at SOUTH SHIELDS Date, First Survey Sept 22nd Last Survey Oct. 22nd 1949
 Book.
 (No. of Visits 8)
 attached 193 on the S.S. "ZEITOUN" Ex. "MOBILE BAY" Tons { Gross 10720 Net 6370
 ilt at MOBILE ALA. By whom built ALABAMA DD & SB. Co. Yard No. — When built 1945
 oners BALTIC TRADING Co. Port belonging to LONDON BRITISH
 tallation fitted by ALABAMA DD & SB. Co. When fitted 1945
 vessel equipped for carrying Petroleum in bulk Yes Is vessel equipped with D.F. Yes E.S.D. Yes Gy.C. Yes Sub. Sig. —
 ns, have they been submitted and approved No System of Distribution 3 wire AC Voltage of Lighting 115
 Braiding 115 Power 450 D.C. or A.C., Lighting A.C. Power AC If A.C. state frequency 60
 me Movers, has the governing been found as per Rule when full load is thrown on and off Yes Are turbine emergency governors fitted —
 h a trip switch Yes Generators, are they compound wound —, and level compounded under working conditions —
 " not compound wound state distance between generators — and from switchboard — Are the generators arranged to run —
 " parallel Yes, are shunt field regulators provided Yes Is the compound winding connected to the negative or positive pole —
 Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing No Have certificates of —
 for machines under 100 kw. been supplied No and the results found as per Rule —
 ition of Generators in engine room.
 he ventilation in way of generators satisfactory Yes are they clear of inflammable material and protected from mechanical injury and —
 age from water, steam and oil Yes Switchboards, where are main switchboards placed near generator - on Forward
d of main control platform.
 they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water, —
 m and oil Yes, what insulation is used for the panels Dead front board, if of synthetic insulating —
 erial is it an Approved Type —, if of semi-insulating material (slate or marble) are all conducting parts insulated therefrom as —
 as possi Rule — Is the construction as per Rule, including locking of screws and nuts Yes Description of Main Switchgear 3 Pole Circuit Breaker with overload releases with time lags
 each generator and arrangement of equaliser switches each leg. Reverse current relay.
 the switch and fuse gear (or circuit breakers) for each outgoing circuit 3-Pole Circuit Breaker with 3-overloads.
 compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes Instruments on main switchboard 15
3 wattmeters and 2 freq. meters
 meters 7 voltmeters — synchronising devices. For compound machines in parallel are the ammeters and reversed current —
 s of section devices connected on the pole opposite to the equaliser connection — Earth Testing, state means provided Earth
 ltern amps
 ates, Circuit Breakers and Fuses, are they as per Rule Yes, are the fuses an Approved Type American Pattern,
 e of fuses —, are all fuses labelled Yes If circuit breakers are provided for the generators, at what —
 load do they operate 150 FL., and at what current do the reversed current protective devices operate 10% FL.
 t Boxes, Section Boards and Distribution Boards, is the construction as per Rule Yes
 es, are they insulated and protected as per Rule Yes, if otherwise than as per Rule are they of an Approved Type American Pattern,
 maximum fall of pressure between bus bars and any point under maximum load —, are the ends of all cables having a sectional —
 of 0.01 square inch and above provided with soldering sockets No all mechanical Are all paper insulated and varnished cambric insulated —
 es sealed at the ends Yes Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil, —
 temperatures or risk of mechanical damage Yes, are any cables laid under machines or floorplates Yes, if so, are they —
 nately protected Yes Are cables in machinery spaces, galleys, laundries, etc., lead covered Yes or run in conduit —
 f the "HR" type — State how the cables are supported or protected All cables - lead covered and armoured
n in "U" brackets
 all lead sheaths, armouring and conduits effectually bonded and earthed Yes Are all cables passing through decks and watertight —
 heads provided with deck tubes or watertight glands Yes, where unarmoured cables pass through beams, etc., are the holes —
 ippingively bushed Yes Refrigerated chambers, are the cables and fittings as per Rule —
 native Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule Yes Emergency Supply, state position —
separate house on poop.



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Navigation Lamps, are they separately wired Yes controlled by separate double pole switches and fuses Yes Are the switches and fuses a position accessible only to the officers on watch Yes, is an automatic indicator fitted Yes Is an alternative supply provided Yes

Secondary Batteries, are they constructed and fitted as per Rule Yes, are they adequately ventilated Yes

state battery capacity in ampère hours 56

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof Yes

Are any fittings installed where readily combustible materials or inflammable or explosive dust or gases are likely to be present Yes

if so, how are they protected Nigam Flameproof Fittings

and where are the controlling switches fitted in accommodation midship in alleyway are all fittings suitably ventilated Yes

Searchlight Lamps, No. of 1, whether fixed or portable portable, are they of the carbon arc or of the filament type Filament

Heating and Cooking, is the general construction as per Rule Yes, are the frames effectually earthed Yes, are heaters in accommodation of the convection type — Motors, are all motors constructed and installed as per Rule and placed in well-ventilated compartments in which inflammable gases cannot accumulate and protected from damage from water, steam and oil Yes

Are motors coupled to oil fuel transfer and pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment Yes Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing No

Have certificates of test for motors under 100 BHP intended for essential sea services been supplied and the results found as per Rule No

Control Gear and Resistances, are they constructed and fitted as per Rule Yes Lightning Conductors, where required are they fitted as per Rule Yes Ships carrying Oil having a Flash Point less than 150° F. Have all the special requirements of the Rules for such ships been complied with Yes, are all fuses of an Approved Cartridge Type American Pattern make of fuse — Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships Yes Are the cables lead covered as per Rule Yes

E.S.D., if fitted state maker Gathometer location of transmitter Forward Pump Room and receiver Forward Pump Room

Spare Gear, if the vessel is for open sea service have spares been provided as per Rule and suitably stored in dry situations Yes

Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory Yes

PARTICULARS OF GENERATING PLANT.

DESCRIPTION OF GENERATOR.	No. of	MAKER.	RATED AT				PRIME MOVER.	
			Kilowatts per Generator.	Volts.	Ampères.	Revs. per Min.	TYPE.	MAKER.
MAIN	2	G.E.C.	400	450/3/60	642	1200	Turbine	G.E.C.
Propulsion Exciters	1	Elect. Mach. Trans.	75	"	120.5	750	Diesel	Corinier
	2	G.E.C.	75	110	682	1200	Turbine	G.E.C.
Ships Aux Exciters	2	G.E.C.	55	120	458	1200	Turbine	G.E.C.
EMERGENCY								
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead ends ^{ends} between ^{between} feet).	INSULATION.	PROTECTIVE COVERING.
		No. in Parallel per Pole.	Sectional Area ^{sq} Sec. and Dia. of Sec. ^{Strand} Sq. ins. Sec. ^{sq.} mm.	In the Circuit.	1155. ^{1155.}			
MAIN GENERATOR	400	1	0.7854	642 ✓	705	30	V.C.	L. & A.
" " EQUALISER								
EMERGENCY GENERATOR	75	1	0.0829	120.5 ✓	158	30	V.C.	L. & A.
PROPULSION GEAR EXCITER	75	1	0.7854	682 ✓	705	35	V.C.	L. & A.
SHIPS AUX. EXCITER	55	1	0.5890	458 ✓	582	40	V.C.	L. & A.
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR...								

MAIN DISTRIBUTION CABLES (to Section Boards, Distribution Fuse Boards, etc.).

[illegible]

LIGHTING, HEATING, WIRELESS, NAVIGATION LIGHTS, ETC., CABLES.

[illegible]

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.		No.	B.H.P.	MOTOR SPEED.				MOTOR DATA.			
MAIN CIRC. PUMP MOTOR	1	125	1	0.2356	156 ✓	234	90	V.C.	L 3A.	3 CORE	
FIRE & BUTTERWORTH PUMP	2	50	1	0.0321	63 ✓	83	130	"	"	"	
STEERING GEAR	2	30	1	0.0261	38 ✓	54.5	150	"	"	"	
LATHE MOTOR	1	2	1	0.0051	3.1 ✓	18.5	10	"	"	"	
DRILLING M/C MOTOR	1	1	1	0.0051	1.7 ✓	18.5	20	"	"	"	
GRINDER MOTOR	1	3	1	0.0051	4.4 ✓	18.5	20	"	"	"	
MAIN CONDENSATE MOTOR	2	25	1	0.0206	32 ✓	46.5	60	"	"	"	
AUX. CIRC. PUMP MOTOR	1	30	1	0.0261	38 ✓	54.5	80	"	"	"	
AUX. CONDENSATE PUMP MOTOR	1	15	1	0.013	19 ✓	34.5	70	"	"	"	
COOLER CIRC. FAN MOTOR	1	10	1	0.0082	13 ✓	25.5	65	"	"	"	
FUEL OIL SERVICE PUMP MOTOR	2	7½	1	0.0051	10 ✓	18.5	50	"	"	"	
LUB. OIL SEPARATOR MOTOR	1	2	1	0.0051	3.1 ✓	18.5	90	"	"	"	
LUB. OIL SERVICE PUMP MOTORS	2	5	1	0.0051	6.9 ✓	18.5	60	"	"	"	
FORCED DRAUGHT FAN MOTORS	3	50	1	0.0521	63 ✓	83	170	"	"	"	
EVAPORATOR FEED PUMP MOTOR	1	1	1	0.0051	1.7 ✓	18.5	90	"	"	"	
AFT. ACCOMM VENT FANS	2	1½	1	0.0051	2.4 ✓	18.5	150	"	"	"	
FRESH WATER PUMP MOTORS	2	2	1	0.0051	3.1 ✓	18.5	110	"	"	"	
ENGINE ROOM VENT FANS	4	2	1	0.0051	3.1 ✓	18.5	150	"	"	"	
DOMESTIC REFRIG MOTOR	1	7.5	1	0.0051	10 ✓	18.5	150	"	"	"	
REFRIG. CONDENSATE PUMP	1	0.5	1	0.0051	0.9 ✓	18.5	150	"	"	"	
ATMOSPHERIC DRAIN & RECEIVER PUMP	1	2	1	0.0051	3.1 ✓	18.5	90	"	"	"	
SHIP SERVICE AIR COMPRESSOR MOTOR	1	5	1	0.0051	6.9 ✓	18.5	15	"	"	"	
SALT WATER PUMP	1	7½	1	0.0051	10 ✓	18.5	135	"	"	"	
SANITARY PUMP	1	7½	1	0.0051	10 ✓	18.5	130	"	"	"	
E.R. BILGE PUMP	2	10	1	0.0082	13 ✓	25.5	130	"	"	"	
DRINKING WATER PUMP AFT.	1	1	1	0.0051	1.7 ✓	18.5	130	"	"	"	
" " " MIDSHIP	1	1	1	0.0051	1.7 ✓	18.5	50	"	"	"	
MAIN MOTOR COOLING FAN	1	15	1	0.013	19 ✓	34.5	65	"	"	"	
TURBINE TURNING GEAR	1	3	1	0.0051	4.4 ✓	18.5	20	"	"	"	
MAIN SHAFT TURNING GEAR	1	5	1	0.0051	6.9 ✓	18.5	110	"	"	"	
COMBUSTION CONTROL COMP ² MOTOR	1	15	1	0.013	19 ✓	34.5	15	"	"	"	
CARGO PUMPS	3	200	1	0.2535	249 ✓	308	30	"	"	"	
CARGO STRIPPING PUMPS	2	50	1	0.0521	63 ✓	83	30	"	"	"	
PUMP ROOM EXHAUST FAN	1	1.5	1	0.0051	2.2 ✓	18.5	36	"	"	"	
WIRELESS M/G 450 VOLTS/110/1000 DC	1	7.5	1	0.0051	10 ✓	18.5	16	"	"	"	

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.

Electrical Contractors.

Date

COMPASSES.

Have the compasses been adjusted under working conditions.

Builder's Signature.

Date

Have the foregoing descriptions and schedules been verified and found correct.

Yes

Is this installation a duplicate of a previous case.

Yes

If so, state name of vessel.

"THELICONUS"

Plans. Are approved plans forwarded herewith.

If not, state date of approval.

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

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

The electrical installation to the standards of the American Bureau of Shipping has been in operation for approximately 4 years. Alternators and exciters examined. Main switchboard examined and all mechanical connectors checked and tightened. Engine room motors examined internally and externally. Emergency alternator and switchboard examined. The lighting fittings in the tween deck space centre castle have been replaced with flameproof fittings (switches in accommodation alleyway). All fittings and power circuits examined and megger tested. All found satisfactory. The fresh water pump motor and pump removed from tween deck space centre castle and repositioned in the Steward's store in the officer's accommodation.

The materials and workmanship are satisfactory.

In my opinion the electrical equipment of this vessel is in a satisfactory condition and eligible to receive the Society's classification of L.M.C. (with date)

Noted sub 15/12/29

Total Capacity of Generators.

875

Kilowatts.

The amount of Fee ...

£

:

:

When applied for,

SUNDAY ATTENDANCE FEE.

£

5:5:0.

When received,

Travelling Expenses (if any) £

:

:

When received,

Committee's Minute

TUES. 20 DEC 1940

Assigned

See minute on

f.e. rpt

J. W. Wright & Co. Stew.

Surveyor to Lloyd's Register of Shipping.



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