

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Date of writing Report.....19..... When handed in at Local Office.....**17 SEP 1941**..... Port of.....**HULL**.....
 No. in Survey held at.....**Thorne**..... Date, First Survey.....**28.7.41**..... Last Survey.....**1.9.41**.....
 Reg. Book.....
 on the **H. S. Tug EMPIRE MAPLE**..... Tons {Gross.....**129**.....
 Net.....**Nil**.....
 Built at.....**Thorne**..... By whom built.....**R. Dundas & Co**..... Yard No.....**358**..... When built.....**1941-9**.....
 Owners.....**Ministry of Shipping**..... Port belonging to.....
 Electrical Installation fitted by.....**Humber Electrical Engineering Co Ltd**..... Contract No.....**✓**..... When fitted.....**1941-9**.....
 Is vessel fitted for carrying Petroleum in bulk.....**No**..... Is vessel equipped with D.F.....**✓**..... E.S.D.....**✓**..... Gy.C.....**✓**..... Sub.Sig.....**✓**.....

Have plans been submitted and approved.....**Yes**..... System of Distribution.....**Parallel - Constant pressure 220v**..... Voltage of supply for Lighting.....**110**.....

Heating.....**✓**..... Power.....**✓**..... Direct or Alternating Current, Lighting.....**D.C.**..... Power.....**✓**..... If Alternating Current state frequency.....**✓**..... Prime Movers,

has the governing been tested and found efficient when the whole 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.....**✓**....., 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.....**✓**..... 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.....**Engine Room - starboard side**.....

....., 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.....**Adjacent to 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.....**Sundango**....., 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.....**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.....

.....**D.P. Switches & fuses**.....

and for each outgoing circuit.....**SP or D.P. Switches & D.P. fuses**.....

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

ammeters.....**One**..... voltmeters.....**✓**..... synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection.....**✓**..... Earth Testing, state means provided.....**Earth lamps & switches**.....



and where are the controlling switches fitted Yes, are all fittings suitably ventilated Yes,
are all fittings and accessories constructed and installed as per Rule Yes Searchlight Lamps, No. of One, whether fixed or portable Yes
_____, are their fittings as per Rule _____ Heating and Cooking, is the general construction as per Rule None,
are the frames effectually earthed Yes, are heaters in the accommodation of the convection type _____ Motors, are all motors constructed and
installed as per Rule None and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water,
steam and oil _____, if situated near unprotected combustible material state minimum distance from same horizontally _____ and vertically _____
Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing _____ Have certificates of test for motors under
100 BHP intended for essential services been supplied and the results found as per Rule _____ Control Gear and Resistances, are they constructed and
fitted as per Rule _____ 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 _____, are all fuses of the cartridge type _____
are they of an approved type _____ If portable lamps for use in dangerous spaces are supplied, are they of a self-contained battery-fed flameproof
type _____ Spare Gear, if the vessel is for open sea service have spares been provided as per Rule Yes, are they suitably stored in dry
situations Yes Insulation Tests, has the insulation resistance of all circuits and apparatus been megger tested and found satisfactory 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 ...	One	3	110	27	500.	Steam Engine	✓	✓
EMERGENCY ...								
ROTARY TRANSFORMER								

GENERATOR CABLES.

DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULA- TED WITH.	HOW PROTECTED.
		No. in Parallel Per Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR	3.	Gre	7/044	27.	31 ✓	18	V.I.R	L.C 9 Arm ^d
" " EQUALISER								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR ...								
" " GENERATOR ...								

MAIN DISTRIBUTION CABLES.

[illegible]

LIGHTING AND HEATING, ETC., CABLES.

[illegible]

MOTOR CABLES.

[illegible]

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.

P. P. THE LONDON ELECTRICAL ENGINEERING CO.

Geo Ratchange

Electrical Engineers.

Date Sept 11/41

COMPASSES.

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

Minimum distance between electric generators or motors and steering compass..... 42 feet.

The nearest cables to the compasses are as follows:—

A cable carrying 0.25 Ampères feet from standard compass to the feet from steering compass.

A cable carrying 4 Ampères feet from standard compass 6 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 degrees on course in the case of the steering compass.

Builder's Signature.

Date Sept 16/41.

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

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

The Electrical installation has been fitted on board in accordance with the approved plans, the Rules & the Specification. The workmanship & material are good & when tried under working conditions & when subjected to the tests prescribed in the Rules it was found satisfactory in every respect.

Noted
22/9/41

Total Capacity of Generators 25 Kilowatts.

The amount of Fee ... £ 3 : 0 : 15
+ 25% in profit
Travelling Expenses (if any) £ : :
When applied for, 22 SEP 1941
When received, 19.....

Dicky L. P. O'Brien

Surveyor to Lloyd's Register of Shipping.

TUE. 30 SEP 1941

Committee's Minute

Assigned