

## REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

5- OCT 1945

Received at London Office.

Date of writing Report... 5-9-45 When handed in at Local Office... 11-10-45 Port of Middlesbrough

No. in Survey held at Middlesbrough Date, First Survey 30-6-45 Last Survey 4-9-1945  
Reg. Book. "L.C. 28" (J.4867) (Number of Visits... 6...)on the Tons { Gross... 631  
Net... 533

Built at Middlesbrough By whom built The Lake Bridge Engineering Co. Ltd. Yard No. When built 1945

Owners Admiralty Port belonging to London

Electrical Installation fitted by Johnson &amp; Turner Ltd (Newcastle) Contract No. When fitted 1945

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

Have plans been submitted and approved Installation to Admiralty Plans System of Distribution Two wire insulated Voltage of supply for Lighting 110

Heating Power 110 Direct on Alternating Current, Lighting Yes Power Yes 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 Generator are they compound wound Hunt &amp; Hunt to Admiralty Specification are they level compounded under working conditions

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

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 generator as per rule Yes Position of Generators on raised stool in 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 on iron framework adjacent to generator

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 Switchboard to Admiralty design &amp; specification 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 a double-pole single

throw quick break knife switch and double pole cartridge type fuses.

and for each outgoing circuit as per generator

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes 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 E lamps coupled to E through two open

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 are the reversed current

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

did they operate Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule Admiralty pattern fitted

Cables, are they insulated and protected as per the appropriate Tables of the Rules Admiralty pattern fitted 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 2 lb 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

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GENERATOR CABLES.								
DESCRIPTION.	KILOWATTS.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feed).	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.	Rule.			
MAIN GENERATOR ... ..	10	1	19/083	91	18	18	V.I.R	L.C. (AP. 6188A)
" " EQUALISER ... ..								
EMERGENCY GENERATOR ... ..								
ROTARY TRANSFORMER: MOTOR ... ..								
" " GENERATOR ... ..								

[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.

*Cecil W. Leach* For *Tanjin (Newcastle) Ltd.*

Electrical Engineers.

Date *10/9/45.*

COMPASSES.

*to compasses fitted.*

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

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

The nearest cables to the compasses are as follows:—

A cable carrying ..... Ampères ..... 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 .....

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

The maximum deviation due to electric currents was found to be ..... degrees on ..... course in the case of the

standard compass, and ..... degrees on ..... course in the case of the steering compass.

*W. L. Fletcher*

Builder's Signature.

Date *20.9.45.*

Assistant Managing Director.

Is this installation a duplicate of a previous case..... *yes*.....

If so, state name of vessel *"L.C. 23"*

Plans. Are approved plans forwarded herewith..... *No.*.....

If not, state date of approval.....

Certificates. Are certificates of test for ~~motors engaged on essential services and generator~~ forwarded herewith.....

*No. (Addy Test)*

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

*The electrical equipment of this vessel has been installed under special survey in accordance with the approved Admiralty plans, specifications & amendments thereto: The materials used are of good quality and design and the workmanship is good: On completion trials of the equipment as required by Admiralty were witnessed with satisfactory results and the insulation resistance was found good: This equipment conforms generally to the Society's 1939-40 Rules for electrical equipment and is in my opinion suitable for a vessel bearing the class "for Government service"*

Total Capacity of Generators..... *10*..... Kilowatts.

The amount of Fee ... .. £ *10.* : *0.* : *0.*

*Specification* .....

Travelling Expenses (if any) £ : :

When applied for,

*4/10/1945.*

Supervision of Specification,  
When received

*S. D. M. W.*  
Surveyor to Lloyd's Register of Shipping.

FRI. 23 NOV 1945

Committee's Minute .....

Assigned.....

*See F.E. machy. rpt.*



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