

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

8 NOV 1943

Received at London Office.....

Date of writing Report.....19..... When handed in at Local Office.....19..... Port of HULL

No. in Survey held at HULL Date, First Survey 12.8.43 Last Survey 4.10.43
Reg. Book. (Number of Visits.....9.....)

on the H.M.T. MIYALTO Tons { Gross 452
Net 144

Built at Beverley By whom built Cook, Nelson & Lennard Yard No. 717 When built 1943

Owners The Admiralty Port belonging to.....

Electrical Installation fitted by W. & S. Bury & Son Ltd Contract No..... When fitted 1943

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

Have plans been submitted and approved yes System of Distribution two wire Voltage of supply for Lighting 110

Heating 110 Power 110 Direct or Alternating Current, Lighting AC Power DB 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..... 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 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 Engine room starboard side on platform

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 Engine room starboard side near 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 insulated with mica 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 Double pole quick

break knife switches & double pole fuses

and for each outgoing circuit Double pole quick break knife switches & double pole fuses

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 Lamps connected to earth via switches & fuses

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 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 3V, 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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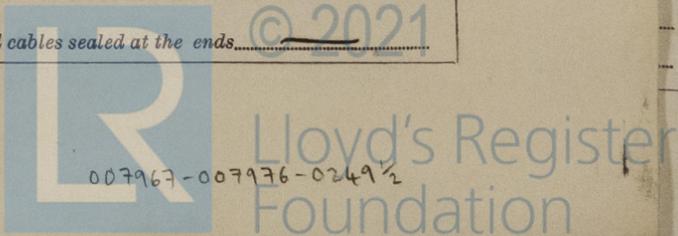
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with insulating compound _____ or waterproof insulating tape _____ Are all the cable runs in accessible positions, not exposed to drip or accumulation of water or oil, high temperatures or risk of mechanical damage Yes, are cables laid under machines or floorplates no, if so, are they adequately protected _____ Are cables in machinery spaces, galleys, laundries, etc., lead covered Yes or run in conduit _____ State how the cables are supported and protected In machinery spaces etc. LC clipped to perforated steel trays or direct to stowage, in accommodation etc. clipped to wood battens or direct to overhead work.

Are all lead sheaths, armoring and conduits effectually bonded and earthed Yes Refrigerated chambers, are the cables and fittings as per Rule _____

Are all cables passing through decks and watertight bulkheads provided with deck tubes or watertight glands Yes, where unarmoured cables pass through beams, etc., are the holes effectually bushed Yes and with what material lead Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule _____ Emergency Supply, state position _____ and method of control _____

Navigation Lamps, are they separately wired Yes controlled by separate double pole switches Yes and fuses Yes Are the switches and fuses in a position accessible only to the officers on watch Yes, is an automatic indicator fitted Yes Secondary Batteries, are they constructed and fitted as per Rule _____, are they adequately ventilated _____ what is the battery capacity in ampere hours _____

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

and where are the controlling switches fitted Over each stove, are all fittings suitably ventilated Yes, are all fittings and accessories constructed and installed as per Rule Yes Searchlight Lamps, No. of 2-10", whether fixed or portable fixed, are their fittings as per Rule Yes Heating and Cooking, is the general construction as per Rule Yes, are the frames effectually earthed Yes, are heaters in the accommodation of the convection type no Motors, are all motors constructed and installed as per Rule Yes and placed in well-ventilated compartments in which inflammable gases cannot accumulate and free from damage from water, steam and oil Yes, if situated near unprotected combustible material state minimum distance from same horizontally _____ and vertically _____ Are motors coupled to oil fuel transfer and unit pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment _____ 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 Admiralty supply 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 _____, are all fuses of the cartridge type _____ are they of an approved type _____ Are the fittings for pump rooms, 'tween deck spaces, etc., in accordance with the special requirements for such ships _____ Are the cables lead covered as per Rule _____ 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 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	1	20KW	115	174	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 For Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
MAIN GENERATOR	20KW	1	37/008	174	214	20	VIR	LC AP6106A WE
" " EQUALISER								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

MAIN DISTRIBUTION CABLES.

DESCRIPTION.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
	No. in Parallel For Pole.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	In the Circuit.	Rule.			
AUX. SWITCHBOARDS AND SECTION BOARDS							
Aft lighting, engine boiler rooms etc	1	7/024	20	31	120'	VIR	LC AP6102A WE
Forward lighting	1	7/024	20	31	180'	"	"
2nd	1	7/024	18	31	20'	"	"

LIGHTING AND HEATING, ETC., CABLES.

DESCRIPTION.	No.	Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
			In the Circuit.	Rule.			
WIRELESS	1	7/026	15	24	140	VIR	LC AP6103A WE
NAVIGATION LIGHTS	1	7/026	3	24	150	"	"
LIGHTING AND HEATING							
Engine & boiler rooms	1	7/026	10	24	30	"	"
Aft accommodation lighting	1	7/026	10	24	30	"	"
Searchlights	1	7/064	20	46	20	"	6191
Forward lighting (crews)	1	7/044	18	31	150	"	6192
Forward lighting (Officers)	1	7/044	15	24	40	"	6193
Heating	1	7/044	10	24	20	"	"
Radio	1	7/044	25	31	16	"	6192
R.A.D.P.	1	7/044	14	31	210	"	"
2nd	1	7/044	25	31	160	"	"
3rd	1	7/044	10	31	160	"	"

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.		No.	B.H.P.	CONDUCTORS.		MAXIMUM CURRENT IN AMPERES.		APPROX. LENGTH (lead plus return feet).	INSULATED WITH.	HOW PROTECTED.
Sectional Area or No. and Dia. of Strands. Sq. ins. or sq. mm.	No. in Parallel For Pole.			In the Circuit.	Rule.					
Vent fan 5"	3	1/2	1	3/026	2.5	10	20	20	VIR	LC AP6105A WE
" 7"	1	1/2	1	3/026	4.5	10	25	25	"	"
" 12"	1	1 1/2	1	7/026	14	24	30	30	"	6193
Refug. (DAR) 7 1/2"	1	1/2	1	3/026	5.2	10	20	20	"	6195
" 3 1/2"	1	1/2	1	3/026	5.2	10	40	40	"	"

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.

W.M. BRADY & SON LTD
W. M. Brady

Electrical Engineers.

Date 5.10.43

COMPASSES.

Minimum distance between electric generators or motors and standard compass 30'-0"

Minimum distance between electric generators or motors and steering compass 7'-0"

The nearest cables to the compasses are as follows:—

A cable carrying 1 Ampères inside feet from standard compass 6' feet from steering compass.

A cable carrying 2.5 Ampères 6' feet from standard compass inside 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 every course in the case of the standard compass, and nil degrees on _____ course in the case of the steering compass.

COOK, WILTON & GEMMELL, LTD.

W. Gemmell
 General Manager

Builder's Signature.

Date 7-10-43

Is this installation a duplicate of a previous case Yes If so, state name of vessel LINDISBARN

Plans. Are approved plans forwarded herewith No If not, state date of approval 12/4/41

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

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

The electrical equipment of this vessel was installed under special survey and in accordance with the Admiralty plans and with the specification. The materials used are of good quality and the workmanship is good. On completion the equipment was operated under working conditions with satisfactory results and the insulation resistance of all circuits and apparatus was measured and found good. This equipment is in my opinion suitable for a closed vessel.

Noted
24
12/11/43

Total Capacity of Generators 20 Kilowatts.

The amount of Fee Classification 17: 10: Specification 17: 10: When applied for, NOV. 1943
 Travelling Expenses (if any) £ _____ : _____ : _____ When received. _____ 19_____

ADMIRALTY
 A/c rendered from
 London 19.11.43

W. Gemmell
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 18 NOV 1943

Assigned see minute on J.E. Rpt.

5m. 4.38.—Transfer. (MADE AND PRINTED IN ENGLAND.) (The Surveyors are requested not to write on or below the space for Committee's Minute.)



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