

# REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office.....

26. NOV. 1948

When handed in at Local Office.....

Port of Calcutta

Survey held at Vijagapatam Date, First Survey 16-1-48 Last Survey 20-10-1948  
(Number of Visits.....)

Reg. Book. " JALASHA " Tons { Gross 5.02  
Net 1

built at Vijagapatam By whom built The Scindia Ste. Nav. Co. Ltd. Yard No. V.C. 101 When built 1948

owners The Scindia Ste. Nav. Co. Ltd. Port belonging to Bombay

Electrical Installation fitted by Scindia Ste. Nav. Co. Ltd. Contract No. ✓ When fitted 1948

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

Plans submitted and approved Yes System of Distribution a parallel system with constant current two wire D.C. Voltage of supply for Lighting 110V

Power 110V Direct or Alternating Current, Lighting D.C. Power D.C. If Alternating Current state frequency ✓ Prime Movers, ✓

governing been tested and found efficient when the whole load is suddenly thrown on and off Yes Are turbine emergency governors fitted with a ✓

switch as per Rule ✓ Generators, are they compound wound Yes, are they level compounded under working conditions Yes

not compound wound state distance between generators ✓ and from switchboard ✓ Where more than one generator is fitted are they

changed to run in parallel no, are shunt field regulators provided Yes Is the compound winding connected to the negative or positive pole

positive Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing ✓ Have certificates of

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

the generators as per rule Yes Position of Generators Engine room, manoeuvring platform, starboard side

is the ventilation in way of generators satisfactory Yes are they clear of inflammable material Yes, if situated

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, manoeuvring platform

level, on bulkhead of engine room stow.

are they in accessible positions, free from inflammable gases and acid fumes Yes, are they protected from mechanical injury and damage from water, steam

oil Yes, if situated near unprotected combustible material state distance from same horizontally ✓ and vertically ✓, what insulation

material is used for the panels 3/4" SANDANYO, if of synthetic insulating material is it an Approved Type Yes, if of

non-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule ✓ Is the frame effectually earthed Yes

the construction as per Rule Yes, including accessibility of parts Yes, absence of fuses on the back of the board Yes, individual fuses

on pilot and earth lamps, voltmeters, etc. Yes locking of screws and nuts Yes, labelling of apparatus and fuses Yes, fuses on the "dead"

ends of switches Yes Description of Main Switchgear for each generator and arrangement of equaliser switches.....

300 A D.P. single throw knife switch

for each outgoing circuit 4 - 60 knife switches of 60 a. and 4 c/p knife switches of 30 a

compartments containing switchboards composed of fire-resisting material or lined as per Rule ✓ Instruments on main switchboard 2

voltmeters 2 voltmeters no 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, 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, are the reversed current protection devices connected on the pole opposite to the equaliser connection Yes, have they been tested under working conditions Yes.

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 Yes, state maximum fall of pressure between bus bars and any point under maximum load Yes, 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 exposed ends with insulating compound Yes or waterproof insulating tape Yes. 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 Yes, if so, are they adequately protected Yes. Are cables in machinery spaces, galleys, laundries, etc., lead covered Yes or run in conduit Yes for galleys. State how the cables are supported and protected main cables in hold spaces on expanded metal trays and in Eng. Room on clamps spaced 6 to 8 inches apart.

Are all lead sheaths, armouring and conduits effectually bonded and earthed Yes. Refrigerated chambers, are the cables and fittings as per Rule Yes. 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 effectively bushed Yes and with what material lead. Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule Yes. Emergency Supply, state position Yes and method of control Yes.

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 Yes, are they adequately ventilated Yes. 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 No, if so, how are they protected Yes.

are all fittings suitably ventilated Yes. Searchlight Lamps, No. of 2, whether fixed or portable Yes, 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 Yes. 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 Yes and vertically Yes. Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing Yes. Have certificates of test for motors under 100 BHP intended for essential services been supplied and the results found as per Rule Yes. 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 the cartridge type Yes. are they of an approved type Yes. If portable lamps for use in dangerous spaces are supplied, are they of a self-contained battery-fed flameproof type Yes. 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	1	20	110	182	400	Steam engine		
	1	20	110	182	400	" "		
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.	In the Circuit.	Rule.			
MAIN GENERATOR	20	1	.288			40	VIR	Lead covered
" " EQUALISER								on expanded metal tray.
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

MAIN DISTRIBUTION CABLES.

AUX. SWITCHBOARDS AND SECTION BOARDS								
Cargo section box mains	1	.0225	36	50	L.C.A.B.	Twin core on clamps		
Fore cargo D.B. mains	1	.01	80	140	"	"		
Aft cargo D.B.	1	.007	16	15	P.C.	single core on Exp. metal tray		
Engine Room Section Box mains	1	.0225	38	5	L.C.A.B.	Twin core on clamps		
" " D.B. mains	1	.01	28	20	"	"		
Saloon mains	1	.0225	46	190	"	"		
Navigation mains	1	.007	10	220	"	and L.C.V.I.R. single core.		
W.P. mains	1	.0225	30	200	"	"		
Middle D.B. mains	1	.01	20	70	"	"		
Post D.B. mains	1	.0225	20	70	"	single core		

LIGHTING AND HEATING, ETC., CABLES.

WIRELESS								
WIRELESS	1	.0225	10	200	L.C.A.B.	Twin core		
NAVIGATION LIGHTS	1	.0225	0.8	360	"	"		
LIGHTING AND HEATING								

MOTOR CABLES.

ALL IMPORTANT MOTORS TO BE ENUMERATED.	No.	B.H.P.						
Lathe motor	1	.003	10	50	L.C.A.B.	Twin core on clamps		
Supply fan D.B.	1	.03	59	70	L.C.A.B.	single core		
Ventilating fan motors:-								
Saloon	1	1.5	7	11.5				
Midships	1	1.5	7	11.5				
Post	1	3	7	20				

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.

For The Scindia Steam Navigation Co. Ltd.

*James C. Campbell*  
Chief Shipyard Manager

Electrical Engineers.

Date 26 NOV 1949

COMPASSES.

Minimum distance between ~~electric generators or~~ motors and standard compass 28 ft.

Minimum distance between ~~electric generators or~~ motors and steering compass 26 ft.

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

For The Scindia Steam Navigation Co. Ltd.

*James C. Campbell*  
Chief Shipyard Manager

Builder's Signature.

Date 26 NOV 1949

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

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

*This Electrical Equipment has been installed in accordance with the approved plans and the requirements of the Rules. The workmanship is of high standard and has been maintained throughout.*

*On completion of the installation an insulation test in accordance with Rule Requirements was carried out with satisfactory results.*

*The installation has been examined under full working conditions and the governing arrangements of both prime movers tested satisfactorily.*

*It is submitted that this installation be classed in the Register Book in accordance with the machinery class recommended.*

*Noted J.S. 1-2-49*

Total Capacity of Generators 400 Kilowatts.

The amount of Fee 40kw £ 1700/- } When applied for, .....19.....  
Travelling Expenses (if any) £ : : } When received, .....19.....

*X. E. Hutchins*  
Surveyor to Lloyd's Register of Shipping.

FRI. 4 FEB 1949

Committee's Minute

Assigned *In unit see J.E. Rpt*

2m.10.38.—Transfer. (MADE IN ENGLAND.)  
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

*616*

