

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office 27 FEB 1942

Date of writing Report 27 FEB 1942 When handed in at Local Office 27 FEB 1942 Port of London

No. in Survey held at London Date, First Survey 29-12-41 Last Survey 29-1-1942
Reg. Book. (Number of Visits 2)on the 3/4 "EMPIRE EXPLORER" Ex "INANDA" Tons { Gross.....
Net.....

Built at..... By whom built..... Yard No..... When built.....

Owners Ministry of War Transport Port belonging to London

Electrical Installation fitted by Messrs Green & Silley Wiers Contract No..... When fitted 1941

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 Yes System of Distribution 2 wire insulated Voltage of supply for Lighting.....

Heating..... Power..... Direct or Alternating Current, Lighting Yes Power Yes If Alternating Current state frequency Yes 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 Yes Generators, are they compound wound Yes, are they level compounded under working conditions Yes

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

arranged 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 Yes 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

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 Yes and vertically Yes, 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

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 Yes and vertically Yes, what insulation

material is used for the panels Interdun, 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 Yes 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. main

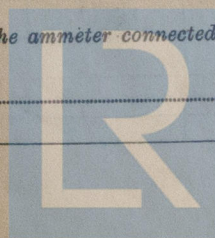
Switch and fuses

and for each outgoing circuit D.P. knife switch and D.P. fuses

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

ammeters 2 voltmeters Yes synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the

equaliser connection Yes Earth Testing, state means provided Earth lamps



and where are the controlling switches fitted.....✓....., are all fittings suitably ventilated.....✓.....
are all fittings and accessories constructed and installed as per Rule.....✓..... Searchlight Lamps, No. of None.....✓.....
....., are their fittings as per Rule.....✓..... Heating and Cooking, is the general construction as per Rule.....✓.....
are the frames effectually earthed.....✓....., are heaters in the 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 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.....✓..... 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.....✓....., are they suitably stored in dry
situations.....✓..... Insulation Tests, has the insulation resistance of all circuits and apparatus been megger tested and found satisfactory.....✓.....

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	30	110	273	450	Steam Engine	—	—
	1	15	110	1365	650	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	30	1	6/093	273	289	10	VIR	L.C.
" " EQUALISER	15	1	87/073	136	184	20	VIR	L.C.
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
" " GENERATOR								

MAIN DISTRIBUTION CABLES.

[illegible]

LIGHTING AND HEATING, ETC., CABLES.

LIGHTING AND HEATING, ETC., CHARTER.							
	1	7/064	30	46	160	VIR	L.C.A.
WIRELESS	...	...	...	...	...	...	...
NAVIGATION LIGHTS	...	...	...	...	...	...	...
LIGHTING AND HEATING	...	...	...	...	...	...	...
Domestic Refrig.	1	7/064	26	46	48	VIR	LCA
Accommodation Engineers	1	7/064	24	46	48	VIR	LCA
" " 2nd & 3rd	1	7/064	26	46	48	VIR	LCA
Cargo Lighting	1	7/064	26	46	48	VIR	LCA
Officers and Crew Accom.	1	7/064	35	46	110	VIR	LCA
Engine & Boiler Room	1	7/064	34	46	48	VIR	LCA

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.

Electrical Engineers.

Date

COMPASSES.

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.

Builder's Signature.

Date

Is this installation a duplicate of a previous case Yes.

If so, state name of vessel

"EMPIRE CHIVALRY"

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

The Electrical Installation has been reviewed throughout as to cables fittings etc. The 30KW dynamo is the original machine fitted when the vessel was built. The 15KW dynamo set is a new machine by Clarke Chapman. The workmanship and materials used are sound and the installation was examined and tested under full load working conditions and found to be satisfactory. In my opinion the Electrical Installation is eligible for the notation X100A1 with date.

Total Capacity of Generators 45 Kilowatts.

The amount of Fee ... £

When applied for,

.....19.....

Travelling Expenses (if any)

When received,

.....19.....

Committee's Minute

Assigned

H. B. Bunyan

Surveyor to Lloyd's Register of Shipping.