

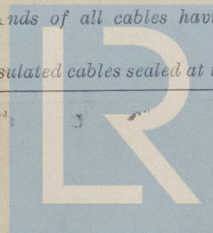
REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

2 DEC 1942

30 NOV 1942

Received at London Office.....

Date of writing Report.....19..... When handed in at Local Office.....19..... Port of ThornNo. in Survey held at Thorn Date, First Survey Oct 5 Last Survey 20 Nov 1942
Reg. Book. (Number of Visits.....)on the Single Screw Ing "EMPIRE ARIEL" Tons {Gross 129
Net NILBuilt at Thorn By whom built Richard Dandm Ltd Yard No. T373 When built 1942Owners Ministry of War Transport Port belonging to.....Electrical Installation fitted by Wm Broady & Son Ltd Contract No. ✓ When fitted 1942Is vessel fitted for carrying Petroleum in bulk no Is vessel equipped with D.F. no E.S.D. no Gy.C. no Sub.Sig noHave plans been submitted and approved Yes System of Distribution Parallel Constant Pressure Voltage of supply for Lighting 110
WireHeating ✓ Power ✓ Direct or Alternating Current, Lighting DC Power ✓ 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 atrip 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 theyarranged to run in parallel ✓, are shunt field regulators provided Yes Is the compound winding connected to the negative or positive poleNegative Have machines over 100 kw. been inspected by the Surveyors during manufacture and testing ✓ Have certificates oftest for machines under 100 kw. been supplied ✓ and the results found as per rule ✓ Are the lubricating arrangements and the constructionof 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 situatednear unprotected combustible material state distance from same horizontally ✓ and vertically ✓, are the generators protected from mechanicalinjury and damage from water, steam and oil Yes, are the bedplates and frames earthed Yes and the prime movers and generators in metalliccontact Yes Switchboards, where are main switchboards placed adjoining generator in engine roomare they in accessible positions, free from inflammable gases and acid fumes Yes, are they protected from mechanical injury and damage from water, steamand oil Yes, if situated near unprotected combustible material state distance from same horizontally ✓ and vertically ✓, what insulationmaterial is used for the panels Sindany, if of synthetic insulating material is it an Approved Type Yes, if ofsemi-insulating material (slate or marble) are all conducting parts insulated therefrom as per Rule ✓ Is the frame effectually earthed YesIs the construction as per Rule Yes, including accessibility of parts Yes, absence of fuses on the back of the board Yes, individual fusesto 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 + fusesand for each outgoing circuit D. P. switches + fusesAre compartments containing switchboards composed of fire-resisting material or lined as per Rule ✓ Instruments on main switchboard oneammeters one voltmeters ✓ synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to theequaliser connection ✓ Earth Testing, state means provided Earth lamps + switchesSwitches, Circuit Breakers and Fuses, are they as per Rule Yes, are the fuses an approved type Yes, are all fuses labelled asper Rule Yes If circuit breakers are provided for the generators, at what overload current did they open when tested ✓, are the reversed currentprotection devices connected on the pole opposite to the equaliser connection ✓, have they been tested under working conditions, and at what currentdid they operate ✓ Joint Boxes, Section Boards and Distribution Boards, is the construction and position as per Rule YesCables, 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 3 volts, are the ends of all cables having a sectional area of 0.04square inch and above provided with soldering sockets Yes Are paper insulated and varnished cambric insulated cables sealed at the ends ✓

11

Clippers to steel bulkheads or trays also to underdeck

Protected by steel plating as required

Yes

h deck :

erial. Lead

Alternative Lighting, are

Yes

method of control.....

... Nav

wherever

ents in

stopped

d as per

ch ship

Spar e

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	27.3	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	3	1	7094	27	31	18	VIR	L.C. & Arm.
" " EQUALISER								
EMERGENCY GENERATOR								
ROTARY TRANSFORMER: MOTOR								
GENERATOR								

121

MAIN DISTRIBUTION CABLES.

[illegible]

LIGHTING AND HEATING, ETC., CABLES.

[illegible]

MOTOR CABLES.

[illegible]

E. ARIEL

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 25 Nov 1942

COMPASSES.

Minimum distance between electric generators or motors and standard compass ✓

Minimum distance between electric generators or motors and steering compass 40 ft.

The nearest cables to the compasses are as follows:—

A cable carrying .25 Ampères feet from standard compass 6 ft. 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 nil degrees on any course in the case of the steering compass.

PER PRO RICHARD DUNSTON, LTD.

Builder's Signature.

Date 27/11/42

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

Plans. Are approved plans forwarded herewith No If not, state date of approval 23.7.41

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

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

This Electrical Installation has been fitted on board in accordance with the approved plan, the Rules & the Specification.

The workmanship and materials are good and when tried and working conditions were found satisfactory in every respect.

Noted
24
4/12/42

Total Capacity of Generators 3 Kilowatts.

The amount of Fee ... £ 3 :
+ 25% for Spec £ 0 : 15
Travelling Expenses (if any) £ :

When applied for
30 NOV 1942
When received
19

W S Shild
Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 15 DEC 1942

Assigned See Incl 7E 51819



© 2020

Lloyd's Register
Foundation