

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 Null

No. in Survey held at Thorne Date, First Survey Oct 5 Last Survey 20 Nov 1942
Reg. Book. (Number of Visits.....)

on the Single screw tug "EMPIRE ARIEL" Tons { Gross 129
Net NIL

Built at Thorne By whom built Richard Dutton Ltd. Yard No. T373 When built 1942

Owners Ministry of War Transport Port belonging to.....

Electrical Installation fitted by Wm Broady & Son Ltd. Contract No. When fitted 1942

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 Parallel Constant Pressure Voltage of supply for Lighting 110
Wire

Heating..... 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 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..... and the results found as per rule.....

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..... 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 adjoining generator in 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..... and vertically.....

what insulation material is used for the panels Sindany, 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..... 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. switches + fuses

and for each outgoing circuit.....

D.P. switches + fuses

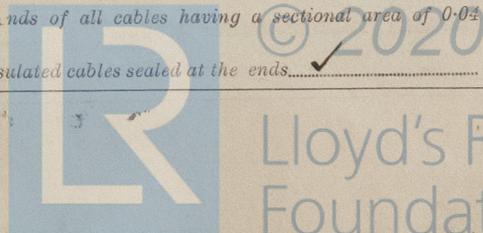
Are compartments containing switchboards composed of fire-resisting material or lined as per Rule..... Instruments on main switchboard one ammeters one voltmeters..... synchronising devices. For compound machines in parallel is the ammeter connected on the pole opposite to the equaliser connection.....

Earth Testing, state means provided Earth lamps + switches

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 3 volts, 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.....



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.

J. Beecha
English Electrical Engineers. Date 25th Nov 1942

COMPASSES.

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

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

The nearest cables to the compasses are as follows:—

A cable carrying .25 Ampères ... feet from standard compass ... 6 1/2 ... 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 'Empire 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 under 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.

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

Committee's Minute TUE 15 DEC 1942
Assigned See Hul JE 51819

5m. 4.39.—Transfer. (MADE AND PRINTED IN ENGLAND.)
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

