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MASSACHUSETTS INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING

Report No. 2

Prepared by: R. F. Markel

PROGRESS REPORT TO THE DEPARTMENT COMMITTEE ON GRADUATE STUDY AND RESEARCH

SUBJECT OF RESEARCH High-Speed Gas Discharge Gaps for Data Storage in Electronic Computers

PERIOD COVERED BY THIS REPORT April 18, 1947 to May 13, 1947

Student Working on Research

Richard F. Markel

Room Number 10-212

Noted by:
Res. Lab. Office
Grad. Comm.
Supervisor

Expected Date of Completion September, 1947

Supervisor Jay W. Forrester

DETAIL OF WORK CURRENTLY ACTIVE Preparation of Research Proposal

Expected Date of Completion of this Detail May 20, 1947

STATEMENT OF PROGRESS SINCE LAST REPORT. Include References, with statements of their usefulness.

1. Study of the literature on gaseous conduction was continued, and a list of various experimental data and empirical and theoretical relationships is being compiled for use in the design of test gaps. Standard references which have been of particular value include:

Loeb, "Fundamental Processes of Electrical Discharges in Gases"

Cobine, "Gaseous Conductors"

Slepian, "Conduction of Electricity in Gases"

2. Consultations with Mr. Jay W. Forrester have served to define the problem under consideration and to clarify the results required.

3. Experimental procddure to be followed in the research and test equipment to be used have been worked out.

Signed: Richard F. Markel

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