

## PUBLICATIONS AND REPORTS

### MEETING PAPERS PRESENTED

American Otological Society, Boston  
May 23-24, 1954

W. A. Rosenblith, Electrical responses from the auditory nervous system.

Symposium on Information Theory, M.I.T., Cambridge  
Sept. 15-17, 1954

P. Elias, Error-free coding.

A. Feinstein, A new basic theorem on information theory.

10th Anniversary of the National Electronics Conference, Chicago  
Oct. 4, 1954

F. M. Reza, An introduction to a qualitative synthesis of linear passive networks in the time domain.

Seventh Annual Gaseous Electronics Conference, New York University, New York  
Oct. 14-16, 1954

K. S. W. Champion and S. C. Brown, Some aspects of plasma resonance.

G. J. Schulz and S. C. Brown, Microwave study of positive ion collection by probes.

IRE Symposium on Fluctuation Phenomena in Microwave Sources, New York  
Nov. 18-19, 1954

H. A. Haus, Limitations on the noise figure of microwave amplifiers of the beam type.

L. D. Smullin, Noise measurements on long electron beams.

J. B. Wiesner, Source noise and its effect upon electronic systems.

The Acoustical Society of America, Austin  
Nov. 18-20, 1954

W. A. Rosenblith, Physiological and psychological constraints upon auditory theory.

Fort Wayne Section, I.R.E., Fort Wayne, Nov. 24, 1954

and

David Sarnoff Research Center, Radio Corporation of America, Princeton, Dec. 20, 1954

W. S. McCulloch, Transmission of electrical signals in the nervous system.

## JOURNAL ARTICLES ACCEPTED FOR PUBLICATION

(Reprints of these and previous articles still in print are available from the Document Room, 20-B-221, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts)

- Y. Bar-Hillel, An examination of information theory (Philosophy of Science)
- C. E. Chase and M. A. Herlin, Ultrasonic propagation in magnetically cooled helium (Phys. Rev.)
- H. A. Haus, Noise in one-dimensional electron beams (J. Appl. Phys.)
- K. H. Pribram, B. S. Rosner, and W. A. Rosenblith, Electrical responses to acoustic clicks in monkey: extent of neocortex activated (J. Neurophysiol.)
- W. A. Rosenblith, Electrical responses from the auditory nervous system (Ann. Otol., Rhinol., and Laryngol.)
- M. Tinkham and M. W. P. Strandberg, Theory of the fine structure of the molecular oxygen ground state (Phys. Rev.)
- M. Tinkham and M. W. P. Strandberg, Interaction of molecular oxygen with a magnetic field (Phys. Rev.)
- V. H. Yngve, Machines for the translation of languages (Journal of Communication)

## TECHNICAL REPORTS PUBLISHED

(These and previously published technical reports, as well as a current list of available reports, may be obtained from the Document Room, 20-B-221, Research Laboratory of Electronics, Massachusetts Institute of Technology, Cambridge 39, Massachusetts)

- 55:2a M. V. Cerrillo, On the evaluation of integrals of the type  $f(\tau_1, \tau_2, \dots, \tau_n) = \frac{1}{2\pi i} \int F(s) e^{W(s, \tau_1, \tau_2, \dots, \tau_n)} ds$  and the mechanism of formation of transient phenomena. Part 2a. Elementary introduction to the theory of the saddlepoint method of integration.
- 208 L. Stark, Electromagnetic waves in periodic structures.
- 244 F. A. Muller, Communication in the presence of additive gaussian noise.
- 261 F. BaHli, Network synthesis by impulse response for specified input and output in the time domain.
- 264 R. D. Luce, J. Macy, Jr., L. S. Christie, and D. H. Hay, Information flow in task-oriented groups.
- 265 Genevieve O. Rogge, Personality factors and their influence on group behavior.
- 272 W. Grattidge, Thermoelectric effects in silver halides.
- 278 L. B. Arguimbau, J. Granlund, E. E. Manna, and C. A. Stutt, Transatlantic frequency-modulation experiments.
- 282 A. Feinstein, A new basic theorem of information theory.