



## Robot Secretary

An automatic telephone answering device—a sort of “robot secretary”—which can take incoming calls and give a caller a message, has been developed by Bell Telephone Laboratories. Known as the “1A Telephone Answering Set,” the device, it is believed, will provide a useful service to professional people, one-man offices and shops, and similar businesses.

When connected to a telephone, the user can record a message up to thirty seconds in length, which he may check, erase, or change as desired. He uses the telephone to make his recording. Before he leaves his office or place of business, he switches the telephone to the automatic machine, which takes over in his absence.

In response to an incoming ring, the machine answers with the pre-recorded message after which it switches to a recording condition. Tone signals tell the caller when he can proceed with his message. After twenty-five seconds, tones are transmitted to indicate that the recording period is almost at an end. About three seconds later, the machine releases the line and resets for the next call. Maximum time for an incoming recording is twenty-eight seconds. The recording mechanism has a capacity of twenty received messages.

All recording and reproducing is done by means of magnetic neoprene drums. Playback of the messages is through the telephone receiver.

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## Talks by Members of the Laboratories

During the month of April, a number of Laboratories people gave talks before professional and educational groups. Following is a list of the speakers, titles, and place of presentation.

Anderson, O. L., Diffusion in Silica Glasses, Ceramic Society Annual Meeting, New York.

Becker, J. A., Chemisorption of Oxygen on Tungsten as Observed in the Field Emission Electron Microscope, Catalysis Club and Institute of Metals, Chicago, Illinois.

Becker, J. A., The Life History of Adsorbed Molecules, Atoms and Ions on Metal Surfaces, Gulf Research and Development Co., Harnarville, Pa.

Bomberger, D. C., Basic Operations of DC Computers, A.I.E.E. Lecture, International Business Machines, New York City.

Campbell, W. E., Solid Lubricants, American Society of Lubrication Engineers, Boston. Requirements for a Specification on Solid Lubricants, Air Force, Navy, and Industry Conference on Lubricants, Wright Field, Dayton, O., and Analysis of

Films on Metal Surfaces by Electrolytic Reduction, Graduate Seminar, M.I.T., Cambridge.

Chapanis, A., Reconstruction of Abbreviated Printed Messages, Annual Meeting, Eastern Psychological Association, New York City.

Christopher, A. J., see D. A. McLean.

Dacey, G. C., The Field Effect Transistor, Physics Club, Yale University, New Haven.

Darnell, P. S., Transistors and Miniaturization of Electronic Equipment, Convention of the Petroleum Industry Electric Association, Houston, Texas.

Dodge, H. F., Sampling Inspection, American Society for Quality Control, Bethlehem Section, Allentown, Pa.

Doherty, W. H., Research in Broadband Transmission, Student A.I.E.E. Section, Catholic University of America, Washington, D. C.