



the MONITOR

News of the New York Section, IRE

VOLUME 1

JANUARY, 1954

NUMBER 5

CIVIL DEFENSE COMMUNICATIONS—Wed., Jan. 6, 7:30 P. M.

Engineering Societies Bldg., 33 W. 39th St., Main Auditorium.



Ralph S. Healy

RALPH S. HEALY graduated from the University of Maryland in 1913 with a B.S.E.E. degree. At the present, he is Civil Defense Activities Engineer for the New York Telephone Company, and is responsible for the development and coordination of the company's defense and securities program.

In 1941, Mr. Healy organized a special chapter of Tau Beta Pi in Nassau County to assist in civil defense planning. He organized a project in 1948
(continued on page 2, column 1)

CIVIL DEFENSE COMMUNICATIONS by R. S. Healy, Chief, Communications, New York State Civil Defense Commission.

The talk will chiefly describe the nature of the civil defense communications problems in atomic attack as we see them in New York State, and the communications operations considered feasible to meet these problems.

In order to establish a common concept of civil defense organization and the present view regarding the plan of operation, a brief review of these matters will be included in the introductory remarks.

To provide the basis for discussing the specific communications problems and the operations which we envisage, the communication situation confronting a typical target city—both pre-attack and post-attack—will be analyzed.

The requirements for new facilities and for the reinforcement of skeleton
(continued on page 2, column 1)

PRE-MEETING DINNER—6:00 P. M., Midston Grill, 22 E. 38th St. Everyone welcome—no reservations necessary.

SOCIAL HOUR—7:00 P. M., just outside main auditorium. Light refreshments will be served.

JANUARY MEETINGS

- | | |
|--|--|
| 12—Long Island Section (page 6) | 21—Mid-Hudson Subsection (page 3) |
| 13—Monmouth Subsection (page 3) | 21—Long Island Lecture Series (page 6) |
| 13—Northern New Jersey Subsection (page 3) | 23—Symposium (page 4) |

FEBRUARY 3—New York Section, "FM Broadcast Multiplexing System: Techniques and Applications" by William S. Halstead

BIOGRAPHY

(continued from page 1, column 1)

to study up-to-date civil defense problems; the group engaged in this project prepared and had published nationally "To Be or Not to Be," which became one of the standard reference works on the hazards of the atomic bomb.

Mr. Healy was appointed Special Assistant to the Director, New York State Civil Defense Commission, in the fall of 1950, and in August, 1951, he was appointed Chief of the Communications Section of this Commission.

CIVIL DEFENSE

(continued from page 1, column 2)

facilities will be covered, as well as the action taken to supply them.

The action taken to meet the unpredictable situations arising after attack will be described.

Throughout the preceding description, the mechanics for gathering communications intelligence and the essential fac-

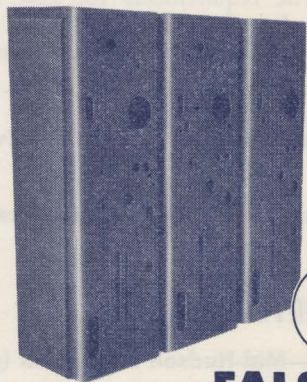
ilities for the exercising of communications management will be brought out.

Having described what may reasonably be expected to occur in the communications field following atomic attack, certain policies and principles derived from practical field experience will be discussed. This discussion will include a statement of the communications chief's mission, the information and data necessary to carry out this mission, the necessity for planning in advance to meet foreseeable situations, and the use of the management approach in implementing his command function.

With the problem met as well as is feasible with only such facilities as are currently available, future requirements will be discussed and it will be shown how the solution would have been improved had additional means been available.

Appropriate slides will be used to illustrate key items.

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SUBSECTIONS

Northern New Jersey

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On January 13, Mr. F. K. Harvey, of Bell Telephone Laboratories, will present a lecture-demonstration entitled "Focusing Sound Waves with Microwave Lenses" at 8:00 P. M., Hillside school, corner of Orange Rd. and Hillside Ave., Montclair. Pre-meeting dinner at 6:15, Three Crowns Restaurant.

Monmouth

O. D. PERKINS, Chairman
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The January 13 meeting will be held at the Officers Assembly Hall, Ft. Monmouth. J. F. Hull, of the Signal Corps Engineering Labs., will talk on "The Backward Wave Oscillator." Pre-meeting dinner—Crystal Brook Inn, Highway 13, near Ft. Monmouth; no reservations necessary.

Mid-Hudson

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The next meeting has been tentatively planned for Thursday, Jan. 21. No further details available at press time.

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SYMPOSIUM on the AUTOMATIC FACTORY in the PRODUCTION of ELECTRONIC EQUIPMENT

10 A. M., Saturday, January 23

ENGINEERING SOCIETIES BUILDING
33 West 39th St., New York City

In view of the sharp trend towards automatization of electronic equipment and component manufacture, the 1954 Symposium Committee of the New York Section IRE under the chairmanship of Mr. Robert J. Bibbero is planning a symposium on the application of the Automatic Factory to the production of electronic equipment.

Five speakers will be featured at this session:

Mr. Freeman Hom, of the Stanford Research Institute, Stanford, Calif., is actively engaged in an Air Force sponsored program embodying automatic assembly techniques, and will discuss various aspects and the nature of his work.

From the General Electric Co., Syracuse, N. Y., Mr. W. Hausz, Manager, Development Engineering Techniques and Applications Section, Electronics Laboratory, will speak on the Automatic Component Assembly System recently announced by the Signal Corps.

Mr. R. L. Henry, Chief, Process Technology Section, Electronics Division, of the National Bureau of Standards, will introduce a film on the much discussed Project "Tinkertoy," code name for a program at NBS under the sponsorship of the Navy Bureau of Aeronautics which embraces the development of an automatic production line for the manufacture of electronic equipment based on a new system of electronic component design.

Mr. R. F. Mallina, of the Bell Telephone Labs., New York City, will describe the application of the recently announced BTL solderless wrapping device to the production of switchboards and other equipment.

Finally, Mr. W. H. Hannahs, representing Sylvania Electric Products Inc., Bayside, L. I., will describe an automatic method of making printed circuits developed for the Signal Corps.

A highlight of the Symposium will be an informal round-table discussion conducted by Mr. John Diebold, noted lecturer ("Automation") and consulting engineer in the field of automatic production and assembly techniques. In addition to conducting the afternoon round-table, Mr. Diebold (formerly associated with Griffenhagen Associates, Management Consultants) will serve as moderator for the entire session.

Automatization is indeed a timely topic for serious consideration because of the steady increase in demand for electronic devices for military, industrial and home use. In 1952 alone, more than six billion dollars worth of electronic devices were produced—representing an increase of 50 per cent over peak wartime production, and applications of computers and information-handling machines to industrial business inventory and other uses foreshadow an even larger volume of production in the near future. If, in addition, the numerous requirements of the military are considered, especially in the event of a national emergency, it would be impossible to produce adequate quantities of electronic devices with the present facilities and techniques.

Automatization of the production line offers not only increased production capacity, but other distinct advantages, such as: reduction in cost, improved wastage, improved quality control, and reduction of manpower requirements.

Registration Information

Registration for the Symposium will start at 9:15 A. M. at the Engineering Societies Building, 33 West 39th St., New York City. The Morning Session will begin promptly at 10 A. M.

The fees for registration are as follows:

Student (IRE) Members	—\$1.00
IRE Members	----- 2.00
Non-Members	----- 4.00

Those who wish to register in advance may do so by sending name, address, and company affiliation, together with the proper remittance to: Prof. M. Wind, Microwave Research Institute, Polytechnic Institute of Brooklyn, 55 Johnson St., Brooklyn 1, N. Y.

LECTURE SERIES

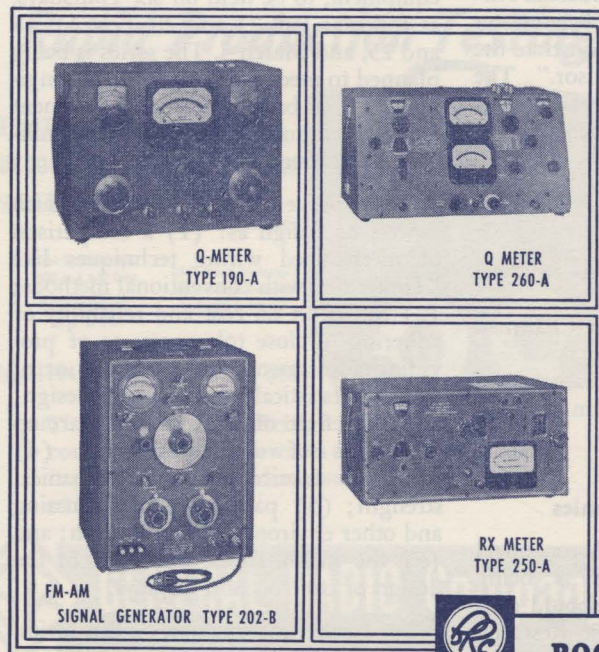
The spring lecture series on Color Television, sponsored jointly by the AIEE and the IRE, is beginning to take

form. Dates have been set—six successive Monday nights, starting on March 8 and skipping March 22 because of the IRE Convention. Lectures will be held in the Western Union Auditorium.

Topics to be covered include: Analysis of NTSC Signal Specifications, Basic Principles of Color, Production of the Color Picture Signal, Distribution of the Signal by Network Transmission and by Broadcast Transmission, and Means and Circuits for the Reproduction of the Color Picture.

Speakers have been chosen to represent a broad cross section of the industry and are outstanding in their special fields. Firm commitments have been obtained from the following: J. M. Barstow, Bell Labs.; Peter Goldmark, CBS; D. C. Livingston, Sylvania; D. L. MacAdam, Eastman Kodak; R. E. Shelby, NBC; and J. W. Wentworth, RCA. Other speakers will be announced later.

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PROFESSIONAL GROUPS

The Professional Groups Chairman is Sidney Moskowitz, Federal Telecommunication Labs., Nutley, N. J. (Phone: Nutley 2-3600). If you are interested in forming a new Group, he will be glad to help you.

Electronic Computers

The Group held an organizational meeting on December 1 which was attended by more than 100 people. John E. Bartelt, of the IBM Engineering Labs., Poughkeepsie, gave a description and demonstration of the IBM 701 electronic digital computer. The following officers were elected:

DANIEL HAAGENS, Chairman
CRAIG ANDREWS, Vice Chairman
ROBERT F. SHAW, Sec.-Treas.
CRAIG ANDREWS, Membership
FERDINAND P. DIEMER, Program
LEO STAMLER, Publicity

A meeting of this Group will be held on Tuesday, Jan. 26, at La Guardia Airport. Craig Andrews, of Teleregister Corp., will describe and demonstrate the American Airlines "Reservoir." The meeting will be held in American Airlines' Hanger 3 Reception Room at 8:00 P. M.

Electron Devices

Officers of this Group are as follows: C. E. FAY, Chairman
SIMEON WESTON, Vice-Chairman
K. D. SMITH, Secretary
WARREN D. MCBEE, Treasurer
T. J. MARCHESE, Program
B. CARLAT, Membership

Aeronautical Electronics

A Professional Group on Aeronautical and Navigation Electronics is being formed. Anyone interested should contact K. D. Black, Polytechnic Research & Development Corp., 55 Johnson St., Brooklyn 1, or R. J. Bibbero, Hillyer Instrument Co., Inc., 54 Lafayette St., New York 13.

Production Methods

Ralph Batcher, of RETMA, 500 Fifth Ave., (LONGacre 5-3450), is in the process of forming this Group. Contact him for further information.

LONG ISLAND SECTION

The meeting on Tuesday, Jan. 12, will be held at the Stewart Ave. school, 8:00 P. M., as usual. Lofti Zadeh, of Columbia University, will speak on "A Modern View of Filtering Theory." The pre-meeting dinner will be at Felice's, Post Ave. & Old Country Rd., Westbury, at 6:00 P. M. No reservations necessary. The Stewart Ave. school is on the corner of Clinton Rd. and Stewart Ave., Garden City.

Lecture Series

The Long Island Section has scheduled a lecture series on the design of electronic equipment, to be held on six Thursdays, as follows: Jan. 21 and 28, Feb. 11, 18 and 25, and March 4. The series is being planned to meet the desire of many engineers for a broad view of equipment design in industrial, domestic and military applications.

The speakers will deal with such aspects of design as: (1) a comparison of mechanized wiring techniques like "Tinkertoy" with conventional methods; (2) the effect on cost and reliability of adhering to close tolerances, or of providing adjustments and trimmers, or of using a statistical basis for the design; (3) the effect of drift during warmup and ways of dissipating heat; (4) structural fabrication and mechanical strength; (5) packaging, impregnating and other environmental protection; and (6) the man-machine approach to the design of controls and displays.

For further information on this series, contact Frank Rockett, Airborne Instruments Lab., 160 Old Country Rd., Mineola, N. Y.; phone: Garden City 3-0600.

TRANSISTOR CIRCUIT CONFERENCE

The Philadelphia Section of the IRE has announced in its Bulletin that a Transistor-Circuit Conference will be held on February 18 and 19 in Philadelphia. This Conference is sponsored jointly by the IRE Professional Group on Circuit Theory and the AIEE, both on a national level.

Included will be papers discussing the representation of transistors for circuit design purposes, problems peculiar to the design of transistor circuits, and current trends in transistor circuit designs for both linear and pulse applications. The Conference is designed to appeal primarily to engineers working actively with transistor circuits.

SURFACE-BARRIER TRANSISTOR

Speaking of transistors, be sure to read the articles in the December Proceedings about the new Surface-Barrier Transistor. This new development by

Philco engineers was discussed before an overflow crowd at the Franklin Institute Auditorium in Philadelphia on December 3. The occasion was a joint meeting of the Philadelphia Section and the Franklin Institute. Attendance at the pre-meeting dinner was nearly 400!

Fellow Awards

A total of 18 engineers and scientists from the New York area will receive Fellow awards from the IRE at the spring convention. Space permits mention of their names only:

E. I. Anderson, W. F. Bailey, I. F. Byrnes, J. G. Chaffee, E. P. Felch, J. L. Finch, R. M. Foster, E. G. Fubini, J. E. Gorham (deceased), N. L. Harvey, R. G. E. Hutter, J. B. H. Kuper, W. D. Lewis, W. W. Miehler, Eugene Reisz, P. C. Sandretto, E. A. Speakman, and J. R. Wilson.

The awards will be presented at the Annual Banquet on March 24, at the Waldorf-Astoria Hotel.

Rapid Production Testing

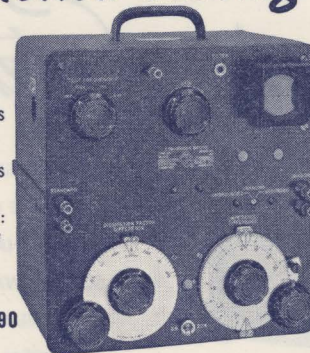
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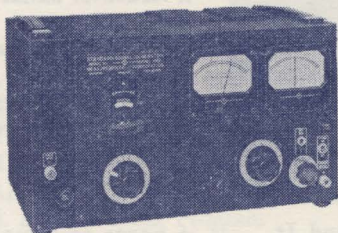
NEW IRE SECTION

New York State boasts of a new IRE Section as of November 11, 1953—the Rome-Utica Section was approved by the Board of Directors on this date. Counties included are Oneida, Herkimer and Lewis. Chairman of the new Section is Joseph Vogelman. Congratulations and best wishes, Rome-Utica!

STUDENT ACTIVITIES

A tentative date of April 3 has been set for Student Activities Day. A prize paper and demonstration contest will be held, as was done last year, with worthwhile prizes being presented to the winners. The Activities this year will be held at Columbia University. More details in a future issue.

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