

Contributors to This Issue

RICHARD C. BOYD, B.S., Northwestern University, 1946; B.S.E.E., University of Michigan, 1947; M.S.E.E., University of Michigan, 1948; Bell Telephone Laboratories, 1948-. After completion of the Laboratories Communication Development Training program in 1950, Mr. Boyd was concerned with transmission engineering and systems studies. He was a supervisor during the exploratory trial of experimental P1 carrier in 1953 and 1954. He is now responsible for transmission engineering of P1 carrier for rural subscriber use, and for adaptation of P and N1 carrier to exchange trunk use. He is a member of Tau Beta Pi and Phi Kappa Phi.

ROBERT W. DAWSON, Newark College of Engineering; Rutgers University; Bell Telephone Laboratories, 1941-. All of Mr. Dawson's work has been with the Radio Research Department. Together with A. C. Beck, he was concerned with conductivity measurements at microwave frequencies, and they were co-authors of an article on this subject. Mr. Dawson, a member of the Institute of Radio Engineers, worked on the Manhattan Project at Los Alamos while serving in the Army from 1942 to 1946.

GEORGE FEHER, B.S. in Engineering Physics, University of California, 1950; M.S.E.E., University of California, 1952; Ph.D. in Physics, University of California, 1954; Bell Telephone Laboratories, 1954-. Dr. Feher has been a member of the Semiconductor Research Department since joining the Laboratories. He has been engaged particularly in studies of electron spin resonance absorption, and is the author of several articles on this subject. He is a member of the American Physical Society, the Institute of Radio Engineers, and Sigma Xi.

JOHN D. HOWARD, B.E.E., University of Louisville, 1947; Southern Bell Telephone Company, 1947-. After a year and a half in the Plant Department at Southern Bell, Mr. Howard joined the Engineering Department and remained there until late 1952. At that time he was called to the O. & E. Department of the A. T. & T. Co. where he was concerned with exchange transmission. After completing this assignment he

returned to Southern Bell where he is now Exchange Transmission Engineer. Mr. Howard is a member of the A.I.E.E.

MARILYN J. HUYETT, A.B., Susquehanna University, 1954; Bell Telephone Laboratories, 1954-. Since joining the Laboratories, Miss Huyett has been concerned with statistical research for the reliability group at Allentown, where she has had a great deal of experience with IBM computing machines. She is a member of the American Statistical Association. While in college, she received the Stine Mathematical Prize, an award for proficiency in mathematics.

JOHN E. KARLIN, B.A., University of Cape Town, 1938; M.A., University of Cape Town, 1939; Ph.D., University of Chicago, 1942; Bell Telephone Laboratories, 1945-. Dr. Karlin was engaged in psychoacoustic research from 1945 to 1947. From 1947 until the present he has been concerned with user preference research, and since 1952 he has been in charge of the group doing this research. During the war years, 1942-1945, Dr. Karlin was at Harvard University, engaged in communications research on military projects. He is a member of the I.R.E., the Acoustical Society of America, the American Psychological Association and Sigma Xi.

STUART P. LLOYD, S.B., 1943, University of Chicago; M.S., 1949 and Ph.D., 1951, University of Illinois. Bell Telephone Laboratories, 1952-. Engaged in work relating to probability theory and information theory. Member, Institute for Advanced Study, Princeton, 1951-52. Member of American Mathematical Society, Institute of Mathematical Statistics, American Physical Society, A.A.A.S., Phi Kappa Phi, Sigma Xi and Phi Beta Kappa.

D. W. McCALL, B.S., University of Wichita, 1950; M.S., 1951 and Ph.D., 1953, University of Illinois; Bell Telephone Laboratories, 1953-. Dr. McCall is engaged in fundamental studies of the properties of dielectrics. He is a member of the American Chemical Society, the American Physical Society, Sigma Xi, and Phi Lambda Upsilon.

LUDWIG PEDERSEN, Christiania Technical School (Norway), 1919; Western Electric International Co. (Oslo), 1919-20; Western Electric Co., 1920-25; Western Electric Co., Field Engineering Force, 1944-45; Bell Telephone Laboratories, 1925-. He has been concerned with circuit design for machine switching systems, development of telegraph equip-

ment, design of transmission equipment for the armed forces, and toll transmission systems. He served as a technical observer with the U. S. Army in the European theater. He is now Systems Development Engineer at the Merrimack Valley Laboratory with responsibility for voice frequency, broadband carrier, short haul carrier and rural carrier systems. Member of the A.I.E.E.

JOHN R. PIERCE, B.S., 1933, M.S., 1934 and Ph.D., 1936, California Institute of Technology; Bell Telephone Laboratories, 1936-. Director of Research in Electrical Communications at Bell Telephone Laboratories. He has specialized in the development of electron tubes, microwave research, electronic devices for military applications, and communications circuits. Dr. Pierce has been granted 55 patents and is the author of three books. For his research leading to the development of the beam traveling wave tube, he was awarded the 1947 Morris Liebmann Memorial Prize of the I. R. E. He was voted the "Outstanding Young Electrical Engineer of 1942" by Eta Kappa Nu. Member of National Academy of Sciences, British Interplanetary Society, A.I.E.E., Sigma Xi, Tau Beta Pi and Eta Kappa Nu. Fellow of American Physical Society and I.R.E.

JOHN H. ROWEN, B.E.E., 1948 and M.Sc., 1951, Ohio State University. Mr. Rowen worked at the Antenna Laboratory of the Ohio State University Research Foundation in Columbus, O. from 1948 to 1951. He joined Bell Telephone Laboratories in 1951, shortly after being awarded his master's degree. Since then Mr. Rowen has specialized in the applied physics of solids, and the development of microwave ferrite devices. He is a member of the Solid State Device Development Department at the Murray Hill Laboratory. Mr. Rowen is a member of the Institute of Radio Engineers and of Eta Kappa Nu.

HAROLD SEIDEL, B.E.E., 1943, College of the City of New York; M.E.E., 1947 and D.E.E., 1954, Polytechnic Institute of Brooklyn; Microwave Research Institute of Polytechnic Institute of Brooklyn, 1947; Arma Corp., 1947-48; Federal Telecommunications Laboratories, 1948-53; Bell Telephone Laboratories, 1953-. He has been concerned with general electromagnetic problems, especially regarding wave-guide applications, and with analysis of microwave ferrite devices. Member of Sigma Xi and I.R.E.

MILTON SOBEL, B. S., 1940, College of the City of New York; M.A., 1946 and Ph.D., 1951, Columbia University; U. S. Census Bureau, stat-

istician, 1940-41; U. S. Army War College, statistician, 1942-44; Columbia University, department of mathematics, 1946-50; Wayne University, assistant professor of mathematics, 1950-52; Columbia University, visiting lecturer, 1952; Cornell University, fundamental research in mathematical statistics, 1952-54; Bell Telephone Laboratories, 1954-. He has been engaged in fundamental research on life testing and reliability problems with special application to transistors. Consultant on many Bell Laboratories projects. Member of Institute of Mathematical Statistics, American Statistical Association and Sigma Xi.

WILHELM VON AULOCK, Dipl. Ing., Technische Hochschule, Berlin, 1937; Dr. Ing., Technische Hochschule Stuttgart, 1953; Dr. von Aulock worked in Berlin from 1938 to 1942 for the A.E.G., Kabelwerk; in Gotenhafen (Gdynia) for the Torpedoversuchsanstalt from 1942 to 1945; and for the United States Navy Bureau of Ships in Washington from 1947 to 1953, where he was involved in work on torpedo countermeasures and studies of electromagnetic induction fields in sea water. He joined Bell Telephone Laboratories in 1954. Since then he has been principally engaged in analytical and experimental studies of phase shift and loss characteristics of ferrite-loaded waveguides, and the application of these properties. He is an associate member of the Institute of Radio Engineers.

