Contributors to This Issue

ALLEN GERSHO, B.S., 1960, M.I.T.; M.S., 1961, Ph.D., 1963, Cornell University; Bell Telephone Laboratories, 1963—. During the 1966–67 academic year he was Assistant Professor of Electrical Engineering at the City College of the City University of New York. He has been engaged in research problems related to time-varying and nonlinear signal processing, synchronization of remote clocks, synthesis of distributed networks, and adaptive equalization for digital communications.

HARRY HEFFES, B.E.E., 1962, City College of New York; M.E.E., 1964; and Ph.D., 1968, New York University; Bell Telephone Laboratories, 1962—. Mr. Heffes has been involved in the study of linear stochastic control problems. This includes work which has been done in determining the sensitivity of filter performance to the assumed models and the approximation of complex control systems by simpler systems. Member, IEEE, Tau Beta Pi, Eta Kappa Nu.

EDWARD B. KOZEMCHAK, B.S.E.E., 1966, University of Pennsylvania; M.S.E.E., 1967, Stanford University; Bell Telephone Laboratories, 1966—. Mr. Kozemchak has been engaged in developing operational amplifiers for monolithic integrated circuits, transversal filters for radar systems, and active filters. He is working in computer-aided development of design algorithms for electronic circuits. Member, Tau Beta Pi, Eta Kappa Nu.

TIEN PEI LEE, B.S.E.E., 1957, National Taiwan University, Taiwan, China; M.S.E.E., 1959, Ohio State University; Ph.D., 1963, Stanford University; Bell Telephone Laboratories, 1963—. Mr. Lee participated in the research and development of solid-state microwave diodes and photodiodes. He is working on millimeter wave devices, optical modulators, mixers, and GaAs injection lasers. Members, Sigma Xi, IEEE.

Marco A. Murray-Lasso, National Mechanical and Electrical Engineer, 1960, University of Mexico; M.S.E.E., 1962, and Sc.D., 1965, Massachusetts Institute of Technology; Bell Telephone Laboratories, 1965—. A former Associate Professor at the University of Mexico, Dr. Murray-Lasso has been engaged in communication component re-

search, missile control systems, data reduction, and computer-aided design. Member, IEEE, Association of University Professors of Mexico, Association of Mechanical and Electrical Engineers of Mexico, Sigma Xi.

JOHN F. O'NEILL, B.S.E.E., 1959, St. Louis University; M.E.E., 1961, New York University; Ph.D., 1967, New York University; Bell Telephone Laboratories, 1959—. Mr. O'Neill has done exploration and development in digital data transmission and is now exploring common control customer telephone systems.

Tadikonda N. Rao, B.Sc. (Physics), 1952, Madras University, India; B. Tech. (E.E.), 1957, Indian Institute of Technology, Kharagpur, India; M.S. (E.E.), 1962, University of California, Berkeley; Ph.D. (E.E.), 1967, Stanford University; Bell Telephone Laboratories, 1967—. Since joining Bell Laboratories Mr. Rao has been concerned with active and passive network theory and its applications to silicon and tantalum integrated circuits. Member, IEEE, AAAS, Sigma Xi.

Stephen O. Rice, B.S., 1929, D.Sc. (Hon.), 1961, Oregon State College; Graduate Studies, California Inst. of Tech., 1929–30 and 1934–35; Bell Telephone Laboratories, 1930—. In his first years at the Laboratories, Mr. Rice was concerned with nonlinear circuit theory, especially with methods of computing modulation products. Since 1935 he has served as a consultant on mathematical problems and in investigation of telephone transmission theory, including noise theory, and applications of electromagnetic theory. He was a Gordon McKay Visiting Lecturer in Applied Physics at Harvard University for the Spring, 1968, term, Fellow, IEEE.

G. H. Robertson, B.Sc., 1943, University of Glasgow; after three years in the Royal Navy as an Air Radio Officer he returned to the University of Glasgow for two years and obtained a Post Graduate Certificate in Natural Philosophy; Bell Telephone Laboratories, 1948—. Until 1958 Mr. Robertson was engaged in electronics research and a variety of electron tube development projects. Since 1958 he has been working on signal propagation and processing studies in the Underwater Research and Systems Departments. Associate member, IEEE; member, AAAS.

Burton R. Saltzberg, B.E.E., 1954, New York University; M.S., 1955, University of Wisconsin; Eng. Sc.D., 1964, New York Univer-

sity; Bell Telephone Laboratories, 1957—. Mr. Saltzberg has been engaged in developing and analyzing data transmission systems. He supervises a group responsible for developing data sets for use over the telephone network. Member, IEEE, Eta Kappa Nu, Tau Beta Pi, Sigma Xi.

IRWIN W. SANDBERG, B.E.E., 1955, M.E.E., 1956, and D.E.E., 1958, Polytechnic Institute of Brooklyn; Bell Telephone Laboratories, 1958—. Mr. Sandberg has been concerned with analysis of military systems, synthesis and analysis of active and time-varying networks, studies of properties of nonlinear systems, and some problems in communication theory and numerical analysis. He is head of the Systems Theory Research Department. Member, IEEE, Eta Kappa Nu, Sigma Xi, Tau Beta Pi.

PHILIP E. SARACHIK, A.B., 1953; B.S., 1954; M.S., 1955; Ph.D., 1958, Columbia University. Mr. Sarachik is a professor of electrical engineering at New York University. His main interests are in control theory with emphasis on optimal and adaptive systems. Member, Phi Beta Kappa, Tau Beta Pi, Eta Kappa Nu, Sigma Xi, Society for Industrial and Applied Mathematics.

Marvin K. Simon, B.E.E., 1960, City College of New York; M.S.E.E., 1961, Princeton University; Ph.D., 1966, New York University; Bell Telephone Laboratories, 1961–1963, 1966–1968. Mr. Simon's early work at Bell Telephone Laboratories dealt with station apparatus development including Touch-Tone® dialing telephone and Picturephone® visual telephone circuit design. Recently he has been engaged in theoretical studies of digital transmission systems. He is currently at Jet Propulsion Laboratory, Pasadena, California. Member, IEEE, Eta Kappa Nu, Tau Beta Pi, Sigma Xi.

R. D. Standley, B.S., 1957, University of Illinois; M.S., 1960, Rutgers University; Ph.D., 1966, Illinois Institute of Technology; U. S. Army Research and Development Laboratory, Fort Monmouth, N. J., 1957–1960; IIT Research Institute, Chicago, 1960–1966; Bell Telephone Laboratories, 1966—. At Fort Monmouth, Mr. Standley was project engineer on various microwave component development programs. His work at IITRI included microwave and antenna research. At Bell Telephone Laboratories he has been concerned with millimeter-wave component research. He is investigating millimeter-

wave impact ionization avalanche transit time diode devices, integrated circuits, and optical modulators. Member, IEEE, Sigma Tau, Sigma Xi.

ALAN N. WILLSON, JR., B.E.E., 1961, Georgia Institute of Technology; M.S.E.E., 1965, Ph.D., 1967, Syracuse University; International Business Machines Corporation, 1961–1964; Bell Telephone Laboratories, 1967—. Mr. Willson is interested in network and systems theory. Member, IEEE, Eta Kappa Nu, Tau Beta Pi, Sigma Xi.

AARON D. WYNER, B.S., 1960, Queens College; B.S.E.E., 1960, M.S., 1961, and Ph.D., 1963, all from Columbia University; Bell Telephone Laboratories, 1963—. Mr. Wyner has been doing research in various aspects of information theory. He has also been Adjunct Associate Professor of Electrical Engineering at Columbia University and Chairman of the Metropolitan New York Chapter of the IEEE Information Theory Group. Member, IEEE, SIAM, Tau Beta Pi, Eta Kappa Nu, Sigma Xi.

Woodson, D. Wynn, B.E.E., 1959, M.S.E.E., 1961, Ph.D., 1965, Georgia Institute of Technology; Assistant Professor of electrical engineering at Georgia Tech, 1965–1966; Bellcomm, Inc., 1966—. Mr. Wynn has been concerned with statistical communication problems related to the manned space program. His current interest is in the design of communications systems for possible deep space missions. Member, IEEE, Tau Beta Pi, Eta Kappa Nu, Pi Mu Epsilon, Sigma Xi.