

Contributors to This Issue

Harry W. Astle, A.A.S., 1966, Hartford State Technical College, Bell Laboratories, 1966—. Mr. Astle has worked with optical gas lenses and is presently engaged in the fabrication and evaluation of optical fibers.

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Larry J. Greenstein, B.S.E.E., 1958, M.S.E.E., 1961, and Ph.D. (E.E.), 1967, Illinois Institute of Technology; Bell Laboratories, 1970—. Since joining Bell Laboratories, Mr. Greenstein has engaged in studies of digital encoding, processing, and transmission. He is supervisor of a group responsible for research in digital radio repeaters. Member, AAAS, IEEE.

Peter Kaiser, Diplom Ingenieur, 1963, Technical University, Munich, West Germany; M.S., 1965, and Ph.D., 1966, University of California, Berkeley; Bell Laboratories, 1966—. At Berkeley Mr. Kaiser worked on frequency-independent antennas. At Bell Laboratories, Mr. Kaiser has been engaged in optical transmission research, including the design and testing of gas-lens beam waveguides and, more recently, in the development and characterization of low-loss optical fibers. Member, IEEE, American Optical Society.

John O. Limb, B.E.E., 1963, and Ph.D., 1967, University of Western Australia; Research Laboratories, Australian Post Office, 1966-1967; Bell Laboratories, 1967—. Mr. Limb has worked on the coding of picture signals to reduce channel capacity requirements involving intraframe coding, frame-to-frame coding, and the coding of color signals. He currently heads the Visual Communication Research Department. Member, IEEE, Association for Research in Vision and Ophthalmology, Optical Society of America.

Dietrich Marcuse, Diplom Vorpruefung, 1952, Dipl. Phys., 1954, Berlin Free University; D.E.E., 1962, Technische Hochschule, Karlsruhe, Germany; Siemens and Halske (Germany), 1954-57; Bell Laboratories, 1957—. At Siemens and Halske, Mr. Marcuse was engaged in transmission research, and studying coaxial cable and circular waveguide transmission. At Bell Laboratories, he has been engaged in studies of circular electric waveguides and work on gaseous masers. He spent one year (1966-1967) on leave of absence from Bell Laboratories at the University of Utah. He is presently working on the transmission aspect of a light communications system. Mr. Marcuse is the author of three books. Fellow, IEEE; member, Optical Society of America.

J. A. Morrison, B.Sc., 1952, King's College, University of London; Sc.M., 1954, and Ph.D., 1956, Brown University; Bell Laboratories, 1956—. Mr. Morrison has been doing research in a variety of problems in mathematical physics and applied mathematics. His recent interests have included the theory of stochastic differential equations and propagation in random media. He was a Visiting Professor of Mechanics at Lehigh University during the fall semester of 1968. Member, American Mathematical Society, SIAM, Sigma Xi.

R. F. W. Pease, B.A., 1960, M.A. and Ph.D., 1964, University of Cambridge; Bell Laboratories, 1967—. Before joining Bell Laboratories, Mr. Pease held a faculty appointment at the University of California at Berkeley, where he worked on electron microscopy. At Bell Laboratories he has worked on the digital encoding of television signals. Presently, he is engaged in using electron beams to make integrated circuits.

Lawrence R. Rabiner, S.B., S.M., 1964, Ph.D., 1967, Massachusetts Institute of Technology; Bell Laboratories, 1962—. Mr. Rabiner has worked on digital circuitry, military communications problems, and problems in binaural hearing. Presently he is engaged in research on speech communications and digital signal processing techniques. Member, Eta Kappa Nu, Sigma Xi, Tau Beta Pi; Fellow, Acoustical Society of America; Member of the IEEE G-ASSP Technical Committee on Digital Signal Processing; President of the G-ASSP AdCom, associate editor of the G-ASSP Transactions; member of the technical committees on speech communication of both the IEEE and Acoustical Society.

Lewis H. Rosenthal, S.B. (Electrical Engineering) and S.M. (Electrical Engineering), 1974, Massachusetts Institute of Technology; Bell Laboratories, 1971—. Mr. Rosenthal has worked in the areas of loop transmission, digital terminal design, and automatic voice response. Member, Eta Kappa Nu, Tau Beta Pi.

Ronald W. Schafer, B.S. (E.E.), 1961, and M.S. (E.E.), 1962, University of Nebraska; Ph.D., 1968, Massachusetts Institute of Technology; Bell Laboratories, 1968—. Mr. Schafer has been engaged in research on digital waveform processing techniques and speech communication. Member, Phi Eta Sigma, Eta Kappa Nu, Sigma Xi, IEEE, Acoustical Society of America, and the IEEE G-ASSP Technical Committees on Digital Signal Processing and Speech Communication; associate editor of the IEEE Transactions on Acoustics, Speech, and Signal Processing.

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Kenneth A. Walsh, Associate Degree (electrical engineering technology), Kent State University, Salem, Ohio, 1969; Bell Laboratories, 1969—. Mr. Walsh's work at Bell Laboratories has been mainly concerned with efficient coding of digital *Picturephone*® transmissions, including the use of a buffered, bit-rate controlled coder, the use of channel sharing, and transmission of color *Picturephone* signals.

