

Contributors to This Issue

William E. Baker, B.S.E.E., 1956, Saint Louis University; M.S. (Mathematics), 1964, Rutgers University; Bell Laboratories, 1956—. Since joining Bell Laboratories, Mr. Baker has worked in the data transmission area and on electronic PBXs. He was involved in the design of test equipment for the different transaction sets. He is licensed as a Professional Engineer in the State of New Jersey and is a member of Pi Mu Epsilon.

Donald D. Banks, B.S. (mechanical engineering), 1941, Newark College of Engineering; Marine Engineering, 1942, U. S. Naval Academy; N. J. Bell Telephone Co., 1941-1960; Bell Laboratories, 1960—. Mr. Banks began his telephone career as an installer in the N. J. Bell Telephone Company and rotated through various assignments as a supervisor in the plant and engineering departments. In 1960, he joined Bell Laboratories' Common Systems laboratory where he supervised the physical development of the Stored Program Control for the Traffic Service Position System. He joined the Station Systems Laboratory in 1973 where he supervises the physical design of station apparatus.

Leland R. Beaumont, B.S.E.E., 1972, Lehigh University; M.S.E.E., 1974, Purdue University, Bell Laboratories, 1973—. Since joining Bell Laboratories, Mr. Beaumont has worked on software development projects including planning tools for *DATAPHONE*® Digital Service and Maintenance Software for Transaction Network. Currently he is a supervisor of the Maintenance Operations Software Group, working on the Advanced Communications Service.

G. A. Bhat, B.E., 1967, University of Poona, India; M.S.M.E., 1968, University of California; M.S.E.E., 1975, Brooklyn Polytechnic Institute; Bell Laboratories, 1973-1978. Before he came to Bell Laboratories, Mr. Bhat developed experience designing dynamic devices such as accelerometers and gyroscopes; at Bell Laboratories he was associated with the Transaction telephones. Member, ASME.

Howard A. Bodner, B.E.E. (Electrical Engineering), 1963, M.S., 1965, Ph.D., 1968, Cornell University; Bell Laboratories, 1968—. At Bell Laboratories, Mr. Bodner first worked on theoretical problems in data communications. He was then involved in the design and implementation of the Transaction Network Service with particular emphasis on the host procedures. He presently supervises a group responsible for the systems engineering aspects of the host computer interfaces for the Advanced Communications Service. Member, Phi Kappa Phi, Tau Beta Pi, Eta Kappa Nu, IEEE.

C. A. Buzzard, B.S.E.E., 1964, M.S.E.E., 1965, Cornell University; Bell Laboratories, 1964—. Mr. Buzzard has worked on the development of data sets and data networks. He is presently supervisor of the circuit design group, Advanced Business Telephone Systems Department.

Karen L. Cohen, B.S., 1970, Ohio State University; M.S. (Computer Science), 1974, Ohio State University; Bell Laboratories, 1976—. Since joining Bell Laboratories, Ms. Cohen has been working on call processing, maintenance, and audit programs for Transaction Network.

John A. Drager, B.S.M.E., 1964, University of Maryland, 1964; S.M. (M.E.), 1965, Massachusetts Institute of Technology; Bell Laboratories 1964-1978; AT&T, 1978—. Mr. Drager has been involved in physical design of data sets and data systems, including an acoustically coupled data set for low-speed data transmission, data line concentrator, the switched digital data system, and the Transaction Network. From 1976 to 1978, he supervised groups involved in design of 407 data sets and Transaction Network peripherals. He is currently an Assistant Manager for Teletype products at AT&T. Member, Phi Kappa Phi, Tau Beta Pi, Pi Tau Sigma.

Ronald M. Dudonis, Polytechnic Institute of Brooklyn, 1954, 1956-1958; University of Maine, 1960-1962; Bell Laboratories, 1956—. Mr. Dudonis has worked on the AMA circuit in both No. 1 ESS and TSPS No. 1. He designed and built the exploratory version of the Automated Coin Toll service equipment in TSPS and helped develop the software for Transaction I and II telephones.

J. W. Fitzwilliam, B.S., Physics, Case Western Univ., 1940; Ph.D., Physics, M.I.T., 1947; Bell Laboratories, 1953—. Mr. Fitzwilliam's early

work concerned the development of magnetrons. In 1955 he was appointed Department Head responsible for work on TJ microwave radio, and later for development of the TH system. In 1958 he became Director of the Electron Device Laboratory, where he was responsible for the design of various microwave tubes used in the Telstar project. In 1962, Mr. Fitzwilliam was named Director of the Array Radar Laboratory; and in 1968 Executive Director of the Station Systems Division, where he was responsible for providing the concept, systems engineering, design, and development of customer premises telephone system equipment. In 1977 he was appointed Executive Director of the Systems Studies Division. Member, American Physical Society, American Crystallographic Association, Tau Beta Pi and Sigma Xi.

Fritz E. Froehlich, B.S. (Physics), 1950, M.S. (Physics), 1952, Ph.D. (Physics), 1955, Syracuse University; Bell Laboratories, 1954—. Mr. Froehlich conducted high-altitude cosmic ray research before he joined Bell Laboratories. At Bell Laboratories, he first worked in electronic switching. Following this, he worked in data transmission on voiceband and wideband modems, error control techniques, automatic equalizers and in data theory. In the station area, he was responsible for electronic telephones and the Transaction telephone family. He is currently head of the Business Terminal Department. Fellow and member, IEEE; member, Phi Beta Kappa, Sigma Xi, Sigma Pi Sigma, Pi Mu Epsilon, N.Y. Academy of Sciences, and the American Association for the Advancement of Science.

Travis H. Gordon, B.E.E., 1960, M.S.E., 1962, Ph.D., 1964, University of Florida; Bell Laboratories, 1965—. Mr. Gordon's work has included data set design and analysis, data multiplexing and switching analysis, and, most recently, system planning for Transaction Network Service. Member, IEEE, Phi Kappa Phi.

W. Gordon Heffron, Jr., B.E.E.E., 1947, Tulane University; M.S.E.E., 1950, Purdue University; D.Sc., 1969, The George Washington University; General Electric Co., 1949-1955; General Dynamics Corp. (Convair), 1955-1956; Melpar, Inc., 1956-1964; Bellcomm, Inc., 1964-1972; Bell Laboratories, 1972—. At Bellcomm, Mr. Heffron was Head of the Guidance and Navigation Department, concerned with the Apollo Lunar Landing program. Since transferring to Bell Laboratories, he has been Department Head for systems engineering of the Digital Data System, the Switched Digital Data System, and the Transaction

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John H. Kee, A.A.S., 1963, Staten Island Community College; B.S.E.E., 1972, Newark College of Engineering; M.S.E.E., 1974, Columbia University; Bell Laboratories, 1963—. Mr. Kee has been involved in the design of various data products and the Transaction telephones. He is presently responsible for all Transaction station work. Member, Tau Beta Pi, Eta Kappa Nu.

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Mr. Omohundro has worked on communication protocols, diagnostics, and maintenance on the Transaction Network. He currently supervises a group that has responsibility for the Transaction Network and also for operations support on the Advanced Communications Service.

Robert E. Reid, B.E.E., 1970, Georgia Institute of Technology; M.E.E., 1971, Stanford University; South Central Bell (part-time), 1965-1970; Bell Laboratories, 1970-1977; AT&T, 1977—. Mr. Reid was in the Data Communications Planning Center while at Bell Laboratories and has worked on the Digital Data System implementation strategy and time-shared programs to aid the operating telephone companies in the deployment of DDS. His work on the Transaction Network System began in 1974 and concentrated in polled terminal call processing, system integrity, and initialization. Mr. Reid is currently Supervisor in the Data & Special Services section at AT&T and has engineering responsibilities for voice band data sets. Member, Tau Beta Pi, Eta Kappa Nu.

Robert F. Ricca, B.S.E.E., 1950, New York University; Western Electric Company, 1941-1960; Bell Laboratories, 1960—. Mr. Ricca was involved in various phases of ABM system work until 1975. Since then, he has been a member of the Transaction Network Planning Group.

Ernesto J. Rodriguez, B.S. (Math.), 1967, Michigan Technological University; M.S.O.R., 1970, New York University; Bell Laboratories, 1967—. Mr. Rodriguez initially worked on various aspects of computer-access planning for *PICTUREPHONE*[®] service. He supervised a group responsible for developing software aids to help telephone companies in planning for the *DATAPHONE*[®] Digital Service. He was also involved in the software development and design of the Transaction Network. Mr. Rodriguez is currently head of a department responsible for data message switching software development.

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Frank P. Sansone, B.S.E.E., 1966, Manhattan College; M.S.E.E., 1967, Columbia University; Bell Laboratories, 1966—. Mr Sansone has worked in the area of data communications since joining Bell Laboratories. He has been involved in the development of a variety of data systems and is presently head of the Voiceband Data Communications Department. Member, IEEE, Eta Kappa Nu.

Norman E. Snow, B.S.E.E., 1952, University of Arkansas; Southwestern Bell, 1952–1957; Bell Laboratories, 1957—. Mr. Snow initially worked in the Arkansas area of Southwestern Bell where he engineered toll terminal, local switching, and central office power installations. At Bell Laboratories, he has worked in both systems engineering and development of voiceband and wideband data sets and systems for a variety of standard and special-purpose Bell System data services. He is presently Bell Laboratories Field Representative in Chicago. Registered professional engineer; member, Tau Beta Pi, Theta Tau, Phi Eta Sigma, Pi Mu Epsilon.

Kenneth W. Sussman, B.E.E., 1963, City College of New York; M.E.E., 1964, New York University; Bell Laboratories, 1964–1969; AT&T, 1969–1971; Bell Laboratories, 1971—. At Bell Laboratories, Mr. Sussman worked on computer-aided design and simulation techniques until 1969. From 1969 to 1971, he was an Assistant Engineering Manager at AT&T responsible for the planning of the Switched Digital Data System. From 1971 to 1974, he supervised a group at Bell Laboratories responsible for studies of the effects of unusual usage traffic on the Message Telephone Network. In 1974, he assumed his present position, supervising a group responsible for system engineering of the Transaction Network. Member, IEEE, Tau Beta Pi, Eta Kappa Nu.

Robert L. Wagner, B.S., 1949, and M.S., 1952, Electrical Engineering, Rutgers University; Bell Laboratories, 1954–1962, 1972—. Mr Wagner was initially concerned with the development of techniques for underwater detection of submarines. In 1962 he joined Bellcomm, Inc. and in 1967 became Executive Director of Bellcomm's Systems Engineering Center; simultaneously he served as NASA's Director of Systems Engineering for Apollo. His work included systems studies and analysis, systems engineering, planning, and technical support for NASA on the Apollo Project to land men on the moon and return them to earth. In 1972 Mr. Wagner rejoined Bell Laboratories as Executive Director on Special Assignment in the Network Planning and Customer Services

Area, and later in the same year became Executive Director of the Data and Mobile Communications Division. Member, Phi Beta Kappa and Tau Beta Pi.

John W. Wesner, P.E., B.S.M.E., 1958, Carnegie Institute of Technology; M.S.M.E., 1959, California Institute of Technology; Ph.D. (mechanical engineering), 1968, Carnegie-Mellon University; Bell Laboratories, 1968—. Mr. Wesner is a Supervisor in the Station Physical Design Department. He was the original physical designer for the Transaction telephones, beginning with the field trial, and remained on the project through field introduction. His first supervisory task was to bring the Transaction printer into production and then into the field. More recently, he has been responsible for exploratory physical design work related to office communications. Member, ASME, NSPE, Sigma Xi, Pi Tau Sigma, Tau Beta Pi.

Bernard A. Wright, B.S.E.E., 1960, University of Michigan; M.S.E.E., 1963, New York University; Bell Laboratories, 1960—. Mr. Wright has been involved in the design of *PICTUREPHONE*[®] station sets and Transaction terminals. He is presently a supervisor in the Station Circuits Department and responsible for special telephone activities. Member, IEEE, Tau Beta Pi, Eta Kappa Nu, Phi Kappa Phi.

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