

CONTRIBUTORS TO THIS ISSUE

R. Ahmari, B.S.E.E., 1966, University of Tehran; M.S. (E.E.), 1969, and Ph.D. (E.E.), 1972, Illinois Institute of Technology; Assistant Professor, Manhattan College, New York, 1972-1973; Bell Laboratories, 1973—. Mr. Ahmari worked on system planning for private networks, design and development of fault-tolerant systems, and system testing and integration for TSPS. He is currently supervising a group engaged in software design, and development coordination of TSPS No. 1B Generic 1BT2. Mr. Ahmari is a Registered Professional Engineer in the State of Illinois. Member, IEEE.

Pierre L. Bastien, B. S. (Physics), University of Montreal; Ph.D. (Physics), University of California at Berkeley; Bell Laboratories, 1973—. Upon joining Bell Laboratories in 1973 Mr. Bastien first studied the effects of No. 4 ESS failure on the toll network and local offices. More recently he has worked on long-range planning tools: The Operator Services Traffic Network Planning System for operator services; and the Switching Studies Tool, for toll planning. Currently, Mr. Bastien is a Member of Technical Staff in the SPC Network Planning Methodology Group working on development of a planning tool for long-range toll switch studies and point-of-presence (interconnection) planning for post-divestiture.

Joseph J. Bodnar, B.S.E.E., 1969, Rutgers University, M.S.E.E., 1971, Polytechnic Institute of Brooklyn; M.S. (Advanced Management), 1980, Pace University; Bell Laboratories, 1969-1976; AT&T, 1976-1979; Bell Laboratories, 1979—. Mr. Bodnar worked on the development of the Switching Control Center System at Bell Laboratories. He then joined AT&T Network Operations where he was responsible for TSPS and ESS operations methods and technical support. He returned to Bell Laboratories in systems engineering and is currently Supervisor of the Switching Control Center Systems group. Member, Tau Beta Pi, Eta Kappa Nu.

G. T. Clark, B.S.M.E., 1952, Bradley University; Western Electric, 1956-1961; Bell Laboratories, 1961—. Mr. Clark was first engaged in the physical design of step-by-step common control equipment and later worked on the design of 758C PBX equipment. He has coordinated the physical design of TSPS No. 1 equipment, including detail design of network, position subsystem, TTY trunk and buffer, the station signaling and announcement subsystem, Peripheral System

Interface frame, and processor replacement for TSPS No. 1B. He was also engaged in the physical design of AIS equipment, including the file subsystem No. 2. He is currently working on physical design of new features for TSPS No. 1B.

J. I. Cochrane, B.S.E.E., 1962, M.S.E.E., 1966, Georgia Institute of Technology; Ph.D., E.E. (Communication Theory), N.Y.U.; Honeywell, Inc., 1963-1965; Bell Laboratories, 1966—. From 1966-1969, Mr. Cochrane worked on the design of prototype signal processors for ballistic missile defense radars. In 1969 he was appointed Supervisor of a group responsible for the system design of advanced missile defense radars. From 1972-1973 he supervised the group responsible for the Perimeter Acquisition Radar software performance requirements. From 1973 to 1976 he supervised the formulation of long-range plans for the Navy Telecommunications System. From 1976 to 1977 he supervised the determination of the requirements for new features and equipment to be used in the operations and administration of voice-grade switched networks for large corporate customers. In 1977 and 1978 he supervised a group responsible for formulating and analyzing concepts for new services for large corporate customers using emerging telecommunications technology. In 1978 he was appointed Head of the Network Operations Planning Department responsible for formulating long-range plans for computer-based support systems to support Bell System network operations. In 1981 Mr. Cochrane was appointed Director of the Network Switching and International Systems Engineering Center; this center is responsible for the Bell Laboratories systems engineering work on Operator Services systems and for much of the planning and systems engineering work in support of AT&T International. Licensed Professional Engineer (NJ); member, Tau Beta Pi, Eta Kappa Nu.

Bently A. Crane, B.S. (Physics), 1954, M.S. (Physics), 1955, University of Michigan; M.S.E.E., 1959, New York University; Bell Laboratories, 1957—. Mr. Crane was involved in exploratory development of advanced computers for ballistic missile defense systems until 1972. He then began Bell System work, which has included exploratory development of auxiliary processors and voice message systems. Mr. Crane is currently a Consultant in the Operator Services Project Planning Department, working on TSPS system performance evaluation. He recently received the Bell Laboratories Distinguished Technical Staff Award.

John R. Daino, B.S.E.E., 1967, Syracuse University; M.S.E.E.,

1969, Ohio State University; AT&T, 1977-1980; Bell Laboratories, 1967-1977, 1980—. After joining Bell Laboratories in 1967, Mr. Daino worked on switching systems development in No. 5 Crossbar and No. 3 ESS. In 1972, he transferred to systems engineering to work on billing systems for electronic and electromechanical switching systems. Mr. Daino transferred to AT&T Network Design in 1977 where he was responsible for ESS generic planning as well as individual switching projects. In 1980, he returned to Bell Laboratories in his present position as Supervisor of the Suburban and Local Systems Central Office Operations group.

John C. Dalby, Jr., B. S. (Applied Mathematics), 1968, M.S.E. (Computer, Information, and Control Engineering), 1969, University of Michigan; Masters of Philosophy (Computer Science), 1977, Rutgers University; Bell Laboratories, 1970—. Since joining Bell Laboratories Mr. Dalby has been involved in TSPS No. 1 development designing call-processing and maintenance software and writing system development requirements for new TSPS No. 1 features. Presently, he supervises a group doing No. 5 ESS Operator Services Position System Planning. Member, Tau Beta Pi.

Noel X. DeLessio, B.S.E.E., 1960, M.S.E.E., 1961, Ph.D. (E.E.), 1966, Polytechnic Institute of Brooklyn; Bell Laboratories, 1966—. Mr. DeLessio worked on Safeguard system design and supervised guidance design for the SPRINT missile system. Subsequently, he supervised the Exploratory Development Group of the Operator System Laboratory and is currently Head of the No. 5 ESS OSPS Development Department in the Operator Services and Digital Switching Applications Laboratory.

Richard S. DiPietro, B.S. (Engineering Science), 1970, Northwestern University; M.S.E.E., 1972, New York University; Bell Laboratories, 1970—. Mr. DiPietro worked on military system performance evaluation until 1974. He then worked on hardware design and system testing for the remote TSPS trunk arrangement. Since 1977, he has been Supervisor of TSPS field support, system test, and call-programming groups.

R. J. Gill, B.S., 1970 (Computer Science), Purdue University; M.S., 1971 (Applied Mathematics), University of Michigan; Bell Laboratories, 1970—. Mr. Gill began his work at Bell Laboratories on the Safeguard ballistic missile defense system in the area of software

architecture, design, and analysis. From 1974 through 1981 he worked on TSPS, designing call-processing software, doing exploratory development, and then supervising the Processor Application Group for TSPS No. 1B. In 1982 he became Supervisor of the OSPS Architecture Group for the No. 5 ESS Operator Services Position System.

T. G. Hack, B.S., 1966 (Mathematics), Xavier University; M.S., 1967, Ph.D, 1970 (Applied Mathematics), Purdue University; Bell Laboratories, 1966—. Mr. Hack initially worked on software generation tools for the No. 2 ESS and No. 3 ESS projects and then in the area of change management for C-language-based developments. In 1979, he became Supervisor of a group responsible for the software development environment for the TSPS project. He currently supervises a group responsible for the development of operational software for No. 5 ESS.

Harry A. Hilsinger, B.S.E.E., 1954, Newark College of Engineering; M.S.E.E., 1958, New York University; Bell Laboratories, 1954—. Mr. Hilsinger initially worked on airborne guidance systems for the Nike Zeus project. In 1961 he became Supervisor of a group doing physical design for the first electronic PBX system. He has been participating in switching system physical design since that time and is currently responsible for physical design associated with Network Operator Services. Member, Tau Beta Pi, Eta Kappa Nu.

Teddy Huang, B.S. (Electrical Engineering), Purdue University; M.S. (Electrical Engineering), MIT; Ph.D (Electrical Engineering), Purdue University; Bell Laboratories, 1972—. Since joining Bell Laboratories, Mr. Huang has been engaged in system simulation, maintenance software, and test utility systems development. He is currently a Supervisor of a group responsible for the overall integrity of Operator Services Position Systems.

Gary J. Kujawinski, B.S.E.E., 1975, M.S.E.E., 1977, University of Illinois; Bell Laboratories, 1977—. Mr. Kujawinski has worked on the TSPS No. 1B system in the software emulation, performance measurement, and field support areas. He currently supervises the TSPS Test Facility Group. Member, IEEE.

N. A. Martellotto, B.E.E, and B.S. (Applied Mathematics), 1957, Georgia Institute of Technology; M.E.E, 1959, New York University;

M.B.A., 1970, University of Chicago; Bell Laboratories, 1957—. Starting with the Bell System Data Processor project in 1957, where he did logic design and programming, Mr. Martellotto has been involved with computers and software development throughout his career at Bell Laboratories. He worked on EPBX and No. 1 ESS and holds a patent related to the basic notion of ESS generic programs. In 1966, he became Head of the Indian Hill Computation Center (IHCC). In 1976, he resumed design and development of ESS software development support programs and other related work. In late 1979, Mr. Martellotto became DMERT project manager and for the next two years was involved with all aspects of the project, from operating system development to field support. He is now Head of the Software Development Systems Department at Indian Hill. Member, IEEE, Tau Beta Pi, Eta Kappa Nu.

Sherman C. Reed, B.S.E.E., 1956, University of Oklahoma; M.S.E.E., 1958, Newark College of Engineering; Bell Laboratories, 1956—. At Bell Laboratories, Mr. Reed had many assignments in ballistic missile defense activities from 1956 to 1974. He began work on TSPS in 1974 and has been involved with call programming and operator actions software design, new feature planning development coordination and system testing. He is currently Supervisor of the TSPS No. 1B 1BT2 System Testing Group. Member, Tau Beta Pi, Eta Kappa Nu, Pi Mu Epsilon.

Robert E. Staehler, B.S.E.E., 1947, The College of the City of New York; M.S.E.E., 1948, Polytechnic Institute of Brooklyn; Bell Laboratories, 1948—. Mr. Staehler's early work was on No. 5 Crossbar, toll signaling systems, and trainers for guided missile systems. In 1953, he worked on the development of electronic switching systems, specifically, the processor memory for the experimental central office in Morris, Illinois, and the processor logic and call memory for No. 1 ESS. He was appointed Director of the Electronic Switching Projects Laboratory in 1964 with responsibility for special applications for No. 1 ESS to military and data networks, including No. 1 ESS AUTOVON. In 1968, he became Director of the Electronic Systems Design Laboratory with responsibility for development of the 1A Processor for No. 1 ESS and No. 4 ESS. In 1976, he became Director of the Network Operator Services and Digital Switching Applications Laboratory with responsibility for developing operator services for both domestic and international applications, along with the No. 5 ESS remote switching vehicles. Senior member, IEEE. Member, Eta Kappa Nu, Tau Beta Pi, Sigma Xi.

L. C. Stecher, B.S., 1967, Loyola University; M.S., 1968, Northwestern University; Ph.D., 1972 (Applied Mathematics/Computer Science), Northwestern University; Bell Laboratories, 1970—. Mr. Stecher was involved in the design and development of the No. 4 ESS maintenance and call-processing subsystems. In 1975, he became Supervisor of the No. 4 ESS trunk maintenance development effort and later became Supervisor of an exploratory effort to define new network services for the evolving Stored Program Controlled Network. In 1980, he became Head of a department responsible for development of software for the Traffic Services Position System. This software interacts with operators, customers, and the network to handle toll and assistance traffic. In addition, the department is responsible for the Software Development System and Programmer Support Systems used in the Operator Services and Digital Switching Applications Laboratory.

E. H. Stredde, B.S.E.E., 1966, M.S.E.E., 1967, University of Illinois; Bell Laboratories, 1967—. Mr. Stredde has developed maintenance and operational software for No. 1 ESS, the 1A Processor, No. 4 ESS, and TSPS. He is currently Supervisor of the Remote Switch Module Switch Maintenance Group. Member, Eta Kappa Nu, Tau Beta Pi.

D. S. Suk, B.S.E.E., 1969, Seoul National University; M.S. (E.E.), 1977, and Ph.D. (E.E.), 1978, University of Iowa; Bell Laboratories, 1978—. Mr. Suk has been involved in maintenance software design and the evaluation of TSPS No. 1B performance and reliability. He is currently working on project management and software development methodology. Member, IEEE, Eta Kappa Nu.

James H. Tendick, B.S.E.E., 1977, University of Illinois; M.S.E.E., 1978 Stanford University; Bell Laboratories, 1977—. Mr. Tendick was initially involved in the hardware design of the Peripheral Systems Interface for the TSPS No. 1B. He was also involved in system testing at the first live TSPS No. 1B site in Fresno, California. Other work activities included speech synthesis and recognition and field support. Presently, he is supervising a group responsible for system test and integration of the current TSPS Generic. Member, Tau Beta Pi, Phi Kappa Phi, Eta Kappa Nu, Sigma Xi.

Kendra A. VanderMeulen, B.S. (Mathematics), 1973, Marietta College; M.S. (Computer Science), 1977, Ohio State University; Bell Laboratories, 1973—. Ms. VanderMeulen has participated in the de-

sign, development, testing, and maintenance of minicomputer-based operations systems for service evaluation and SPCS maintenance. She is currently Head of the SCCS Applications Development Department responsible for the development of SCCS application software, development of a world-class switching operations system for the international market, and development of an operations maintenance system for minicomputer maintenance and operations centers.

Daniel Van Haften, B.S., M.S. (Mathematics), 1970, Michigan State University; Ph.D. (Electrical Engineering), 1977, Stevens Institute of Technology; Bell Laboratories, 1970—. Mr. Van Haften initially worked on the Safeguard project. In 1974 he joined the Network Operator Services Laboratory, where he was involved in TSPS system testing, field support, call-processing development, and processor replacement development. In 1981 he became involved in No. 5 ESS site testing in Seneca, Illinois, and is presently Supervisor of the Factory Test Software Design Group in the Local Digital Switching Software Laboratory. Member, Phi Beta Kappa, Phi Kappa Phi, Pi Mu Epsilon.

Laurance A. Weber, B.E.E., 1945, Cornell University; M.E.E., 1955, Polytechnic Institute of Brooklyn; Bell Laboratories, 1946—. Mr. Weber was initially involved in the design of signaling circuits. Later he participated in the design of circuits for crossbar tandem systems. Following this assignment, he was appointed Supervisor in charge of designing data sets for the mechanization of TWX service. He was appointed Head of the 101 ESS Design Department in 1960. He has had subsequent assignments in No. 2, No. 2B, and No. 3 ESS. He is presently Head of the Operator Services and Digital Switching Application Laboratory System Testing and Laboratory Administration Department. Member, IEEE, Tau Beta Pi, Sigma Xi, Eta Kappa Nu.

R. A. Weber, B.S.E.E., 1970, Iowa State University; M.S.E.E., 1971, Stanford University; Bell Laboratories, 1970—. Mr. Weber was initially a member of the Ocean Systems Laboratory, where he worked on underwater cable systems. In 1974 he transferred to the Operator Services and Digital Switching Applications Laboratory, where he has done circuit design and diagnostic programming on the Remote Trunk Arrangement and the SPC 1B Processor. He currently is the Supervisor of a group responsible for the TSPS System software, which interfaces with the DMERT operating system. Member, Tau Beta Pi.

J. R. Williams, B.S.E.E., 1960, Vanderbilt University; M.S.E.E., 1961, University of Illinois; U. S. Navy Submarine Service, 1961-1964;

Bell Laboratories, 1964—. Mr. Williams has had a variety of assignments in Electronic Switching System development. His early work included assignments in system design, test system development, and operational software design for No. 1 ESS ADF, a store and forward message switching system. In 1969, he became involved in maintenance planning and hardware design for No. 4 ESS. Later assignments included responsibilities in the area of No. 4 ESS maintenance and call-processing software development. In 1977, he became responsible for No. 5 ESS maintenance planning, and in 1979, joined the TSPS project with responsibility for operational software development. In 1980, he assumed responsibility for planning future operator system developments and for system testing new TSPS features. In 1982, Mr. Williams returned to No. 5 ESS development, with responsibility for maintenance software.

Bruce R. Wycherley, B.A., 1976, M.A., 1978 (Mathematics), University of Oklahoma; Bell Laboratories, 1978—. At Bell Laboratories, Mr. Wycherley has worked on the development of TSPS market models, examined TSPS limiting components, and developed operator services long-range planning tools for use by telephone companies. He is presently working in the Operator Services Planning group, investigating applications of automatic speech recognition and studying the impact of divestiture on TSPS. Member, Pi Mu Epsilon, Phi Beta Kappa.