Robert A. Bird

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Mr. Bird joined IBM Canada, Ltd. in 1965 in Toronto as a customer engineer. From that time until the present, he has held positions in customer engineering education, field support, and management. He is currently manager of network support for IBM Canada, Ltd. Prior to joining IBM, Mr. Bird was a radar and communications specialist in the Royal Canadian Air Force. He has received two IBM Outstanding Contribution Awards: in 1972 as codeveloper of a data recording and analysis technique, and in 1974 for his involvement as technical advisor on a large government communications system.

LeeRoy Bronner

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Dr. Bronner is currently a member of the IBM Washington Systems Center where the primary focus of his work since 1975 has been the development of a methodology for computer capacity planning in production data processing installations. He joined IBM in 1966, holding positions in the systems and sales areas in the Data Processing Division. He was on the technical staff at the IBM Thomas J. Watson Research Center from 1973 to 1974. From 1974 to 1975, he was with the Systems Development Division where his work was concerned with the application of queuing analysis techniques to assess the performance of large computer systems. Dr. Bronner earned a B.S. in electrical engineering from the University of Akron in 1963, an M.S. in electrical engineering from Northeastern University in 1966, and a Ph.D. in systems engineering from Case Western Reserve University in 1973.

Authors

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Mr. Campenni is currently a systems consultant specializing in the areas of network and systems management. After joining IBM in 1957, he held numerous technical and management positions in the Data Systems, Federal Systems, Systems Development, and Data Processing Divisions as well as in the World Trade Corporation. He has been continuously associated with the management of complex telecommunication systems since 1962. Mr. Campenni has a B.S. in electrical engineering from the University of Detroit.

James C. Cooper

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Mr. Cooper is an advisory market support representative at the Washington Systems Center. He joined IBM in 1962 at Poughkeepsie, New York, where he assisted in processor development of the IBM 7010 and the System/360 Model 75. Mr. Cooper joined the Federal Systems Division at Gaithersburg, Maryland to work on large processor development and later on complex systems. His current areas of interest are computer systems measurement, performance, and capacity planning. Mr. Cooper received a B.S. in electrical engineering in 1962 and an M.S. in information science in 1968 from the Georgia Institute of Technology.

Charles A. Hofmann

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Mr. Hofmann is the development manager for the ANMP-NEMF project. He joined IBM in 1961 in Kansas City, Missouri as a customer engineer. In 1968, he joined the Remote Analysis Project in Poughkeepsie, New York. In 1969, he be-

came a member of Field Engineering Technical Operations as a service planning representative for large systems software. He was coordinator for the early installation support and field systems performance control center projects from 1971 to 1973. Mr. Hofmann became a program support field manager in Chicago, Illinois in 1974. He joined the Field Engineering Network Project Office in Raleigh in 1977.

Jack R. Leach

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Mr. Leach is currently the manager of IBM's Western Region Project Office of the Field Engineering Division. Originally established to plan the installation and management of the Western Bancorporation TIPS (Teller Item Processing System) network, the project office has continued to develop and test prototypes of system management solutions. Mr. Leach joined IBM in 1960 and has held numerous technical management positions. In 1970, he received an Outstanding Contribution Award for work in teleprocessing management systems.

Hung C. Nguyen

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Mr. Nguyen is currently working on performance evaluation tools for communication networks. He joined IBM France in 1969 at the Paris Scientific Center and worked on the Timetables problem. In 1971 he was transferred to the Systems Engineering Headquarters of IBM Denmark and worked on APL and simulation languages. In 1974 he was assigned to the Sindelfingen Program Product Center to work on advanced systems, and he assumed his present position in 1975. Mr. Nguyen graduated in 1965 from the Ecole Nationale des Ponts and Chausses, Paris, and in 1968 from the University of Paris, where he specialized in electronics and computer science.

Arnold Ockene

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Mr. Ockene has been working in systems aid development since 1974. He joined IBM in 1961 and became one of the early users of simulation as a technique for predicting the performance of large communications-based systems. In 1963 he joined a system design group that provided consulting services to IBM branch offices, and in 1966 he became involved in the development of general-purpose simulation languages. From 1969 to 1974 he held several positions outside of IBM. Mr. Ockene has been active in numerous professional conferences on simulation and system performance and currently serves as meetings vice-president of the Institute of Management Sciences.

Richard Revell

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Mr. Revell is involved in the performance analysis of real-time systems for large accounts through the use of FIVE and related performance-prediction aids. He joined IBM under a student scholarship in 1966. In 1970 he was assigned to the London Field Systems Centre as a systems engineer and worked on development of system configurators. While based in the United Kingdom as a member of the IBM marketing staff, he worked with the product development divisions on several occasions, producing simulation models of such products as display units, banking systems, and the 3704/3705 Transmission Control Unit.

Richard M. Schardt

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Mr. Schardt joined IBM in 1955 as a customer engineer in the Evanston branch office. In 1965, he moved to Field Engineering Education where he helped develop and teach the first OS/360 classes to customer engineers. He also coordinated a two-year project that developed a teacher training program for instructors in the Field Engineering Division. In 1971 he joined the Data Processing Division Systems Center in Poughkeepsie and was responsible for technical support of the SVS operating system. In his present position of Consulting Market Support Representative, obtained in 1978, his prime responsibilities include technical support for large system processors and the MVS operating system. Mr. Schardt has been the author or coauthor of 16 papers on hardware and software performance and tuning.

Donald C. Schiller

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Mr. Schiller works in systems capacity planning at the Data Processing Division's Washington Systems Center. After employment with Shell Oil Company as a geophysicist and applications programmer, he joined IBM in 1963 to work on the Gemini and Apollo mission control programs. Moving to the Washington area in 1969, he worked on the MPS (Multiprocessor System) project until 1973, when he joined the Systems Technology Department. He transferred to his present position in 1975. Mr. Schiller has a B.A. from Columbia University and an M.S. from the University of Houston.

Philip H. Seaman

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Mr. Seaman is a senior engineer with the Aids Development Department, currently engaged in mathematical modeling of data processing systems. He joined IBM in 1958 in Poughkeepsie as a computer analyst and has worked on the performance analysis of teleprocessing systems since 1961. He was project leader of the Computer System Simulator program from 1966 to 1969. From 1969 to 1971, he taught computer science at the University of Science and Technology at Kumasi, Ghana under Peace Corps sponsorship. Since 1975 he has been involved with the development of marketing support for on-line systems. Mr. Seaman received a B.S. degree in electrical engineering in 1957 from Columbia University and an M.S. degree in applied mathematics from Harvard University in 1958.

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Mr. Skwish is manager of system design aids. He joined IBM in 1955 as a customer engineer in Scranton, Pennsylvania, and transferred to systems engineering in 1962. He joined the Field Systems Center in Syracuse, New York, in 1965 and became manager of the Data Center in 1966. In Endicott, New York, in 1968, he was responsible for development of advanced customer programs. In 1970 he became development manager for the Advanced Marketing Institute in Brussels, Belgium, and in 1973 he became development manager for the education industry in the System Communications Division. He was assigned to his current position in 1975.