Authors

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Dr. Ahuja is an advisory scientist in a communication systems architecture group. His current interests are in the area of network routing and flow control. He received his B.S. in electrical engineering from Panjab Engineering College, India, in 1963. After receiving an M.S. in computer science from the University of North Carolina, he joined IBM in 1970. In 1976, he received his Ph.D. in computer science, also from the University of North Carolina. He worked on the performance analysis of the IBM 3705 Communications Controller and developed an analytic model to estimate its performance. Recently, he has been working on developing the routing and flow architecture in SNA. Dr. Ahuja is a member of the Association for Computing Machinery and Sigma Xi.

Lewis M. Branscomb

Corporate Headquarters, Armonk, New York

Dr. Branscomb, Vice President and Chief Scientist of IBM, is responsible for guiding the Corporation's scientific and technical programs to ensure that they meet long-term needs. He joined IBM in 1972. Before joining IBM, Dr. Branscomb, a noted physicist, was appointed director of the National Bureau of Standards in 1969 after serving the Bureau since 1951. He was graduated from Duke University summa cum laude in 1945. He was awarded M.S. and Ph.D. degrees in physics by Harvard University in 1947 and 1949. Among his affiliations, Dr. Branscomb has been a member of the President's Commission for the Medal of Science and the President's Science Advisory Committee. He is a member of both the National Academy of Engineering and the National Academy of Sciences. A fellow of the Royal Society of the Arts, he was also the vice-president of the American Physical Society in 1978 and is serving as president in 1979. Dr. Branscomb is chairman of the Committee on Scholarly Communications with the People's Republic of China, established by the National Academy of Sciences, the Social Science Research Council and the American Council of Learned Societies. It is a nongovernmental committee and handles the facilitated exchange program between the United States and China.

Frank P. Corr

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Dr. Corr has been a member of the Architecture and Telecommunications Department in Raleigh, North Carolina since 1976. His principal interest is the application of new communications media in teleprocessing systems. Joining IBM in 1960, he worked on modem and error control equipment. From 1962 to 1970, he was with the Federal Systems Division and was responsible for the design of secure military communications, air traffic control techniques, and reconnaissance systems. He was then assigned to the Data Communications Center in Zurich, Switzerland, where he performed analyses of new public data networks and services. Dr. Corr received his B.E.E. from Manhattan College in 1954 and his M. Eng. in 1957 and Dr. Eng. in 1960 from Yale University.

W. Donald Frazer

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Dr. Frazer joined the IBM Thomas J. Watson Research Center as a staff member in 1963. His research areas have included communications, combinatorial algorithms, computer systems measurement and modeling, and storage systems architecture. Dr. Frazer is currently manager of the experimental systems laboratory in the computer sciences department at the Research Center. He has also

served as an adjunct faculty member at Princeton University and at the Courant Institute of New York University. Dr. Frazer received the B.S.E. degree from Princeton University and the Ph.D. degree in electrical engineering from the University of Illinois.

James P. Gray

System Communications Division, Research Triangle Park, North Carolina

Dr. Gray joined IBM in 1970 as a research staff member in a research group in Raleigh, North Carolina. He worked on the universal controller (later to become the IBM 8100 Information System) machine architecture, continuing his work in communications systems architecture after 1972. He has contributed to the definition of several portions of SNA, including DFC, SCS, multiple system networking, parallel sessions, SNA 4.2, LU Types 1 and 6, and sync point recovery. He has been the technical assistant to the chairman of the architecture maintenance board of SNA since its inception in 1973. Dr. Gray earned a B.E. in electrical engineering from Yale University in 1965 and a Ph.D. in communication theory from Yale's Department of Engineering and Applied Science in 1970.

Paul E. Green

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Dr. Green joined IBM in 1969 as manager of communication science. Prior to this he had been at the MIT Lincoln Laboratory since 1951. There he worked on applications of communication theory to antijam communications, multipath problems, radar astronomy, and seismic arrays. His interests at IBM have centered on signal processing and the performance and architecture of computer networks. From 1974 to 1977 he was at Corporate Headquarters, first on the engineering, programming and technology staff, and later as a member of the corporate technical committee. Dr. Green received the Sc.D. degree from Massachusetts Institute of Technology in 1953.

John R. Halsey

System Communications Division, La Gaude, France

Mr. Halsey is a consultant telecommunications engineer in the Europe/Middle East/Africa Telecommunications Centre at La Gaude where his specialty is strategic and policy issues at the European level. He joined IBM in 1958 in the IBM United Kingdom Laboratory, then in London. Since then, he has been in sales and systems engineering management, and in 1968/76 was the telecommunications relations manager responsible for IBM's relations with the United Kingdom post office. Mr. Halsey received his B.S. in electrical engineering from Imperial College, London, in 1951 prior to which he served for five years as a signal officer on radio and radars in the Royal Air Force.

Leslie E. Hardy

System Communications Division, Research Triangle Park, North Carolina

Mr. Hardy is an advisory engineer in the U.S.A. Telecommunications Center at Raleigh, North Carolina. He joined IBM at Long Beach, California in Field Engineering in 1955. While there, he maintained large systems and managed a group of field engineers. He worked in the Western Region special marketing group and later joined the special engineering group in Raleigh assigned to the 2972/2980 planning department. Prior to his present assignment, he worked as an advisory market planner in the communications terminal area. Mr. Hardy attended the University of Illinois.

Ray S. Moore

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Dr. Moore is responsible for overall strategic planning of the System Communications Division computer networks in Europe and the United States. He joined IBM Information Systems Ltd., in Havant, United Kingdom, in 1970, and was involved in the design, development, and implementation of software and hardware required to support IBM Europe's international message switching, bulk data, and customer engineering support networks. In 1975 he moved to the Hursley Laboratory and assumed responsibility for the design and implementation of the telecommunication facilities required to support the European Laboratories Computation Network (ELCN). He assumed his present responsibilities in 1978. Dr. Moore graduated in physics at Liverpool University in 1964. He undertook research in elementary particle physics and gained his Ph.D. at Liverpool in 1968, and lectured in physics there until 1970.

Tony B. McNeill

System Communications Division, Research Triangle Park, North Carolina

Mr. McNeill is manager of Advanced Networking Architecture in the System Communications Division. Since joining IBM in 1968, he has worked in planning, analysis, programming, and architectural aspects of the teleprocessing environment. During the past four years he has participated in the development of Systems Network Architecture. Mr. McNeill received a B.S. in electrical engineering from North Carolina State University in 1967.

Don H. Neal

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Mr. Neal joined IBM in 1973 in the communications systems architecture group in Research Triangle Park. He has worked primarily in areas dealing with communications services—as a liaison between IBM and the common carriers and in analyzing potential effects of the new transmission facilities and services on IBM products. Mr. Neal received his M.S. in mathematics and operations research from the University of Florida in 1973.

Leo F. Powning

System Communications Division, Research Triangle Park, North Carolina

Mr. Powning joined IBM in Australia in 1961 as a customer engineer. From 1966 to 1973 he was a special equipment engineer and specialized in the interfacing of sensor-based systems to user processes. From 1973 to 1977 he was an advisory systems engineer installing IBM sensor-based and teleprocessing systems at the Weapons Research Establishment, South Australia. Mr. Powning is currently on assignment as an advisory engineer at the Americas/Far East Telecommunications Center at Raleigh, North Carolina.