#### Harold R. Albrecht

System Communications Division, Kingston, New York

Mr. Albrecht is an advisory programmer in Distributed Systems Programming at IBM's Kingston laboratory. He joined IBM in 1962, working in communications related programming. From 1965 to 1967 Mr. Albrecht was instrumental in designing and developing OS/360 BTAM, for which he received an Outstanding Contribution Award. From 1968 through 1970 he managed a programming design and development group working on remote job entry for OS/360. In 1971 and 1972 he participated in the initial design of VTAM. He was then involved in the early definition of SNA and the design of the related communications subsystem. Since 1975 he has been working on the definition of the DPPX I/O structure and the design of communications-related facilities, for which he received a Division Award. Mr. Albrecht received his B.S. in mathematics from Kansas State University in 1961.

# A. Kenneth Fitzgerald

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Mr. Fitzgerald is a senior programmer in the Distributed Systems Programming Design Department at IBM's Kingston laboratory. He has worked on data management and data base management requirements and designs since 1977. Previously, he held management and technical positions in development and architecture for OS/360 and OS/370, and in system architecture and advanced system communications and source/sink design. Mr. Fitzgerald joined IBM in 1956 as a programmer for the 650 and 704. After a period with the Service Bureau Corporation (then a subsidiary of IBM), he was instrumental in developing the SHARE Operating System and, later, the 1410/7010 operating system. Mr. Fitzgerald is the recipient of an IBM Outstanding Contribution Award and a Programming Fellowship at Carnegie Mellon University. He received his B.S. from Queens College in 1956, and his M.S. in mathematics from New York University in 1960.

Brian F. Goodrich

System Communications Division, Kingston, New York

Mr. Goodrich is an advisory programmer in the Distributed Systems Programming Development group at IBM's Kingston laboratory. He joined the Kingston Programming Center in 1968 as a junior associate programmer and worked on DOS and OS BTAM support for the IBM 3270 terminal. From 1972 to 1976 he participated in the design of VTAM. From early 1976 through 1978 he was active in the design of the Data Management component of DPPX. Currently he is involved in the design and development of the Host Transaction Facility component of DPPX. Mr. Goodrich received his M.S. in mathematics from the State University of New York at Albany in 1964.

## Stephen C. Kiely

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Mr. Kiely has been manager of DPPX design and architecture since 1976. He joined IBM in 1967 at the Mohansic Development Laboratory, Yorktown Heights, New York where he worked on the development of the System/360 Model 67 Time Sharing System (TSS/360). From 1968 to 1974, he held a variety of development assignments in Kingston, New York, including TSS/360, OS/VS/SVS supervisor, and VTAM. From 1974–1976, Mr. Kiely served in a staff capacity in the development laboratory in Uithoorn, Netherlands. In 1978, he received an IBM Outstanding Innovation Award. Mr. Kiely received a B.A. degree in mathematics from Fairfield University in 1967.

# **Authors**

## **Harold Lorin**

IBM Systems Research Institute, New York, New York

As Faculty Member, Mr. Lorin teaches courses in parallel architectures, operating systems, and distributed processing. He has been involved in data processing since 1955, when he joined the Sperry UNIVAC Division of the Sperry Rand Corporation. Mr. Lorin joined IBM in 1965. His published books include Parallelism in Hardware and Software (Prentice-Hall, Inc., 1972) and Sorting and Sorting Systems (Addison-Wesley Publishing Company, 1975), a volume of The Systems Programming Series. He has also published papers on operating systems, sorting, parallelism, and distributed processing. Mr. Lorin was awarded the B.S. degree in economics by New York University in 1955.

### Louis C. Thomason

System Communications Division, Kingston, New York

Dr. Thomason is a senior programmer in Distributed Systems Programming at IBM's Kingston laboratory. He has taught courses in electrical engineering and computer science at Oklahoma State University, Virginia Polytechnic Institute, and Rensselaer Polytechnic Institute. In 1966 he joined IBM to work on advanced graphic display programming technology. Since then he has been involved in the design and development of communication facilities and System/370 support for SNA. In 1976 Dr. Thomason was assigned to work on distributed systems programming design and architecture. He has concentrated on the definition of the I/O structure and has received an Outstanding Innovation Award for his work in that area. He received his B.S., M.S., and Ph.D. degrees from Oklahoma State University.

## Frank C. H. Waters

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Mr. Waters is a development programmer at the Santa Teresa Laboratory. He joined IBM in 1962, and has participated in a number of development projects, including OS/360 Release 1, TEXT 360, TERMTEXT, VSAM, and the IBM 3850 Mass Storage System. He is currently manager of the Advanced Transaction Facilities department. Mr. Waters received a B.S. in physics from Oklahoma State University in 1962.

## Robert A. Weingarten

System Communications Division, Kingston, New York

Mr. Weingarten joined IBM in 1969 as an associate programmer in the former New York Development Center, having done systems programming at the New York University Computing Center. His first assignment was working on the OS/360 linkage editor. From 1970 through 1972 he worked as a data processing plans and operation officer for the U.S. Army, aiding in the development and design of a teleprocessing message switching system for the U.S. Army Pentagon Telecommunication Center. Returning to IBM, he worked on the DOS RPG II compiler before transferring to Kingston in 1974. From 1974 to 1977, he was involved in the definition of Systems Network Architecture and high-level systems design for the Advanced Communications Function access methods when he was designated the communications network management systems design manager. He is currently with the communications systems programming system requirements and planning department. Mr. Weingarten received his B.S. and M.S. degrees in electrical engineering from New York University in 1967 and 1969, respectively.

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