



Isaac L. Auerbach

ISAAC L. AUERBACH

1921–1992

BY JORDAN J. BARUCH

ON DECEMBER 24, 1992, with the death of Isaac L. Auerbach, the world simultaneously lost a skilled, creative engineer; a special breed of philanthropist; an entrepreneur, consultant, and teacher; and an artist in the demanding world of color photography.

Isaac was born in Philadelphia, Pennsylvania, on October 9, 1921. He received his B.S. in electrical engineering from Drexel University in Philadelphia in 1943 and spent the war years from 1943 to 1946 in the U.S. Navy.

During his stay in the navy, he was introduced to his future in electronics working on the Mark V IFF system at the Naval Research Laboratory in Washington, D.C., and to his future as a leader serving as a lieutenant (junior grade) aboard a destroyer escort in the North Atlantic.

After the war Isaac attended Harvard University, where he received an M.S. in applied physics. After graduation Isaac worked with the Eckert Mauchly Computer Corporation (later Sperry-Univac), where he was one of the designers of the BINAC and UNIVAC computers.

After Sperry, Isaac spent eight years at Burroughs, where he formed and directed the Defense, Space, and Special Products Division. Among his major accomplishments there, were the first real-time, transistor-based guidance computer system for the U.S. space program and a continuing series of

ever-more powerful encryption and decryption computers for the U.S. government.

By 1957 Isaac had had enough of working for others and struck out on his own. He then established the Auerbach Corporation for Science and Technology. Under the rubric of that corporation and independently, Isaac, as a pioneering entrepreneur in the computer field, founded and headed more than a dozen successful companies.

Among the best known of these was Auerbach Associates Inc., one of the earliest computer system design and consulting firms in the United States. Specializing in real-time systems, the firm was responsible for a new air-traffic control system for the Federal Aviation Administration, the earliest airline reservation system, and every computer in the U.S. Ballistic Missile Early Warning System. Personally, Isaac was a successful inventor, holding sixteen U.S. and foreign patents in the digital computer field.

Another firm that he founded, Auerbach Publishers Inc., produced a world-renowned series of loose-leaf information services covering computer technology, information management, and computers in manufacturing. These services updated information monthly and distributed it on six continents. The information eventually came to fill thirty-seven substantial binders, which essentially defined the computer industry.

As reflected in his consulting and his publishing, Isaac recognized how important communication among professionals was to the development of the information field. He pulled together forty-eight professional societies from fifteen countries and in 1960 founded (and served as the first president of) the International Federation for Information Processing. He was elected their first honorary life member in 1969.

Among Isaac's many other honors were his election as a fellow of the American Association for the Advancement of Science, a distinguished fellow of the British Computer Society (personally conferred by the Duke of Kent), a trustee of the Charles Babbage Institute, a fellow of the Institute of Electrical and Electronics Engineers, and an honorary member of the Information Processing Society of Japan.

However, Isaac claimed that his greatest satisfaction came with his election to the National Academy of Engineering in 1974. Isaac saw it as the ultimate in recognition from his peers. In the Academy, Isaac served on five committees and chaired the Public Information Advisory Committee. This renaissance man not only participated in and guided the work of the Academy, but in 1977 he also delighted us with an exhibit of forty-four color photographs hailed by such publications as *Art in Focus*. An article in that magazine summed up the feelings of many about his photography: "[Isaac] feels and sees as might a contemporary master of the brush."

Fortunately for us, Isaac's technical leadership was matched by his civic and philanthropic leadership. In 1976 Isaac started his service on the Technical Advisory Board of the U.S. Department of Commerce, where he served with distinction. His contributions were particularly important in the board's work on formulating policies to stimulate technological innovation—an area where his personal experience was exceptionally valuable. He also served as a valuable adviser to the cities of Philadelphia and Washington.

Much of Isaac's attention was focused on helping educational and other charitable organizations. Domestically, Drexel University, Dropsie University, the University of Pennsylvania (where he also taught entrepreneurship at the Wharton School), Georgia Institute of Technology, and the Institute for Mental Health Initiatives all benefited from his commitment. Isaac gave freely of both his time and his material resources.

Israel was a particular focus of Isaac's efforts. He was a national president of the American Associates of Ben-Gurion University of the Negev and, in fact, became the vice-chairman of the Board of Governors of the university in 1988. Among the others who benefited were the Hebrew University, the Technion, and Boys Town of Jerusalem (where the Isaac L. Auerbach School for Computer Technology was founded in 1973).

As it would be impossible to list his technical papers and contributions, so this list of his civic and philanthropic con

tributions must end. Yes, in 1992, the world lost an accomplished, multifaceted man. A family lost a husband, father, brother, and guiding figure. I, and many others, lost a friend.

