## **Willis Howard Ware**

Born August 31, 1920, Atlantic City, N.J.; computer engineer who assisted John von Neumann to develop the IAS machine, and who took charge of the subsequent development of the JOHNNIAC at Rand Corporation.



Education: BS, electrical engineering, Moore School of Electrical Engineering, University of Pennsylvania; SM, electrical engineering, MIT, 1942; PhD, electrical engineering, Princeton University, 1951.

Professional Experience: research engineer, Hazeltine Electronics Corporation, Little Neck, N.Y., 1942-1946; Institute for Advanced Study, Princeton University, 1946-1951; North American Aviation Corp., 1951-1952; Rand Corp., 1952-present; adjunct professor, University of California at Los Angeles, 1955-1968.

Honors and Awards: Atwater Kent Prize, Moore School of Electrical Engineering, University of Pennsylvania, 1941; National Fellowship, Tau Beta Pi, 1941-1942; Achievement Award, Los Angeles Chapter, IRE, 1957; fellow, IRE, 1962; Distinguished Service Award, AMPS, 1963 and 1986; Computer Sciences Man of the Year, Data Processing Management Association, 1975; Exceptional Civil Service Medal, US Air Force, 1979; Centennial Award, IEEE, 1984; member, National Academy of Engineering, 1985; Computer Pioneer Award, IEEE Computer Society, 1993; fellow, ACM, 1994.

## **UPDATES**

Portrait changed (MRW, 2013)