Charles L. Bradshaw

Born August 30, 1923, Powder Springs, Tenn.; early programmer who made contributions to the techniques of programming in support of nuclear engineering and space programs.



Education: BS, mathematics, Tennessee Tech, 1947; N/1A, mathematics, University of Tennessee, 1950.

Professional Experience: member, Mathematics Panel, Oak Ridge National Laboratory; Marshall Space Flight Center, Huntsville, Ala.: staff member, deputy director, Computation Laboratory, founder and chairman, General Computer Services; director of computing, Vanderbilt University, 1971-1988.

Honors and Awards: ACM Distinguished Service Award, 1988; associate fellow, AIAA.

As a member of the mathematics panel at Oak Ridge National Laboratory, Bradshaw worked with Alston Householder on the ORACLE computer, one of the first IAS machines developed as part of John von Neumann's plans for the AEC. After working on some of the first computer programs to determine the criticality of nuclear reactors, he joined the rocket team headed by Werner von Braun at the Marshall Space Flight Center. He was responsible for the early orbit computations for Explorer 1, the first US artificial earth satellite.

BIBLIOGRAPHY

Significant Publications

Bradshaw, Charles I, "Improved Approximations to Numerical Solutions of Partial Differential Equations," *J. Mathematics and Physics*, 1956.

Bradshaw, Charles L., "Real Time Testing in the Saturn Program," Control Engineering, 1962.

UPDATES