

5 January 1971

FOOTE, EDWARD BURTON

#### EDUCATION

Rutgers University, 1947-1951, B.S. in Mathematics and Agriculture.

Military Service - U.S. Army Air Corps, 1944-1946, Sergeant.

#### SUMMARY

Sixteen years in design and development of programming systems. These activities included:

- o Original creation and implementation of JOVIAL
- o One of the first time-sharing one pass interactive compilers JTS
- o Modifying the FORTRAN H language for parallel processing programs operating on a multiple CP computer

#### PRESENT POSITION

Advisory Programmer, IBM Corporation, Center for Scientific Studies, Westlake Village, California.

Two years on the design and development of a FORTRAN H compiler to produce operating parallel processing programs for a multiple CP computer. Specifically, the activity consisted of:

- o Specifying additional FORTRAN tasking language to achieve parallel processing.
- o Providing reentrant I/O tasking for all FORTRAN I/O with interjob release of the CP.
- o Providing new user-controlled asynchronous reentrant I/O subroutines with I/O tasking.
- o Designing a reentrant technique for FORTRAN code, subroutines and tasks.
- o Designing reentrant linkage and parameter passing for FORTRAN tasks and subroutines.

#### PREVIOUS EXPERIENCE

Raytheon Corporation, June 1968 - January 1969, Senior Engineer

monitoring and coordinating a contract for a SAMD support system. This included the interfacing, testing and acceptance of a JOVIAL compiler, compool generator, compool environment program and a WCC simulator, all running on the Univac 1108 for the WCC computer, and an executive program for the WCC computer.

System Development Corporation, May 1958 - June 1968, Computer Systems Specialist.

1967-68 Conversion of TINT, an interactive JOVIAL interpreter operating under time sharing, from the IBM Q-32 to the IBM 360. Design and implementation of programming techniques for time sharing in the ADEPT system on the IBM 360, including a page marking method which saves 40% of program swapping, and a standard quality control program.

1962-66 Design and implementation of a one-pass compiler operating under time sharing (JTS), general utility routines for time sharing and a J3 compiler, all on the IBM Q-32. Adaption to developing user needs in time sharing, including compatibility of compiler with an interpreter and compiler interaction with an editing system. Study of the addition of a programming capability for the user of an experimental data retrieval system operating under time sharing (TDMS).

1959-61 Design and implementation of a JOVIAL interpreter (JO), JOVIAL compilers (J1, J2), involving the IBM 709 and IBM 7090. Installation of the JOVIAL compiler at Omaha, including briefings, demonstrations and final acceptance tests. Installation of the JOVIAL compiler at Santa Monica, including adaptations to run under the operating system, development of operator procedures, informal instruction of other programmers in JOVIAL techniques and capabilities, and revision of JOVIAL programs written for other operating systems.

Curtiss Wright Corporation, October 1955 - May 1958, Mathematician analysis and programming of engineering problems on the IBM CPC, IBM 650 and IBM 704.