GLOSSARY

The following is a list of computer terms, presenting part of the basic vocabulary of computer technology.

Accumulator: the part of the computer that stores results of arithmetic or logical operations.

Address: a number, name or label identifying a specific location within a computer's memory apparatus, or identifying a peripheral device.

Alphanumeric: pertaining to a set of characters that contains both letters and numerals.

Analog: denotes the use of physical variables, e.g., distance, rotation, or voltage, to represent and correspond with numerical variables that occur in computation; contrasts with Digital.

Analog computer: a computer that operates on analog data by performing physical processes on these data.

Binary: a numbering system using only the digits 1 and 0. A binary choice is one made between two alternatives.

Binary notation: the writing of numbers in the scale of two. Numbers zero to eleven are written as 0, 1, 10, 11, 100, 101, 110, 111, 1000, 1001, 1010, 1011. The position of the digits designate powers of two; thus, 1010 means 1×2^3 or 8; 0×2^2 or 4; 1×2^1 or 2; and 0×2^0 or 1. This equals one 8 plus no 4's, plus one 2, plus no 1's, or 10.

Bit: an abbreviation of Binary digIT (either 1 or 0).

Cathode ray tube: a vacuum tube in which cathode rays usually in the form of a slender beam are projected upon a fluorescent screen that serves as an anticathode where the rays produce a luminous spot. Sometimes called display tube.

Character: one of a set of elementary marks, such as numerals or alphabetic letters, or events, which may be combined to express information. A character includes all the marks, such as a group of holes punched in a tape, which are necessary to completely identify it.

Compiler: translates a problem from arithmetic statements as written by the programmer into machine language instructions as understood by the computer.

Computer: a device capable of solving problems by accepting data, performing prescribed operations on the data, and supplying the results of these operations.

Console: location of computer controls, as well as various lights, cathode ray tube display.

Coordinates: the positions or relationships of points or planes.

Data: any facts or information, particularly as they are taken in, acted upon, or emitted by a machine used for handling information.

Decimal digit: one of the numbers 0 through 9 when used in the scale of ten.

Digit: one of the symbols 0 through 9 when used for numbering in the scale of 10, regardless of position or the type of Code in which they appear.

Digital computer: a computer which produces results from numeric information only, and performs operations by means of counting, rather than measuring as in analog computers.

Disc: a set of magnetic plates on which information is stored on both sides.

Drum: a magnetic cylinder on which information is stored.

Hardware: the physical assembly of the computer and its accessories, as distinguished from the programs known as "software."

Input/Output (or I/O): devices used to connect the computer with the operator; e.g. printers, tapes, card readers, etc.

Iteration: repetition of a small series of simple steps to perform difficult calculations.

Keyboard: part of a device that punches holes in a card or tape to represent data, or a device that communicates directly to a computer.

Library: set of useful routines stored within the computer, available to all users.

Lightpen: a hand-held pen-like device containing a photocell or photomultiplier, used for guiding the generation of lines on the display.

Machine language: instructions written as binary codes.

Memory: a term referring to the equipment and media used for storing information (data and instructions) in machining-language electrical or magnetic form.

Numerical control system: a system in which actions are controlled by the direct insertion of numerical data. A numerical control (N/C) machine must automatically interpret at least some portion of the data.

Object program: assembled or compiled program in machine language.

Offline operation: operation of peripheral equipment such as card readers and magnetic tapes independent of the central processor of a computer system.

On-line operation: operation of input and output devices interacting directly with the central computer.

Optical scanner: a device that optically scans printed or written data and generates their electrical representation for input to the computer.

Plotter: automatic drawing equipment controlled by a tape or directly by a computer.

Printer: an output mechanism which prints or typewrites characters.

Processor: that portion of a computer which controls the operation input and output devices and operates on the received, stored, and transmitted data. Its circuitry includes the functions of memory, logic, arithmetic, and control.

Program: a set of instructions for the computer that defines a desired sequence of conditions for a process or function, and the operations required between these conditions.

Punched card: a card of constant size and shape, suitable for punching in a meaningful pattern and for mechanical handling. The punched holes are usually sensed electrically or mechanically.

Punched tape: paper tape into which a pattern of holes is so punched as to convey information.

Random access: indicates equality of access time to all memory locations, without dependence on the location of the previous memory reference.

Real time: computer takes data, makes decision, and responds with solution within same time span as real life phenomena.

Register: part of computer storage device where data may be operated on.

Routine: a set of instructions arranged in the correct sequence to direct the control computer to perform one or a series of operations. A portion of the total program.

Software: program; the means of communication with the machine as distinguished from the hardware.

Time-sharing: process in which computer switches rapidly from one problem to another, giving to each of a number of human users the illusion of working upon his problem all of the time.