APPENDIX I

GLOSSARY

A

ABORT— Procedure for terminating a program when a mistake, malfunction, or error occurs.

Ada— A high-level programming language designed by the Department of Defense.

ADDRESSING— Locating a required piece of data by specific techniques.

ARITHMETIC-LOGIC UNIT— The part of the cpu that contains the logic capability and performs all the arithmetic functions (addition, subtraction, multiplication, and division).

ARTIFICIAL INTELLIGENCE— The capability of a machine to perform human-like intelligence functions, such as learning, adapting, reasoning, and self-correction.

ASSEMBLER— A computer program that translates assembly language programs into machine language (object) programs.

B

BASIC (Beginners All-Purpose Symbolic Instruction Code)— A high-level, general-purpose programming language used primarily on microcomputers.

BIT MAPPING— A data structure that describes a bit image being held in computer storage.

BUBBLE MEMORY— Method by which information is stored as magnetized dots (bubbles) that rest on a thin film of semiconductor material.

C

C++— An object-oriented version of the C programming language.

CACHE MEMORY— A faster memory in which parts of the information in the main (slower) memory or disk are copied.

CARRIER PACKAGE— The portion of the microprocessor chip that plugs into the motherboard.

CERTIFIER— The piece of equipment that is used to certify magnetic tape and check for errors.

COBOL (COmmon Business Oriented Language)— A high-level programming language designed for business-type applications.

COMPILER— A program that translates a source program written in a high-level programming language into machine language.

CONTROL MEMORY— RAM consisting of addressable storage registers, primarily used in mini- and mainframe computers.

D

DEGAUSSER— Device used to erase information from magnetically recorded media, such as a floppy disk or magnetic tape.

DIAGNOSTIC LIGHT-EMITTING DIODES— Indicator lights used to help isolate a hardware failure.

DIAGNOSTIC ROUTINE— Routine designed to locate a malfunction in the central processing unit or a peripheral device.

DISTRIBUTED SYSTEM— A computer system designed to operate as a communications network with al1 its terminals linked to a remotely located central processing unit.

DUPLEX— Pertaining to a communications system or equipment capable of transmission in both directions.

E

EXTERNAL DIAGNOSTICS— Diagnostics that can be run from a peripheral device.

F

FILE FRAGMENTATION— Files that are split into many noncontiguous areas on the disk.

FINITE— To have limits, an end, or a last number.

FIVE-PIN CONNECTOR— A connector that has five pins, usually used to connect a keyboard to the CPU.

FORTRAN (FORmula TRANslator)— A high--level programming language for scientific and mathematical applications.

H

HARD-SECTORED— Wedge-shaped storage division on a floppy disk from time of manufacture.

HIERARCHICAL DIRECTORY— A term used to refer to the organizational method of arranging files either in a DOS tree structure or in the file-and-folder method.

HUB— The center part of the tape reel that attaches to the tape drive.

HYPERTEXT— A document retrieval network having till-text files and dynamic indexes for links among documents.

HYPOTHERMAGRAPH— A piece of equipment that is used to record the temperature and humidity in a computer room.

I

INSTRUCTION AND CONTROL— The portion of the control section that includes the combinational and sequential circuits that make up the decision-making and memory-type functions.

INTEGRATED CIRCUIT— A miniaturized chip in which semiconductor components and other such technology combine the functions of a number of conventional components (such as transistors, resistors, capacitors, and diodes).

INTERNAL DIAGNOSTICS— Diagnostics that are run when the computer is started.

IPL (Initial Program Load)— A set of instructions that cause other instructions (the operating system) to be loaded into the main memory of the computer. This must be done each time the computer is turned on.

J

JULIAN DATE— Form of calendar representation within a computer system, indicating the year and the number of elapsed days in the year.

L

LETTER-QUALITY MODE— The mode that produces high--quality printed output from a printer.

LIBRARIAN— Person responsible for the safekeeping of all computer files, such as diskettes, disk packs, and magnetic tapes.

LOCAL-AREA NETWORK— A network that normally operates within a well-defined and generally self-enclosed area. The communication stations or terminals are linked by cable.

M

MAGNETIC CORE STORAGE— System of storage in which data is represented in binary form by means of directional flow of magnetic fields in tiny, doughnut-shaped arrays of magnetic cores.

MAGNETIC DOMAINS— The data that is stored by changing the polarity of the magnetized dots (bubbles).

MAINFRAME COMPUTERS— This term is usually used to designate large-scale computer systems, although the precise definition of mainframe is the cpu and the control elements of any computer system.

MATRIX— Orderly array of symbols by rows and columns.

MINICOMPUTERS— Midsize computers that are smaller than large-scale systems but with the same components. They are less expensive and have less strict environmental requirements.

MODEM— A device that converts data from digital to analog format for transmission on analog transmission lines, and also converts data in analog format to digital format for computer processing.

MULTIPLE-FILE DIRECTORIES— An option of the operating system that allows for several files to be contained in a directory.

N

NONVOLATILE STORAGE— Storage medium that retains its data in the absence of power.

O

OXIDE— A ferrous material that can be magnetized; also, the recording side of the magnetic tape (dull side).

P

PARALLEL PROCESSING— Handling all the elements of a word or message simultaneously.

PASCAL— High-level structured programming language that has gained wide acceptance as a tool for both applications programming and system development.

PENTIUM CHIP— A processor chip that can execute many instructions at the rate of two instructions per clock cycle.

PERIPHERAL EQUIPMENT— Equipment used for data entry, storage, or retrieval, but which is not part of the central processing unit. Peripherals include crt displays, terminals, printers, and mass storage (tape, disk, and drum) devices.

PHOTOELECTRIC CELL— A mechanism that when activated by a light source emits an electrical impulse.

Q

QUERY— To make a request for information from a database system.

R

RECONCILING— Refers to the correcting of processing discrepancies.

RELATIONAL DATABASE— A database organization scheme that treats files as tables of data in which the rows represent fixed-length records and columns represent fields.

RIGID— Refers to the hard metal platters (usually constructed of aluminum or glass) that comprise a hard disk.

S

SCHEMA— Structure for organizing knowledge relative to context or expectations.

SCRATCHING MAGNETIC MEDIA— Making the magnetic media available to the computer operator for reuse.

SCSI ADAPTER— A general purpose parallel interface designed for connecting one or more computers and one or more peripherals. A total of 8 devices may be connected to one bus.

SEMICONDUCTOR— A crystalline substance that conducts electricity when it is “doped” with chemical impurities.

SERIAL— Pertaining to the sequential occurrence of two or more related activities in a single device.

SILICON CHIP— Tiny portion of a silicon wafer with thousands of electronic components and circuit patterns etched on its surface.

SIMPLEX— A mode of data transmission in which data can travel in only one direction on the line. When a terminal is connected to such a circuit, it can be used to either receive or send data to the cpu but not do both.

SINGLE-FILE DIRECTORIES— An option of the operating system that allows for only one file to be contained in a directory.

SOFT-SECTORED— Method of marking sectors or sections on a disk by using information written on the disk.

SPECIAL FUNCTION KEY— Key on a keyboard to control a mechanical function, initiate a specific computer operation, or transmit a signal that would otherwise require multiple key strokes.

STAND-ALONE— Self-contained computer system that can work independently, not connected to or under the control of another computer system.

STRIPPING— The removing of the first 100 feet of the magnetic tape. This is the portion that becomes contaminated and causes the most errors.

SUBSCHEMA— Logical organization of data required for a particular program.

SURGE PROTECTOR— Device that protects electrical equipment from being damaged by short surges of high voltage by filtering them out.

T

TIMING— The regulation of the flow of signals that control the operation of the computer.

TREE STRUCTURED DIRECTORY— A disk containing a root directory and several subdirectories.

TWENTY-FIVE PIN SERIAL CONNECTOR— A serial connector that has twenty-five pins, usually used for connecting a printer or monitor to the CPU.

U

UNIX— An operating system that has many high-level utility programs; it is capable of running a number of jobs at once.

UNSTRUCTURED DIRECTORY— A disk with only one directory contained on it.

V

VIRUS— A computer program which can wreak havoc on a system, either by destroying data or simply changing and slowing up the processing of the system.

APPENDIX II

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

A

ABEND— Abnormal end of job.

ALCS— Automated library control system.

ALU— Arithmetic/Logic unit.

ATLC— Automated tape library control.

C

CAD— Computer-aided design

CMOS— Complementary metal oxide semiconductor.

CODASYL— Conference on data systems languages.

COOP— Continuity of operations.

CPU— Central processing unit.

D

DASDI— Direct access storage device initialization.

DBMS— Database management system.

DBTG— Database task group.

DDL— Data definition language.

DML— Data manipulation language.

DOS— Disk operating system.

DTP— Desktop publishing.

E

EPROM— Erasable programmable read-only memory.

I

IC— Integrated circuits.

IPL— Initial program loading.

L

LAN— Local--area network.

LQ— Letter quality.

LSI— Large-scale integration.

M

MODEM— Modulator-demodulator.

P

PROM— Programmable read-only memory.

Q

QWERTY— Refers to the letter sequence QWERTY on the keyboard.

R

RAM— Random-access memory.

ROM— Read-only memory.

S

SOP— Standard operating procedure.

SYSRES— System resident.

U

UWA— User work area.

V

VLSI— Very-large-scale integration.

W

WORM— Write once, read many.

WYSIWYG— What you see is what you get.

APPENDIX III

REFERENCES USED TO DEVELOP THIS TRAMAN

NOTE: The following references were current at the time this TRAMAN was published, but you should be sure you have the current editions.

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