

**T H E J U D I C I A L  
C O M P U T E R D I C T I O N A R Y**

**Edited by Judge David L. Phares**

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The Judicial Computer Dictionary

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Edited by  
Judge David L. Phares

\* (asterisk) prep: Because most computers and printers do not have a times sign, languages often use an asterisk to indicate multiplication. Thus when you see "A \* B" it means A times B.

(slashed "0" or zero) n: To prevent confusion between the letter "O" and "Zero", most computers, as well as computer software and languages, use a slash though the zero.

ACCESS v: To gain the use of, such as a mainframe computer, by means of a modem or a direct line. One can also be said to ACCESS the hard disk when you either read from, or write to, the drive.

ACCESS TIME n: The time interval between the instant at which data are called for from a storage device and the instant delivery is completed. This is a major factor of consideration in the purchase of data storage devices such as hard disk drives, especially in court automation systems where the court information system accesses the hard disk frequently.

ACOUSTIC COUPLER n: One of the earliest methods to connect a modem to a phone line. You have the modem make noises into the phone mouthpiece. Generally the phone will rest in the device on a desk. There are some problems with this type of modem, such as they can pick up outside noises that can cause interference. (see modem)

ADAPTER n: A piece of hardware that connects a computer and an external device, i.e. a printer adapter.

ADMINISTRATOR n: A person responsible for the design, planning, installation, configuration, control, management, and maintenance of a computer network or computer system. (Sound familiar, judge?)

ACTIVE PROGRAM n: A program that is currently running on the computer. Contrast with an "Inactive program" which

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may be in memory, but is not actually processing at the time.

**ADDRESS n:** Each location in a computer memory is numbered consecutively. The number is referred to as the location's address. This becomes important to programmers, but seldom does a judge need to deal with memory address unless there is a conflict between two programs that want that same memory. (see Ram Resident)

**ALPHANUMERIC adj:** A combination of alphabetic and numeric symbols such as A B C or 1 2 3 (letters and numbers).

**ANALOG Adj:** Describes an electrical signal, commonly used by telephone systems, where the strength or intensity of the signal is "analogous" to the physical quality of the information, hence the name. An example would be in a voice (telephone) signal, a higher voltage represents a louder sound. Because any change in the signal changes the information, they are subject to noise interference.

**A N S I n:** An acronym for American National Standards Institute. They are looked to by the computer industry to set standards for various functions such as the format structure of storage media, etc.

**ANSI.SYS n:** A set of instructions in the form of a computer file, that is loaded into a digital computer at the time of start-up through the CONFIG.SYS file. ANSI.SYS is known as a "Device Driver" in that it controls a number of functions just as a hardware "device" would. Many software programs require that ANSI.SYS be installed in order for them to run properly.

**APPLICATIONS SOFTWARE n:** One of the two major types of software for digital computers. Applications Software is software that is intended to perform a job related task for the user such as word processing, a spreadsheet or database.

**ARCHITECTURE n:** The organization of a computer's registers, memory elements, and other components is frequently referred to as its "architecture."

**ARCHIVE (1)n:** A software application designed to compress and combine files into smaller files for storage or transmission via telecommunications. In court computer systems a good Archive system can save the court large amounts of disk space, thus reducing the overall cost of the system. (2) v: To store a file for later retrieval. Most states have statutes or rules that require that court files be archived

for a specified number of years. Automation systems for archiving of court records greatly reduces the amount of space necessary to store, and the amount time necessary to relocate, these records.

**A S C I I n:** An acronym for American Standard Code Information Interchange. Pronounced "Askee." This is a coding scheme where letters, numbers and special symbols are represented as unique 7-bit values, allowing for standardization between data communication devices. It is used by most micro-computer makers and authors of text editors.

**AUTO ANSWER n:** A feature of telecommunications that allows the modem to respond to an incoming call without the user having to execute any commands from the console of the computer. For the judge it means that he can have his communications software running in background (see BACKGROUND) and it will answer the phone without his attention. AUTO ANSWER is a feature of most all modern modems.

**AUTO DIAL n:** A feature that enables a computer's modem to dial a telephone number and make connection by itself. This is handy when you have a large number of remote computers you want to access or you access one terminal often. This function requires both the modem and the communications software to have the capability to AUTO DIAL. (see modem)

**BACKGROUND n:** Certain operating systems, in combination with hardware and software, allow the user to perform two or more functions at once. This is called Multi-Tasking. Generally, one of the tasks being performed is shown to be running on the screen of the monitor. The other task, or program, such as printing or telecommunications, takes place without the activity being displayed on the monitor. Thus the non-displayed activity is said to be taking place in BACKGROUND.

**BACKUP n:** A copy of a program, or data file, made as insurance, in case the original gets lost or damaged. You ALWAYS make backups of important data files, and you ALWAYS work with the work copies, never the backup copies. With a hard-disk system it is not unusual to back up with a tape cassette, removable hard disk cartridge, or an optical disk system.

**BAR CODE n:** A system of data entry where a light is used to read a series of variously sized lines and spaces which represent data to be entered into a computer. Bar Codes have been used in commercial systems for years and are just recently being accepted in court information systems. Bar Code

systems excel in rapid, accurate data entry when compared to typing data into fields by a data entry person.

**BASIC n:** A very popular programming language designed to be used by new programmers. BASIC is relatively easy to learn, and is a HIGH LEVEL language most often included with the micro computer operating system when you buy it.

**BATCH adj:** A term used to describe the processing of data, or the running of programs, by a pre-determined order and process. A typical court application of a "batch processing" function would be having the computer print out all the subpoenas, or notices, at night so they would be ready to be sent out the next day. "Batch Processing" can save hundreds of hours of court personnel time every month.

**BATCH FILE n:** A file that runs directly from the operating system, that contains a number of commands programmed to run one after the other without further input by the operator. An example would be the AUTOEXEC.BAT file in the PC-DOS and MS-DOS system. When you turn on the machine you can tell it to do anything you want it to do, and run any program by typing in the necessary commands in an AUTOEXEC.BAT file, and the machine will do it, automatically. In DOS the extension on the name of all BATCH FILES is .BAT, and in OS/2 it is .CMD.

**BAUD n:** A term used to describe the rate of transmission of data, either internally within a computer or through a modem: usually bits per second. Thus, a modem that is transmitting at 1200 baud is sending approximately 1200 bits of information. The most common modem BAUD rates are 1200 baud, 2400 baud and 9600 baud, however speeds of over 119,000 baud are attainable in a hard-wire configurations on some personal computers.

**B B S n:** An acronym for Bulletin Board System. Software that allows the operator (known as the System Operator, or Sysop) to turn his computer and modem into a public, dial-up, kind of mail room. Remote computers can dial-up on public phone lines and log on to the system. Once on line they can leave and retrieve messages, down-load or up-load programs, or read news items placed there by either the Sysop or other users. Judges have thier own B B S in the form of the National Judicial Network, which consists of state and regional B B S boards in conection with the National B B S software running out of Gilbert, Arizona (602-926-9733).

**BI-DIRECTIONAL PRINTING n:** After printing a line from left to right, many dot matrix and daisy wheel printers save time by printing the next line in reverse - from right to left. The computer/printer combination can do this because it can look at text at more than one line at a time, as opposed to one word at a time as we mere mortals do. This can speed up printing time by as much as 30%.

**BINARY n:** The number system that digital computers use is called binary. It uses only two digits, 1 and 0. This is because the electronic circuits used in a computer have only two states: on and off. An example of a binary number would be: 01111, which in our usual decimal numbering system would equal 15. So, if you were to sentence someone to 15 years in prison in the binary system it would be 01111 years. Obviously you do not want to mix up the systems!

**BIOS n:** Stands for Basic Input-Output System. It is the set of computer commands, generally found in the Read Only Memory (see ROM) of the computer, that controls the input of instructions and data to the CPU from the Keyboard, Mouse, Modem, Disk drives etc., as well as the output to the monitor, Disk drives, printer, etc. It is sometimes called the ROM-BIOS. It participates with DOS to run the computer system.

**BIT n:** This is the smallest unit of information. One bit is enough to tell the difference between yes and no, up and down, or on and off. Most computers must represent all information in opposites because their circuits only have two states: on and off.

**BOOT (1)v:** To start up a computer system. There are two common types of BOOT. COLD BOOT, which means the computer started from when the power is completely off, and WARM BOOT, which means that you are only clearing the registers and memory and are reloading the operating system. (2)n: What most judges would like to give the computer salesman who was less than truthful when selling the court an information system.

**BRIDGE n:** A type of product that links different Local Area Networks (see LAN), enabling users on one network to use all the resources available on the other. A Court LAN may utilize a BRIDGE to communicate with either the Jail LAN, the Prosecutor's LAN, or the Public Defender's LAN.

**BUFFER n:** A temporary storage area for data. It is often used when data is being transmitted faster than a particular piece of hardware can handle it. An example would be a printer. Often it will have a

BUFFER to store data to be printed because it received it faster than it can print it.

BUS (1)n: A conductor, or a group of conductors, serving as a common connection for two or more circuits. Within a computer the data is transferred from one part of the machine to another along a BUS. Generally speaking, all other factors being equal, the larger the bus the faster the raw computing speed of the computer. BUSES are measured by the number of data bits they can handle at one time; i.e. 8, 16, 32, etc. (2)n: A broadcast arrangement in a network where all stations receive the same message through the cable at the same time.

BYTE n: An amount of storage needed to save one character of information. Originally defined as a sub-division of a long computer word, a byte has come to mean a piece of information 8 bits long. (see Bit)

CARRIER n: The tone that a modem hears when the modem at the other end of the line is listening, but not transmitting information. Its disappearance means the connection is broken, and must be re-established prior to continued transmission of data.

CACHE n: A portion of memory that stores data that is accessed from the hard disk drive frequently. The CPU can thus find it quicker, and this speeds up the processing time. Most recent disk caches comprise hardware and software working together.

CHAINING n: If a program requires the running of an additional, independent, program or file in the middle of its function, the activating of that second program is called chaining. In the MS-DOS and PC-DOS systems Batch Files contain a number of commands that can "chain" a series of programs to run one after another without further input by the user.

CHIP n: A tiny bit of silicon that forms the heart of the integrated circuit, or it may also refer to the entire integrated circuit. This is one of those things inside a computer that most judges need know very little about, other than they are there.

CIRCUIT BOARD n: A printed circuit on a non-conductive material with electronic components mounted on it and soldered in place. (see MOTHER BOARD)

CLEAR v: The process of setting the contents of a "register", "flag" or "memory" at zero. When you CLEAR a micro-computer it generally means that you have erased the random access memory or have "warm booted" the machine. (see BOOT)

**CLUSTER n:** A group of micro-computers in a single locale, contacted together for multi-tasking and shared use of each other's data base. This differs from non-local "networks" in that with "networks" the computers are all in different locations, and connected by modems and telephone lines. A CLUSTER is a form of Local Area Network (LAN).

**COAX or COAXIAL CABLE n:** A type of network media. Coaxial Cable contains a copper inner wire surrounded by plastic insulation and then a woven copper or foil shield.

**COBOL n:** A programming language designed specifically for business and data processing work. It would not be uncommon for a court program to be written in COBOL, however it is very slow to write and edit. In most applications a judge would not be trying to change a program written in COBOL.

**COMPRESS v:** To reduce the size of a file by encoding the redundant information in it. Courts will often find that when a case is terminated it is time de-activate that case. We can use a form of ARCHIVE technology to combine all the documents of a file into one archived file and compress them down to about one-half their original size. Then when we want to edit, or print, one of the documents we can de-archive or de-compress them for use.

**COMPUTER n:** An electronic device which manipulates data according to a series of instructions stored in its memory. The unique thing about a computer is that you can change those instructions at will, thus the computer becomes THE most versatile machine ever given to a judge to help him be a better decision maker.

**COMPUTER CARD n:** A circuit board that, rather than being built into the computer, can be added on later to increase the capabilities of the computer. Typical applications would be to enable the computer to display color graphics, connect a modem, or expand the internal memory from 640K to 1 megabyte or larger. (see RAM) Some accounting programs suitable for courts require over the 640K of memory most computers come with today, thus the need for an expansion card.

**COMPUTER LANGUAGE n:** A computer program that interprets English type commands into a string of 1s and 0s which a digital computer can understand. Like any language, a means of exchanging ideas and information. Also, like other languages, computer



languages have vocabularies, syntax rules and even grammar. Computer languages are used to write the logical series of instructions that tell a computer to perform a task.

**COMPUTER SCIENCE n:** The art of solving problems with computers. Courts have lots of problems that lend themselves to this type of problem solving. **COMPUTER SCIENCE** includes the design and production of hardware, software, and operating systems.

**CONCURRENT adj:** A computer is capable of concurrent tasking if it can perform more than one job at a time. An example would be if the computer can print out the day's court calendar while accessing NCIC at the same time. This requires a "concurrent operating system." Also known as **MULTI-TASKING**.

**CONFIG.SYS n:** A file that is read by the computer at the time of start-up. This file is tailored to the particular hardware and software in order to make the computer function at optimum level. If you use a mouse with your computer, you will need to install a command in the **CONFIG.SYS** file telling the machine that a mouse is installed, which port it is attached to, and what the name of the mouse "driver" file is. The **CONFIG.SYS** file is loaded into the computer as part of the Disk Operating System. The use of the **CONFIG.SYS** file is one way that users "Configure" a computer with software. (See **CONFIGURE**)

**CONFIGURE v:** To set the hardware or software up for use. Since there are many types of programs and many types of computer, often it is necessary to customize the program to fit the computer. This goes for printers as well as computers. In order to use most printers with a particular computer it is necessary to "configure" the **SOFTWARE**, that is tell the program what kind of the printer you are using, and thus what kind of signals to send to that printer.

**CONNECTIVITY adj:** The ability to connect two computers together, and make them share data and function, when they have differing operating systems and hardware configurations. An example would be to **CONNECT** an Apple computer to an IBM Personal Computer and have one run the software of the other. Another application would "connect" an IBM PC with a mainframe computer. Communications protocol becomes very important here.

**CONTROL CHARACTER n:** A character that is not intended to be printed, but which gives the computer instructions

as to what to do. A CONTROL CHARACTER is generally created by holding down the control key while depressing another alphabetic key. An example would be that in some computers you can clear part of the computer's memory by typing a ^C. CONTROL CHARACTERS typically are preceded by a ^ mark on the screen.

CP/M n: The most popular type of 8-bit micro-computer operating system. It stands for "Control Program for Micro-processors", and is a trademark of Digital Research, Inc(c). Osborne, Kaypro, early Xerox, and Morrow are all examples of CP/M computers.

C.P.S. n: Stands for "Characters Per Second" and is most commonly used in describing printing speed of computer printers. A typical dot matrix printer will run at 120 to 200 cps, while a "letter-quality" printer would type in the area of 30 to 65 cps. There are a number of printers now that will print in excess of 300 to 400 cps.

C.P.U. n: Stands for "Central Processing Unit", and it can mean either (1) the micro-processor chip that does a majority of the actual computing (such as the Intel 8088, 8086, 80286, 80386, NEC v20, v30, ect.) or (2) The box that contains the micro-processor, the Random Access Memory, internal storage devices, bus, power supply, ports, clock, etc.

C.R.T. n: This is the picture tube or video screen on most tabletop computer terminals. It stands for Cathode Ray Tube, and the most popular ones are in green, amber or full color. Prices range from \$75.00 for a mono-chrome green or amber CRT to well over \$1000 for VGA or higher resolution color displays.

CURSOR n: (1)A flashing line or block of light on the screen of a computer monitor that indicates the operator's location. Much the same as a pencil point as it is placed on a new sheet of paper. It is the location on the screen where the next text or command will be entered. (2) A computer user who is unable to control his or her anger and vocabulary.

CURSOR CONTROL KEYS n: Four keys, generally found on the right side of the keyboard, each marked with a arrow in a different direction, that when pressed causes the CURSOR to move in that direction.

DAISY WHEEL n: A type of printer element that resembles a flower, in that each spoke or petal contains a different symbol at its end. This symbol is then pushed against the ribbon to strike the paper. In use the wheel spins constantly until the desired character is in position to be printed.

Generally the quality of print is better than a dot matrix printer, but they are also slower and you have to change wheels to change print fonts. DAISY WHEEL printers fall into the "Contact" type of printer in that they actually make contact with the printed page.

**DATA n:** The information that the computer manipulates is called data, and it can be anything that can be expressed by patterns or numbers.

**DATA BASE n:** A very common type of software that is an electronic record keeping system. A sort of computer file cabinet, that divides information into a database, which is comprised of records, which in turn is comprised of data fields and data elements. A cook's recipe box is a form of database. Computer databases allow for file searching that greatly speed up the process, as well as complex report writing. Most court management systems a combination of database and financial applications.

**DEFAULT n:** Some computer programs allow you some options in the use of those programs. If you do not pick one of the options, one is automatically assigned by default. An example is in WORDSTAR, the word processing program. If you do not set the margins, the program will use the default setting of 0 on the left margin and 65 on the right margin.

**DESK-TOP PUBLISHING v:** The use of a PC, along with a high end printer, to produce documents that would normally have been sent to a print shop for production. These productions would include both text, in various fonts, as well as high quality graphics. DESK TOP PUBLISHING will generally require the use of at least an EGA quality monitor, a mouse, some form of an image scanner, and a laser printer for highest quality results.

**DIGITAL Adj:** Describes a type of electrical signal, and the related technology in which information is coded as a series of pulses or transitions. The pattern of the pulses, rather than the intensity, as in analog signals, determines the meaning of the signal, and can be easily manipulated using rules of Boolean logic. (see State v. Boolean, 1968)

**DIGITAL COMPUTER n:** A machine for doing work that works on the process of counting, rather than measuring, as an "Analog computer" does. Virtually all computers used in court environments are DIGITAL COMPUTERS.

**DIRECT CONNECT MODEM n:** A modem that is connected

directly to the phone line without the use of an actual telephone, and an accoustic coupler. The computer serial I/O port (COMM Port) is connected to the modem, and the modem to the wall jack of the phone line. Some computers come with the DIRECT CONNECT MODEM built into the computer. Often a DIRECT CONNECT MODEM will be installed inside the computer in one of the expansion slots. (see I/O, MODEM, or SERIAL)

DISK n: A magnetic disk is a thin disk of magnetic material capable of storing large amounts of information. A typical "floppy disk" about the size of 45 rpm record could hold as much as 250 to 500 sheets of paper data equivalent. The disk spins rapidly and heads similar to those in a tape recorder read and write information onto, and from, the DISK in concentric tracks (like a spiral).

DISK CONTROLLER n: A computer system component (most commonly found on a seperate circuite board, but some times included on the main "mother board" in newer systems) which commands the disk drive functions, including positioning of the read/write head.

DISK DRIVE n: In a micro-computer the disk drive houses the disks, keeps them spinning at the correct speeds, and moves the read/write heads into proper position when information must be read from, or written to, the disks. Most personal Computers label the DISK DRIVES as "Drive A", "Drive B", etc.

DISK PACK n: A removable hard disk unit where a special disk drive is installed in the computer, and the hard disk itself is removable for storage and security. Disk Packs are an excellent choice for small courts to secure their data at night in a safe, however they do tend to be expensive compared to a fixed disk drive.

DOCUMENTATION n: When a computer program is designed for use, it needs the written instructions for the computer user to follow to make the program run on the computer. These written isntuctions, in a book form, are called the documentation. The most recent "user friendly" programs require little or no previous computer experience, and have good documenta-tion that is easy to read and understand. Some less expensive programs have the documentation in a file on the disk. This kind of a file is commonly called a DOC file, and can be identified by the extention of .DOC after the name of the file, i.e.: GALAXY.DOC.

DOS n: Stands for Disk Operating System, and is the program that takes care of the details of manipulating information on a disk and in memory. A good DOS program will allow you to copy files, erase files, give a directory upon request, print files, and do many other functions. The most popular DOS's for judicial applications on personal computers are MS-DOS, IBM PC-DOS, OS/2, and UNIX.

DOT MATRIX n: A type of display that is comprised of many small dots that are either on or off. Dot Matrix characters are easy to alter and modify, but unless there are many dots in the matrix they lack definition.

DOT MATRIX PRINTER n: A printer that works by driving needles against a ribbon and paper. The resulting images are formed of dots. Generally not as handsome as standard type, but they are cheaper, faster and more flexible. Many better DOT MATRIX PRINTERS are also very good at printing graphic images.

DOWN LOAD v: To transfer data or a program from a central computer to smaller remote computer.

DUMB TERMINAL (1) n: A device that looks like a computer, but actually will only display what it is sent by another computer, and it does not pretend to do anything else. It does not contain a micro-processor to manipulate information. (2) Adj: To be so stupid you are going to die from it.

DYNAMIC MEMORY n: A semiconductor memory chip whose contents slowly fade away, even while electrical power is being applied, unless constantly rewritten or re-freshed. Most personal computer memory chips (see RAM) falls into this category, and are known as DRAMS.

ECHO (1)v: When data or commands are being transmitted the receiving device re-transmits or "echoes-back" the information so that the originating device can be sure it was received correctly. (2) v: The act of a computer to report to the monitor or CRT what is taking place in the CPU. Example: When you type the letter R from the keyboard, the CPU will ECHO that input to the CRT so the user will be able to confirm the key stroke was received by the CPU.

E G A n: Stands for Enhanced Graphics Adapter, and is an add-on board first devised by IBM to allow for much higher resolution from Color Monitors which support that standard. Generally speaking early Color Monitors did not offer the same high resolution as monographic monitors did, and the EGA standard solved that problem. The EGA Adaptor does require a higher resolution monitor, however. Since its first appearance on the

market many other companies have added an EGA to their product line. The EGA monitor will display up to 64 colors at a time at a resolution of at least 640 pixels across and 350 pixels down the screen (see PIXEL).

**ELECTRONIC MAIL n:** On most computer networks, users have the option to send messages to one another. This message may be left in a file for the recipient to "down load" to his own computer at any time he wishes. The user can call up the network and ask if there is any "mail" for him, "down load" the mail, and print a hard copy, if he wishes.

**E M S n:** Stands for Enhanced Memory Standard, and is a set of microcomputer standard configurations that allow the computer to address (or look at at one time) over 640 Kilo-Bytes of memory at one time. This allows the microcomputer to use programs which typically use large amounts of memory like databases and spreadsheets.

**EMULATION n:** The flexibility of the computer is shown in the fact that they can be programmed to act like a different computer all together. A small, portable computer with the right software can be made to appear like a giant, main-frame computer. This act of immitation is called EMULATION, and it greatly enhances the applications of computers.

**ENDLESS LOOP n:** See Loop, Endless

**ERGONOMIC adj:** The design of objects that relates to the relative comfort of the human being using them. In modern computer technology great care is being taken to design machines and furniture that will not tire, or create stress within, the user.

**ESCAPE KEY n:** This key is found on many computer keyboards. When pressed, it redefines all other keys, giving them new meanings. Escape Keys are generally used for command purposes, and are considered "function" or "utility" keys.

**EXECUTE v:** To perform or carry out a command or function required for the performance of a program. When you EXICUTE you follow the instructions.

**EXPORT v:** The ability of certain software programs to save the files they create in other than their standard format. For example Lotus 1-2-3 version 1A saves its worksheet files in what are called WKS format, but it can also EXPORT the data from a worksheet in an ASCII format for use by a word processor. Many good word processor programs can EXPORT their documents as ASCII files. (see ASCII)

**EXTERNAL STORAGE n:** Data storage that is outside the main memory of the computer, such as disk drives, tape drives or optical disk storage systems. They are not necessarily physically external of the computer, but outside the RAM or ROM memory of the machine. Most common types would be floppy disks, streaming tape cassettes, and now more recently Optical Disks.

**FILE (1)n:** A computer program is comprised of files that contain either instructions or data the program needs to run. You can list these files with the operating system command DIRECTORY or DIR.

**FLOPPY DISK n:** The floppy disk was designed to give micro-computers an inexpensive and handy method of storing data and programs. About the size of a 45 rpm record, and flexible to some extent, they are easier to use and store than the 8" version. "Floppies" can be recorded on one or both sides, and depending on the formatting, and quality of the disk, can store from 90K to 1.2 Megabytes per disk. (see MICRO-FLOPPY)

**FONT n:** A family, or assortment, of characters or alpha-numeric symbols of given size and style. Fonts are a vital part of any word processing or desk-top publishing package used in courts.

**FORTRAN n:** This may be the most widely known of all the computer languages. It was designed for scientific calculations and technical functions. FORTRAN is seldom, if ever, used in Court Administration applications. Most judges will never use it. The name is abbreviated from Formula Translator.

**FUNCTION KEYS n:** These keys on the computer keyboard are programmed to initiate special operations that would ordinarily require several keys to perform. Often "function keys" can be programmed by the user to mean what ever the user wants them to mean, again demonstrating the universal applicability of the computer. "Function Keys" are generally set apart from the rest of the alpha-numeric keys, and are labeled as F1, F2, F3, etc.

**GIGABYTE (1) n:** One billion bytes. That, my friend, is a lot of information. Can be displayed in short by "GB" preceded by the number of billions of bytes. Generally used in reference to size of memory or storage capabilities of a computer. (2)n: A small red mark left on your neck after having made-out with a passionate Giga!

**GIGO adj:** Stands for "Garbage In, Garbage Out." In court computer applications it means you will never receive meaningful reports from a program that is

fed bad data.

**GRAPHICS n:** The computer production of pictures, charts, diagrams, etc. These can be of value to the judge in giving visual emphasis to raw data that would not otherwise be achieved by just scanning numbers.

**HACKER n:** Someone who is learning about computers by the trial (no relation) and error method. Judges need not use the "hacker" approach, as there are better ways of learning court, and more specifically judicial computer applications. However, a vast majority of computer users in this country are self taught HACKERS.

**HARD COPY n:** Information printed out by a computer onto paper that you can take with you away from the computer and examine at your leisure. If you access NCIC by micro-computer and they send you data to your CRT, you can dump this data to a printer and make a "hard copy" to keep in court file.

**HARD DISK n:** A means of data storage; a coated aluminum platter that uses magnetic material on its surface to house data and programs. It spins at 3,000+ rpm and, unlike floppy disk drives, the read/write heads do not actually touch the disk, but rather ride on a cushion of air. "Hard Disks" can store an enormous amount of data. A common version will store 80,000K, or 80,000,000 bytes of information. Shown as 80MB, this is approximately 9 four-drawer file cabinets of paper pages.

**HARDWARE n:** Hardware refers to the physical equipment in computer science, as opposed to "software" which refers to the program and data used by the machines. "Hardware" includes not only the computer but also printers, modems, graph plotters, external disk drives, etc.

**HEXIDECIMAL n:** A numbering system that uses 16 as its base as opposed to the 10 used in the decimal system. It is used as an interface between mortal humans (like judges) and the binary system. It is an easier way to demonstrate and enter binary numbers into a computer. An example: 10110010100000111 in binary equals B287 in hexadecimal. With any kind of luck at all you may never need to learn any more about hexadecimal numbering.

**HOST n:** The primary or controlling computer in a multiple computer operation in which there are other less powerful computers or "dumb" terminals which rely on the 'Host" to perform many of their functions, and often to maintain their database. Sometimes called a "Server".

**IBM COMPATIBLE adj:** A term applied to describe a computer



which will read disks, accept adaptor cards, accomodate I/O devices, and run programs written intended for use on IBM(c) brand personal computers.

**IMPORT v:** The function of some software programs to use the files created by other programs. For example, you may have a graphics file created by PC-Paintbrush(c) (PCX file format), You can IMPORT that file into First Publisher(c) publishing program and use that image in a document you are creating. Another example would be that Q & A Write(c) will allow you IMPORT documents written in WordStar(c).

**INPUT n:** This is the information and instructions from outside the computer that must be entered into the memory to accomplish any task. This "Input" can be accomplished by means of a keyboard, bar code reader, data disks, paper tape readers, a mouse, a modem, or outside "hard wire" data lines. In some advanced systems INPUT can be done by touching the screen of the monitor.

**INTEGRATED CIRCUIT (IC) n:** A tiny chip of silicon about the size of a little finger nail, that by means of acid etchings and diffusions, contains the equivalent of several thousand interconnected transistors. Because they are small, and can be made very inexpensively, they have greatly increased the capabilities and affordability of micro-computers, and at the same time reduced their size.

**INTERFACE (1) n:** A devise that translates one computer's "language" into what another can understand and use. An INTERFACE is necessary when you use a micro-computer other than an IBM 3270 terminal to "talk" directly to an IBM 3270 computer. An INTERFACE can be either a piece of hardware that performs the interpretation, or a software package that "Emulates" the host computer. (see EMULATE) (2) v: The act of communicating between two computer components via an I/O port. For example it might be said that you connected your printer to the printer I/O INTERFACE on the back of the computer. (see I/O)

**I/O n:** Short for Input/Output. I/O generally refers to a the transfer of data, into or out of, the computer. I/O is accomplished via I/O devices such as a keyboard, a monitor or a printer. Each of these I/O devices require a plug of some sort, and this plug is referred to an I/O PORT. Most printers will connect to the "Parallel" Port, while a modem will connect to the "Serial" Port.

**JUDGE n:** The decision maker in the justice system who must rely on accurate information. A prime potential user of computers to manage, manipulate and recall data,

especially in the application of document creation and maintenance.

JUSTIFICATION (1) Adj: Describes a function on a word processor that creates straight line margins on both the right and the left side of the written page. This makes for very formal appearing court documents. (2) n: What a judge looks for to put down on his request for new computer equipment for his court.

K (KILO-) adj: A prefix that generally means 1000. 1K baud would thus be expected to be 1000 bytes per second of transmission. Well, not really. 1k=1000 This is the Rule! Now for the exception: when you apply the term "K" to size of a computer file, program or memory, due to the use of the binary numbering system, then "1K" equals 1024 bytes. (It's like the Hearsay Rule; lots of exceptions!)

KEYBOARD n: Most computers and other types of terminals have keyboards. They are generally designed after a typewriter keyboard, although some keys may have special functions not found on typewriters. They are the most common of input devices for personal computers.

L A N n: Initials for Local Area Network. Refers to a number of PCs that are connected together to share a common database or other software and peripherals. What makes a LAN different from other networks is that the node computers are generally located within one building, thus the use of the term "Local." LANs are Increasingly a very common setup for small court applications.

LAP TOP n: A personal computer that is so portable it can be set on your lap and operated. The LAP TOP PC often is battery powered, has at least one floppy drive and a form of flat monitor. The most recent editions of LAP TOP PCs have hard disk drives and an enhanced screen that makes them very easy to read. Most LAP TOP PCs will run standard desk top software. An ideal tool for the judge, the LAP TOP will go anywhere the judge goes.

L C D n: Stands for Liquid Crystal Display. They are most commonly gray, but recently have been made available in color. A flat, light weight, display of computer information output that utilizes the alteration of alignment of liquid crystals to reflect light thus casting a shadow on the display screen creating symbols on a screen. They are a light weight, low cost alternative to a cathode ray tube. Most digital watches use LCDs to display the time.

L E D n: Short for Light Emitting Diode. It is a popular semiconductor used as an indicator light. They are cheap to make, last a very long time and use very

little power. Most disk drives have an "LED" to indicate when they are in use. They are usually red but can also be found in green, yellow and amber.

**LINE FEED n:** A control character that will cause the terminal "crt" or printer to advance one line. Without LINE FEEDs the printer would print an entire document on one line. This would make it very difficult to read for the average judge.

**LOAD AND GO adj:** A term to describe a program that you load into the machine and execute immediately. Another way of saying this is called "Auto Load." Generally when you insert the disk and close the drive you get an A prompt, but with "Load and Go" programs the program is loaded automatically. Most LOAD AND GO software today are games with their own operating system on the disk.

**LOCKING n:** A method of protecting shared data. When ever an application program opens a file, file LOCKING prevents simultaneous access by a second program, or limits such access to "read only." File LOCKING is vital to data that is shared on a Network. (See NETWORK)

**LOOP, ENDLESS n:** See Endless Loop

**L.P.D. n:** Stands for Liquid Plasma Display. A flat screen that differs from the LCD in that it does not require reflected light, but rather it generates its own light and is not dependant on angle of reflection. Several portable and trans-portable computers such as the GRID COMPUS, COMPAQ PORTABLE III, and the new IBM Model P70 use LPD screens. They are also often called "Gas Light" screens. They tend to be brighter and have a higher resolution than LCDs. (see LCD)

**MASTER n:** When you purchase a computer program the original copy you get from the manufacturer is called the "MASTER." You immediately make a copy and set the "MASTER" aside for safe keeping. You run your programs on the work copies.

**MATRIX n:** A matrix is a two dimensional display, or a table of numbers or dots. In the computer domain, a matrix can be anything displayed in a grid.

**MEDIA (1)n:** Any surface upon which a computer data storage device writes to/reads from. An example would be a hard disk. (2)n: The cabling or wiring used to carry network signals. typical examples are COAX, fiber-optic, and twisted-pair wire.

**MEGA- adj:** A prefix meaning one million. One MEGA-byte

equals one million bytes. It is generally used to describe the size of RANDOM ACCESS MEMORY or a HARD DISK storage device. A common HARD DISK for a small court application would be 80 MEGabytes, or 80 MB. (see Byte)

**MENU n:** A list of alternatives on a computer screen from which the operator may choose. A MENU driven program is one that gives you a list of things you can do and you choose the letter, or number, that corresponds with what you want to do, and type that letter. MENU system reduce the number of actual commands a user must learn in order to perform a task.

**MERGE v:** To combine two files into one within several alternative formats. You can "merge" a file into another and keep the order or sequence of the first or the second file, or you can even "merge" the the order of the files.

**MILLISECOND n:** One thousandth of a second: .001 of a second. Generally used to describe the amount of time required to access a hard disk drive in a personal computer. (see ACCESS TIME)

**MODEM n:** Judges can have need to communicate, using their computer, with another judge or a remote data base, such as NCIC or state drivers license records. If you do not have a dedicated telephone line you will want to use the public phone lines. However, computer transmission pulses cannot be transmitted over phone lines. The MODEM converts the computer pulses into a series of beeps and chirps that can be sent over a phone line. The MODEM on the other end of the line then converts the beeps and chirps back into computer pulses that the remote computer can understand, and vice versa. Comes from the words MOdulator-DEModulator.

**MOUSE n:** A device for interacting with a video screen, or CRT. A small box with a roller ball or optic sensor on the bottom and buttons on the top. It is connected to the computer and as you roll it around the table top next to the computer, it moves a pointer on the screen according to your movements. When the pointer is in line with a function you wish to perform, then you push the button on the top of the MOUSE. It can take the place of several "function keys." A MOUSE is also used in several of the graphics generator programs like MacPaint, PcPaint and PCPaint Brush, as well as many desk-top publishing programs and games.

**MULTI-TASKING adj:** A term used to describe a computer or operating system that allows the user to perform more than one function at a time. Example: A user may print a file while he is editing another at the same time.

**MHz n:** Stands for Megahertz, and refers to the speed at which a computer executes commands. Each PC has an internal clock crystal that vibrates at a set frequency, shown in Megahertz. If you think of it as "ticks of a clock" then every other time the clock "ticks" the computer carries out a software instruction. All other things being equal the faster the clock speed of the PC, the quicker it will perform a given software function. The original 8088 IBM PC had a clock speed of 4.77 MHz, while the most recent editions of the 80386 computers run at 16 Mhz to 33 MHz.

**NANOSECOND n:** One thousand millionth of a second. Shown as .000000001 of a second, and used to measure the speed of memory chips. For example a fast memory chip in an AT class computer would be around 80 nonoseconds.

**NetBIOS n:** Network Basic Input-Output System. A layer of software originally developed by IBM and Sytek to link a network operating system with specific hardware. Today many network vendors provide a version of NetBIOS with their hardware.

**NETWORK n:** A group of computers that are linked together by high speed data lines, or modems and public telephone lines. This enables operators of each of the computers to access the other computers for the purpose of sharing data and programs. This can be very heplful for a group of small courts with common types of caseloads.

**NOISE n:** Any variation in an electrical signal that is out of the ordinary. Excess noise in a power supply may cause damage to a computer or to software running at the time. "Noise" can be caused by thunderstorms, outside radio transmitters, variations in voltage, or "evil spirits" caused by the presence of court administrators.

**NON-VOLATILE MEMORY n:** Memory in a computer whose contents remain stored when the power is off. A part of the baisc I/O instruction set is contained in ROM in most personal computers. (See R O M)

**NYBBLE n:** A nybble is piece of information that is half the length of a "Byte" (remember that a "Byte" is normally 8 bits long), therefore a NYBBLE is only 4 bits long.

**OPERATING SYSTEM n:** A program that assists the user in running the computer. It makes sure that the proper programs are in the right place in memory at the right time. You can consider it "doing all the necessary paper work" to get things done inside the computer.

(see DOS)

**OPTICAL DISK n:** A form of storage media where the data or program instructions are written to and read from the disk by means of a laser beam. Optical disks can hold vast amounts of data and thus are an excellent media for storage of large data bases. As of this time there is not a widely accepted standard of format for this media of storage, however there are a number of excellent OPTICAL DISK storage systems on the market.

**OUTPUT n:** Information that originates within the computer and is then delivered, by way of an I/O port, to the outside world. Common OUTPUT devices are video screens, modems, and printers.

**OVERLAY FILE n:** If a program is too large to all fit into a computer's memory (as in the case of an 800K program in a 640K memory) the parts that are not needed right away, are stored on disk in the form of other files, and are loaded into memory as they are needed. These other files are called OVERLAY FILES. Many good word processing programs, like WORDSTAR have several OVERLAY FILES.

**PACKET n:** A block of data sent over a network transmitting the identities of the sending and receiving stations, error-control information, and a message.

**PARALLEL adj:** This is anything that transmits several bits of information at a time, as opposed to "serial" transmission, in which information is sent one bit at a time.

**PASCAL n:** An early computer language originally designed to teach programming in an orderly and structured manner. It would be very rare that a judge would need to learn PASCAL.

**PERIPHERAL n:** Any equipment connected to a computer such as a printer, a modem, or an external disk drive.

**PIXEL n:** This means literally: Picture Element. It is the smallest DOT a display devise (like a CRT) can display. The more dots it shows in a given space, the higher the resolution or detail that can be displayed. PIXELS are generally referred to by matrix of the number across times the number down the screen, as in 400x200. (this would be a medium resolution screen)

**PLOTTER n:** An output device used and controlled by a computer, to make drawings. Most of these drawings are of the graph type and some plotters offer many colors.

POP-UP PROGRAM n: A type of software that once loaded into the memory of the computer is not visible on the monitor until you activate it by a special command. These are "memory resident" programs that can be Popped Up over another program that is running at the time. Then, when you are finished with the POP UP PROGRAM, a command makes it disappear. It will stay in RAM until you un-load it. An example would be a POP-UP Calendar that could be accessed from within other programs for information on dates and appointments.

POWER SUPPLY n: Because computer circuits cannot use AC power it becomes necessary to change the AC to DC current of a very low voltage. The POWER SUPPLY performs this task along with filtering out any "noise" that might be in the electrical pulses. (see NOISE)

PRINT SERVER n: A computer on a Network that makes one or printers available of the other users. The server will generally have a hard disk to spool the print jobs while they wait in a queue for the correct printer.

PROGRAM n: A series of instructions that are given to the computer to perform a given task. PROGRAMS are written in languages that the computer can "understand," but that most judges cannot. Under these circumstances we look for "user friendly" programs.

PROTOCOL n: In communications between computers, it is a mutually agreed upon procedure or code for the exchange of information. This allows the receiving computer to understand what is being sent. Good examples would be "ASCII" or "XMODEM" protocols.

R A M (1)v: What a judge does with his head into a wall when he cannot get the computer to do what he wants it to do! (2)n: An abbreviation for Random Access Memory. The RAM is where programs that are read off of storage media are loaded into the computer for use. RAM size is measured in Kilobytes (K), as in 640K of RAM. Information in RAM is subject to any modification the computer is capable of performing. Any data or instructions in RAM are lost when the power is turned off, or the computer is re-booted.

R O M n: An abbreviation for Read Only Memory. Any information placed in ROM cannot be erased, modified, or destroyed. Some small micro-computers come with the programming language "BASIC", and other software applications, and the even the operating system (DOS) installed in ROM for use by the purchaser.

RS-232 n: A male/female type connector standard for serial data transmission. Many micro-computers come with one or more RS-232 i/o ports for connection to other hardware such as a modem. (see I/O)

S A A n: Systems Application Architecture. A set of specifications written by IBM describing how users, applications programs, and communications programs interface. SAA represents an attempt to standardize the "look and feel" of software applications.

SCANNER n: Often referred to as an Optical Scanner, it is a device that can "look" at a page of typed material and enter it into a file on a computer, where it can be edited by a text editor, word processor, or graphics application. A scanner could be a very useful tool in a court environment as it could copy papers filed in the court into computer files for archiving purposes.

SERIAL (1) adj: This refers to anything that transmits information or data one bit at a time, as opposed to "parallel" which sends data several bits at a time.  
(2) n: What COMPUTERMAN eats for breakfast.

SERVER (1)n: A computer with large power supply and cabinet capacity. (2) n: Any computer on a network that makes file, print, or communications services available to other network users. (3) n: He who brings COMPUTERMAN his SERIAL in the morning.

SHAREWARE n: A type of software that is given to users, often by means of downloading from Bulletin Boards, with the understanding that if the program is found to be useful the user will send a nominal fee to the author. PC-WRITE is an example of SHAREWARE where when you send the fee they send you the full printed documentation.

S N A n: System Network Architecture. IBM's model of a communications system designed to connect PC, Minis and Main Frame computers.

SOFTWARE n: This refers to programs that run on a computer. If the work is done by a program in the computer rather than by the machine itself, it is said to be done by SOFTWARE. Most SOFTWARE can be divided into types such as: Word processors, spreadsheets, communications, utilities, games, data base management, graphics, ect. Some of the more sophisticated SOFTWARE recently introduced onto the market have several of these types combined into one package, and they are interrelational, that is they share data and function.

SPEED n: Speed measures the rate, in megahertz (MHz) at which a micro-processor receives and processes, as well as outputs, information. The higher the clock speed,



the faster the computer operates. Another way to measure the SPEED of faster computers in MIPS, which stands for Millions of Instructions Per Second.

**SPREADSHEET** n: A program designed to manipulate numbers in tabular form. A grid made up of Rows and Columns much the same as a ledger sheet. The user may make a great many different types of calculations all at one time involving a great deal of data. Most judges can use a good spreadsheet. The most popular currently are LOTUS 1-2-3(c), Excell(c), Quatro(c), and Supercalc(c).

**SURGE PROTECTOR** n: An electrical device that "traps" radical variations in electrical current before it can damage your computer system. A surge protector is plugged into the wall circuit and then all parts of your computer system are plugged into the surge protector. They range in price, and value, from round \$10.00 for a rather worthless unit, to as much as several hundred dollars for a complete system control unit.

**SYNTAX** (1) n: The rules within a computer language that determine the means, order and terms that may be used to make the language work as it was designed. (2) n: A levy on prostitution collected in some areas of Nevada.

**T.S.R.** n: Stands for Terminate and Stay Resident. Often called Ram-Resident Software; once loaded into memory you do not see, or use, it until you bring it up to the screen by means of "HOT KEY". When it is activated it will suspend what ever other software is currently running, and then it will perform its intended task. Once you re through with it, you can make it go "AWAY" and resume use of original program. SIDEKICK(c), or the series of POP-UP programs are good examples of TSR software.

**TERRA-BYTE** n: One million MegaBytes of storage. The next size up from a GigaByte, showing the growth in storage capacity of the micro-computer industry, especially in the area of optical disks. It is shown by the characters TB, as in 1TB of storage. (see OPTICAL DISKS)

**TERMINAL** (1) n: A device for communicating with a computer. In most cases it is a keyboard and a video monitor (CRT) along with some form of a printer for hard copy. (2) n: The mental or physical state of a judge after a long day on the bench sans personal computer.

**THIMBLE** n: A type element in a printer not unlike a daisywheel except that the little arms are all turned up to form a cup or thimble shape.(see Daisywheel)

**TIME-SHARING** n: With the advent of large, expensive "main frame" type computers, time-sharing allows many

users to access and use the computer at one time. They generally would do this from remote terminals, and then be billed for the time they were "on" the machine.

**TOKEN-RING n:** Refers to the wire and the access protocol scheme whereby station on a network relay packets (see **PACKET**) around in a logical ring configuration. The architecture is described in the IEEE 802.3 standards.

**TURNKEY SYSTEM n:** What every judge would love to have in his court. A complete computer system combining hardware and software for a special application that is all ready to go when delivered to the court. All the judge has to do is turn the system on!

**TWISTED-PAIR WIRING n:** Cable comprised of two wires twisted together at 6 turns per inch to provide self-shielding. Some telephone wire - but by no means all - is **TWISTED-PAIR**.

**UNIX n:** A multi-user, multi-tasking operating system devised by AT&T that runs on 32 bit personal computers. There are variations on this system by other, similar names such as Zenix, etc. (see **Operating System**)

**UP AND RUNNING adj:** A description of a computer system or other piece of hardware/software that is in place and working.

**UPLOAD v:** To transfer information from a remote micro-computer to a host computer for use by the host computer. This practice would allow a remote court to add information to a criminal or traffic data base at a central location. This can be done by a dedicated line, or by public phone and a modem.

**U.P.S. n:** Initials for Uninterruptable Power Supply. An essential for a good court information system. The court computer equipment is plugged into the UPS, and the UPS is plugged into the wall current. If the power goes down or out, the UPS continues to provide power for the court computer equipment until such time as you can close the files and shut down the system in an orderly way. Not having a UPS can result in losing your court data.

**USER FRIENDLY adj:** Generally applies to hardware/software systems that do not require little or no computer knowledge or experience to use. They are programs designed to eliminate the frustrations of beginners.

**USER GROUP n:** An informal group of owners/users of a particular type of computer or software who meet to share programs and useful tips. Most micro-computers have "user groups" for support.

UTILITY PROGRAM n: A type of software intended to assist the computer operator to better use his hardware and productivity software. An example of a UTITLITY would be a program that would enable the user to make back-up copies of copy protected software.

VIDEO TERMINAL n: The control/feed back hardware control of a computer. It is comprised of a keyboard and a CRT for display of information. They are fast and quiet, with the only drawback being they do not give a hard copy of the information displayed.

VOLATILE MEMORY (1) n: Memory in a computer whose data is lost when the power is turned off. Most personal computers' main memory, RAM, is VOLATILE MEMORY. (See R A M) (2) n: A state of mind when the judge remembers how much he paid for his personal computer when they first hit the market, and now, three months later, they are on sale for 75% off.

WINCHESTER (1)n: The first thing the judge reaches for when the "darn computer won't work!" (2)n: A nickname given the first design for the hard Disk storage devise, it has since been applied to all types of hard disk drives regardless of their format or storage capacity. (The original IBM was 30 sectors and 30 Megabytes, thus the 30-30 designation)

WINDOW (1) n: A separate viewing area of a CRT screen. They allow you to see two or more files at the same time. Many newer software offerings have WINDOWING capabilities. (2) n: A type of software that allows you to run several different programs at the same time, one in each Window on your monitor.

WORD PROCESSOR n: (1) An Application Software that allows the user to create documents and then print them. It allows for extensive control of the text, such as the moving of words, sentences, and even whole paragraphs from one place to another within the document. The better ones even provide spelling checkers. Probably the single most useful type of software for the judge. (2) n: Often refers to a complete "stand-alone" and "dedicated" system that includes the hardware and software for the performance of only word processing tasks, and generally can not run other types of application software.

WORDWRAP n: A function of a word processor that automatically puts words that don't fit at the end of one line at the beginning of the next line, thus relieving the user from having to hit the return key at the end of each line.

## BIOGRAPHICAL INFORMATION

### JUDGE R. RYAN REINHOLD

Judge Reinhold is the presiding judge of both the county Justice and city courts in Pinetop-Lakeside, Arizona. He also sits as the appellate judge fo the While Mountain Apache Tribal Court. Judge Reinhold has sat as special appointment judge in twelve county and six city courts, as well as juvenile referee, in Arizona.

Judge Reinhold is now on the computer faculty of the National Judicial College in Reno, Nevada, and the computer faculty for the Institute for Court Management in Denver, Colorado. In addition to these teaching duties he also sits on the Arizona Judicial Training Committee. He also taught for number of State Judicial Eduction programs and the ABA at its annual meeting in Toronto, Canada in 1988.

Judge Reinhold is the chairman of the Arizona Commission on the Courts Automation & Technology Committee. He is an Arizona pioneer in court automation, as he began in 1984 to automate the docket, calendar and statistical reporting fucntions.

Judge Reinhold is a graduate of San Jose State University. In 1984 Judge Reinhold was named by the National Judges Association as the recipient of the Kenneth MacEachern Memorial Award as The Outstanding Non-Attorney Judge in America.

### JUDGE DAVID L. PHARES

Judge Phares has been the judge of the Chandler Justice Court, Maricopa County, Arizona for over 11 years. He also serves as judge pro tem for the Gilbert Town court.

Judge Phares is member of the Administation of Justice Department at Mesa Community College where he teaches Rules of Evidence and Criminal Procedure.

Judge Phares is an original member of the computer faculty for the National Judicial College, and serves in that same capacity for the Institute for Court Management. In addition, he has taught for a number of State Judicial Education programs, and for the ABA at its annual meetings in Toronto, Canada, on the subject of court automation and judicial computer applications.

Judge Phares is a member of the Arizona Commission on the Courts Automation & Technology Committee, and also serves on the Maricopa County Justice Court Automation Committee.

Judge Phares holds a B.A.Ed. and an M.A.Ed. from Arizona State University. In 1985 Judge Phares was named by the National Judges Association as the recipient of the Kenneth MacEachern Memorial Award as The Outstanding Non-Attorney Judge in America.

## PERSONAL RESUME

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Chandler, Arizona, 85224

Court Address: Chandler Justice Court  
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Chandler, Arizona 85224

Birth: Hamilton, Ohio - March 12, 1944

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## EDUCATION

High School: Phoenix Central High School, Graduated 1962

College: Phoenix Junior College, Attended 1962-63 and  
summer of 1965

Arizona State University, Graduated Summer 1968  
B. A. Ed. in Speech Communications Education

Graduate: Arizona State University, Graduated Spring 1972  
M. A. Ed. in Secondary Education Curriculum Dev/  
Speech Communications Education

Judicial: American Academy of Judicial Education, University  
of Colorado, Boulder, Co., Summer 1978

National Judicial College, University of Nevada-  
Reno, Spring 1979 to date (Eleven Sessions)

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## PROFESSIONAL BACKGROUND

Teaching: Fall 1968 to spring 1971, Speech Communications  
Teacher and Debate Coach, Alhambra High School,  
Phoenix, Arizona.

Fall 1971 to Spring 1977, Speech Communications  
Teacher and Debate Coach, Chandler High School.  
Chandler, Arizona.

Fall 1975 to Spring 1981, Speech Communications  
Instructor, Evening Division, Mesa Community  
College, Mesa, Arizona.

DAVID L. PHARES  
(CONT)

Fall 1981 to date, Instructor in Rules of Evidence and Rules of Criminal Procedure, Criminal Law, Department of Administration of Justice, Mesa Community College, Mesa, Arizona.

Spring 1984, Faculty Advisor, Non-Lawyer General Session, National Judicial College, University of Nevada-Reno, Reno, Nevada.

Summer 1984 to 1989, Instructor in Computer applications for judges, National Judicial College, University of Nevada-Reno, Reno, Nevada.

Spring 1988 to date, Faculty Coordinator, Introduction To Personal Computers in Courts, National Judicial College, University of Nevada-Reno, Reno, Nevada

Summer 1988 to date, faculty member in technology applications in courts for the Institute for Court Management, Denver, Colorado.

Judicial: Judge, Chandler Justice Court, March 1978 to date.

Judge Pro Tempore, Gilbert Magistrate Court, Spring 1981 to date.

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#### EXTRA-JUDICIAL ACTIVITIES

March 1978 to date:

Has spoken to numerous groups such as Parents Without Partners, A. A., Maricopa County Multi-housing Assoc., various Landlord-Tenant Seminars, Rotary, Lions, Kiwanis and Optomists.

Fall 1983 to Spring 1985

Author of a weekly column in THE CHANDLER ARIZONAN entitled "View From The Bench."

Fall 1984 to date

Serves as a member of the Maricopa County Justice Court Automation Project Oversight Committee, to oversee the automation of Maricopa County Justice Courts, Maricopa County, Arizona.

Spring 1985

Speaker on Computer Applications for Judges at the 1985 Annual Circuit Court Judges Conference, St. George, Utah.

Spring 1985

Speaker on Computer Applications for judges at the 1985 Annual Supreme Court conference for courts of Limited Jurisdiction, Tucson, Arizona.

DAVID L. PHARES  
(CONT)

Summer 1986 Speaker on Judicial Computer Applications for the King County Superior Court Judges Conference, Seattle, Washington.

Fall 1987 Co-created the first Electronic Bulletin Board just for judges, as prototype for The National Judicial Network. (With Judge Stephen Ventre)

Spring 1988 Speaker/Instructor in "10 Technology Solutions for Judges" at National Conference on Court Technology, National Center for State Courts, Denver, Colorado. (With Judge R. Ryan Reinhold)

Spring 1988 Speaker on "Technology and the Courts - Now and in the Future" Washington State annual conference for Court Administrators, Pasco, Washington. (With Judge R. Ryan Reinhold)

Fall 1988 Speaker/Instructor, "Ten Technology Solutions for Judges", Sponsored by The National Judicial College, at American Bar Association Convention, Toronto. (With Judge R. Ryan Reinhold)(S.J.I. Grant Project)

Fall 1988 Instructor, Special Computer Training Session for Superior Court Judges of Georgia, Institute for Continuing Judicial Education of Georgia, Athens, Georgia. (With Judge R. Ryan Reinhold)

Fall 1988 to date Judicial Consultant to Arthur Andersen Consulting and IBM in the design and implementation of the portable judicial workstation.

Fall 1988 to date Faculty/Course Designer for USING PERSONAL COMPUTERS: A BASIC COURSE FOR JUDGES/ADMINISTRATORS, offered in Denver, Colorado and Phoenix, Arizona by the Institute for Court Court Management (With Judge R. Ryan Reinhold).

Summer 1988 to date Member of the Systems Advisory Committee for the National Center for State Courts

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**AWARDS**

Fall 1982 Arizona Recovery Centers Association Award for design and implimentation of the Court Intervention and Referral program for screening of DWI offenders, which became the model for the current Arizona DWI law requiring such screening.

DAVID L. PHARES  
(CONT)

- Summer 1983      Judicial Career Education Achievement Award from the National Judicial College and the National Judges Association.
- May 1985          Awarded the Advanced Achievement Award in Judicial Education by the National Judges Association and the National Judicial College.
- May 1985          Recipient of The 1985 Kenneth MacEachern Memorial Award as the Outstanding Non-Lawyer Judge in the United States, presented by The National Judges Association at their annual conference held at the NJC in Reno, Nevada.