The always enlightening monthly of the San Luis Obispo PC Users Group California

HARD COPY

SLO BYTES PCUG

- PC Reviews
- PC Columns
- PC Advice
- PC Gossip
- PC Activities
- PC Lessons

VOLUME 9, NUMBER 7 JULY 1993

What's New

By Bob Ward—Secretary

HERE WE ARE... ANOTHER month past and time for the newsletter again. You will be getting it a little late this month, perhaps only a day or so from the next meeting. I have been on vacation and couldn't get it all together and copied before I left. So my apologies, but at least you got it!

Last month George & I talked about and demonstrated CD-ROM software and MultiMedia. Unfortunately some of our sound drivers were not acting correctly in Windows so we were a little short on the "Multi" end of it. So be it. At least the CD-ROM didn't act up. The CD player has been put back into the 286 and will be available in the library at the next meeting. Speaking of CDs I saw a "bottom line" internal with interface card for $159. Prices are coming down as they do with all computer hardware with time. You might think about purchasing one soon and taking advantage of our great CD library.

If you read last month's newsletter on page 3 there appeared an article on SmartDrive and some of the problems that have occurred with DOS 6.0. Well, even though not admitting any fault on their part, Microsoft has come out with a more conservative SmartDrive for DOS 6.0 (Don't try using it with 5.0 though). It appears in our library under disk #564W. If you are running DOS 6.0 and Windows 3.1 I advise you get the update. The file is PD0805.EXE which is also found on the BBS.

Speaking of BBS, the SIMTEL CD-ROM has finally been upgraded. I gave up trying to "patch" the new version into the old version. Wildcat BBS software has much to be desired with the way it handles their file database. So I deleted the old CD-ROM database from the BBS and added the new one. Luckily it could all be done with batch files and menus as the total time required to delete, then add the new CD to the file database was 28 HOURS! You wondered why the BBS seemed busy the weekend of July 10th, well it

Continued on page 8

GeoWorks Ensemble 2.0

By John Enos—SLO Bytes PCUG

APPROXIMATELY TWO YEARS AGO at a SLOBytes monthly meeting I learned about GeoWorks Ensemble when a representative of GeoWorks demonstrated their product. I became very interested in the product because it would operate on the 8088 that I had in addition to working on the later models 286 and 386 in use at that time.

Taking advantage of the special coupon that was given to us at that meeting I purchased the Ensemble. It was an excellent product for my use at home because in one package it gave me a desktop file manager for working with files and directories as well as a calendar, address book and notepad for keeping track of dates, people and notes. In addition to the word processing function there was a drawing application program that would let me create documents and complement them with graphics, charts or abstract shapes and lines. I could also change fonts and text styles to any size at any time as well as cut and paste.

Because I was a novice the entire package overwhelmed me at first. I soon learned however, that there were three levels of application and that

Continued on page 3

Club Calendar

- **AUGUST 1**
  Great Plains Software will be showing their "high-end" accounting modules
- **SEPTEMBER 5TH**
  Open
- **OCTOBER 3RD**
  MySoftware will demonstrate several of their small business and home office productivity packages
- **NOVEMBER 7TH**
  Mark Jackson, regional representative from Frame Technology will demonstrate Framemaker
- **DECEMBER 5TH**
  Christmas party, George & Bob's Give-A-Way

In this issue . . .

What's New—Column
Bob Ward 1
GeoWorks Ensemble 2.0—Review
John Enos 1
Taco Chips and Ergonomics—Column
Kathy Yakal 2
Library News
Bob Ward 2
The "Great Equalizer"
Steve Matus 3
Dirty Disk-ing
Tony Pizza 3
Computer Profiles
Karl Van Lear 4
Configuration Problems
Curtiss M. Trout 5
Murphy's Laws of Computing
Interface Technologies 5
Ascii Symbols
Keith D. Smith 6
ChkDsk
Kern Johnson 6
Redirection
Paul Shapiro 7
Club Info 9
Treasurer's Report 9

Taco Chips and Ergonomics

By Kathy Yakal—SLO Bytes PCUG

BOY, I NEVER EXPECTED this french fry thing would get so out of hand. Now even Bob's pastor is writing about it. Guess I shouldn't tell on him anymore. So, no more french fry stories from this humble correspondent.

(But you wouldn't believe how fast Bob can go through a basket of taco chips and salsa. He doesn't exactly grab the chips out of anyone's hands; he just kind of puts the bowl in his lap with his arm around it protectively and turns his chair away from the table.)

Speaking of Bob, you may not have noticed, but he had a cast on his ankle at the last meeting. Seems he sprained it in the process of falling off a ladder. I explained to him that that's what the little steps on the ladder were for.

And speaking of injuries, do many of you have problems with your necks or shoulders or arms? Do you know how much of that can be related to your work at your computer? I know you've probably heard about ergonomics as it relates to prolonged computer work, and the injuries that can result, but you probably haven't paid it much attention unless you've suffered some serious pain from it. Believe me, it can hurt, but you can help prevent it, or make it some better if you've already had a problem.

To tell a little story on myself for once, I've had a herniated disc in my neck for several years that either came from a car accident I had in college or just from prolonged trauma on my spine from sitting at a computer or typewriter eight hours a day for twelve years. I've tried lots of different ways to treat the shoulder and arm pain that's resulted from that, but one of the best preventive measures against further injury is to be very aware of my posture and neck position during the workday.

Maybe all of you do this already, but in case you don't and you want to avoid future injuries, here are some guidelines prepared by California OSHA for offices that require people to use a computer for more than 120 minutes a day.

1. **Workstation**: Keyboard should be at elbow height. Screen should be adjustable from 0-60 degrees below eye level. There should be adequate leg space below the desk. The front edge of the desk should be rounded or padded. Shared workstations should have adjustable keyboard height.
2. **Chairs**: Should have an adjustable seat pan. Should have adjustable back support. If there are arm rests, they should either be adjustable in height or removable.
3. **Accessories** (should be available): Document holder; foot rest; removable wrist rest; telephone head set; and (when recommended) special eye glasses.
4. **Breaks**: At least three minutes per hour.

Do I do all of this stuff? No (I take more than three-minute breaks every hour, though). The single most important thing I try to do is to keep my neck as straight as possible and not bend my head forward any more than is necessary. I also make sure that the distance between my keyboard and chair is such that my hands and wrists can rest, and there's not a lot of unnecessary lifting or stretching for my shoulders to do.

George has a free utility called Nagger that I use during long writing sessions; it'll pop a user-defined message (mine says, "Relax Your Shoulders") onto your screen briefly every five minutes or so.

I'm not a doctor (obviously), so don't take my advice; this is simply what works for me. But if you're having neck or shoulder or arm problems, do be aware that the ergonomics of your workstation may be affecting it. There are plenty of resources in the community—and plenty of articles about ergonomics written in computer magazines—to help you adjust your habits if necessary, and it doesn't mean you'll have to spend a bunch of money buying new furniture. Some small changes may help tremendously. (Next month in this column: Bob talks the officers into going to an all-you-can-eat place.)

Welcome to those of you who joined our club this past month... and to think you gave up your 4th of July to do so. We hope we can be of benefit to your computer efforts.

John Knox	**544-0651**
Irvin Kogan	**544-1215**
Edward Sayers	**772-7701**
Mart Hundertmark	**481-7938**
Jeffrey Mintz	**547-0774**

Library News

By Bob Ward—Secetary

THIS MONTH I'M EMPHASIZING mostly Windows programs. A little for everyone with varied interests.

#562W — AMFIND - Powerful file finder designed for Ami-Pro files. FTASK110 - Excellent task manager for Windows. LATHE15 - Great 3-D drawing program for Windows. QNZIP22 - not a shell but great way to ZIP and UNZIP files through Windows.

#563W — CDDB05 - Windows 3.1 audio CDDB player. EXPLOSV3 - screen saver for both DOS and Windows. PDD805.EXE - This is a more conservative version of Smartdrive from Microsoft. Because of the potential file corruption that has occurred at times (HardCopy, June '93 page 3) Microsoft has made this "revised" version of Smartdrive available. THIS VERSION CAN BE USED ONLY WITH DOS 6.0 OR GREATER. IT WILL NOT WORK WITH DOS 5.0!

#564W — INVT206 - Invoice-It for Windows, ver 2.06. WINSQL11 - Orion SQL for Windows. Includes a database administrator and query editor.

#565 — MMM10A - multi-media presentation maker.

CD-ROM BBS UPDATE...

The new version of SIMTEL CD-ROM has been placed on the BBS. This is the May '93 version. To see files that have been added since the last version choose N - New Files from the file menu. Then (D)ays old and when it asks for the # of days to search, try 180. The next line after a return will ask for the file areas. Enter 28-240. That should do the trick. Also under the CD-FILEDOCS subdirectory there is a list of files added to SIMTEL on a monthly basis since the last update.

The "Great Equalizer"

By Steve Matus

—From BocaBits, Boca Raton Computer Society, Inc, February 1993

THERE WERE SEVERAL TITLES I could give to this article. I could have called it: "How My Home Computer Earned Its' Keep!" Or, "Home Computer vs. the Mortgage Company" or "Don't Bad-Mouth Shareware."

THE STORY:

After almost 1.3 years the bank servicing my mortgage suddenly discovered a "clerical error" and asked for either a large lump-sum payment or an increase in the monthly payment in order to bring the account into full amortization. They claimed that the loan would not fully "pay-out". The "clerical error" occurred when, after a few months of payments at the exorbitant interest rate in effect at the time the loan closed, they allowed me to "buy-down" to the more reasonable rate then in effect.

To prove their point the bank sent me a full amortization schedule using the increased monthly payment that they said was required to fully pay-out the loan. Using this printed schedule as a benchmark I searched my disk/ program library and several BBS's for amortization programs that would produce a similar schedule. Several were very close, but a shareware program, AMORTIZE from Antelope Systems, was practically identical, differing by only 4 cents at end of term. It's on the BOCABYTES BBS and others.

I could now prove that there was no "clerical error". The bank had changed its method. They had come up with a "sharper pencil". The method or program that they now wanted me to accept without question, when applied to both the initial high rate payments and the payments I had been making, did not agree with the balance and interest reported monthly and to the IRS each year. The bank had changed their method of calculating the amortization schedule. The initial difference was only 42 cents per month but at a high interest rate over a long period of time, it amounted to several thousand dollars. the 42 cents difference could be due to rounding and a less precise computation.

There was no further argument. The bank quickly decided to credit my account with the payment necessary to bring it into full amortization using their present method of computation. They did not admit to any change in procedures or any further "clerical errors" — just paid the money. I don't know why they yielded so easily but without my home computer tools I would have been just another dumb consumer, ripe for plucking. The computer had paid for itself. it had earned its keep.

What does this prove? First, a shareware program can be as good as a proprietary program, for which the bank probably paid handsomely. The bank involved is a major local S&L, well regarded for its very conservative policies. It has so far eluded being absorbed into the R.T.A. The consumer should be wary of banks that are considered "conservative" by their peers. It also illustrates the home computer as "a great equalizer", enabling an individual consumer to match resources with a large corporation.

In the "Wild West Days" wasn't there a gun called the "Equalizer"?

I will register AMORTIZE. It's only $30 — I do owe it!

λ λ λ

GEOWORKS—
Continued from page 1

if I took them one at a time, read the manual and watched all the on-screen help that was pictured there for me that I could soon become proficient in its use.

The only drawback that I found in the original Ensemble was that it took a PostScript printer to print in color. With the advent of Ensemble 2.0 that drawback has been eliminated. I have taken classes using Windows and WordPerfect but I find that Ensemble 2.0 is all that I need for my use at home and it is much easier to use than Windows or WordPerfect.

Ensemble 2.0, in addition to the functions mentioned above that were contained in the original Ensemble, now gives me an on-screen calculator, an electronic scrapbook for storing pictures and text, an application for editing DOS text files, a telecommunications application, a banner-making application, a powerful spreadsheet with built-in charting and a flat-file database that lets me present data in many different ways. Of course there is a spell checker and a thesaurus included.

The program is so versatile that you can import and export from and to many other programs such as Microsoft Word, WordPerfect, WordStar and Xywrite. Additionally, the scrapbook can import the following graphic bitmap formats: BMP, CLP, GIF, PCX, and TIFF. While GeoWorks Ensemble might not have become the "industry" standard, I have found it much easier to use, much more versatile because so many applications are included in one package, it is much less expensive to purchase and it takes up much less space on the hard drive.

λ λ λ

Dirty Disk-ing

By Tony Pizza

—From The Outer Edge, newsletter of the Channel Islands PCUG, April 1993

ALTHOUGH THE MORE DURABLE 3.5" disks are very popular, many of us still use the relatively delicate 5.25" ones, and sometimes we direct them into harm's way, though not intentionally. I didn't devise the following, but I have used it successfully to rescue a disk. It may come in handy for you some day.

Ever spill some coffee on a floppy disk? Or leave it out in the rain or a flood? Drop it in the toilet bowl? Leave it out during a Santa Ana? You get the idea, you let it get wet or dirty. There's still hope. (We're not talking creased, scratched, punctured, or melted. That's pretty far gone.) If you're careful (and lucky) you may be able to recover the data using the following procedure.

Hold the disk upright, and tap it firmly on a desktop or other flat surface. This should move the floppy disk toward the bottom of its plastic jacket (disk holder). If this doesn't move it, then try tapping the holder on one edge or the other. The idea is to position the part you are trying to save (the magnetic medium) as far from the opposite edge as possible before you start the next step. The rest is written with the assumption that you will be working at the top of the disk holder.

Use a pair of scissors to cut off the top edge of the plastic jacket. Carefully remove the floppy disk, handling it only by the edges. Gently wash it in warm water with a little detergent, then rinse in clear water. Shake off as much water as possible, then let it dry.

Take another, but undamaged, disk, cut off the top edge of its jacket and remove the floppy disk. Put the one you cleaned in that jacket, tape the cut edge closed, put it in the drive, type DIR at the prompt and say a prayer. If you get one, then copy the disk's files to another disk ASAP and be thankful. And then be more careful in the future!

λ λ λ

Computer Profiles

By Karl Van Lear—SYSOP NiteLog BBS

—From MBUGPC Newsletter, Monterey Bay Users Group Personal Computer, January 1993

THIS ARTICLE IS ABOUT some of my impressions of the local computer shopping scene. By local I mean anything within a two hour drive. Like everyone, I have favorite places to shop for computer accessories. Some are friendly havens that are a delight to browse—where I feel at home; like the sales staff and the store layout. Then there are those places I detest. I look forward to patronizing them the same way I look forward to my dentist's smile. Some of these places make you feel like chum in shark infested waters and they never seem to have what you're looking for. When you do find one that has items of interest, their prices are often so high you get the feeling they are a government front for trying to pay off the national debt. So many places to shop, so many to annoy and aggravate you. When you do find a gem, you like to go there often.

The following are two places I enjoy patronizing. Generally I arrive at their doors after a long car ride with my annoyed wife and daughter. My little one always takes these opportunities to test her lung capacity for record lengths of time. By the time I get there my nerves are such a wreck I bolt from the car before coming to a full stop. Which is not good since I'm the driver.

FRY'S ELECTRONICS

This is a computer store designed by someone who understands the concept. Shelf after shelf lined with bounty just waiting to be plundered. Fry's not only has reasonable prices; but a helluva selection too. I can think up things at random and Fry's will have it.

As I begin finding things I want to buy I make a move for my wallet—it shrinks away from my hand in fear of being emptied mercilessly. My wife looks on; bored and pensive. My daughter reaches above her metal shopping cart prison and giggles with glee as she puts gooey finger prints on a 20 inch monitor. This annoys my wife to no end but I find it amusing. I used to wonder how those monitors got so smudged. Now I know.

Before I can hardly even get started my wife deserts me—obviously lacking a fine tuned interest in computer shopping. I locate her later over in consumer electronics fingering the controls of an expensive camcorder. A slick salesman with "big commission" written on his pimpled forehead is bedazzling her with its features. I remind her that we already own a camcorder as I usher her back with me towards the computer section. She tries to divert my attention with pit-stops but I'm not daunted. Onward.

Fry's has it all: a mile long magazine rack for loiterers, voyeurs and bored housewives. Stereos, TVs, VCRs, Camcorders and various other household electronics. Furthermore they have candy, soda and other sundries (Fry's has apparently swallowed a 7-11, a liquor store and a Radio Shack). They also have computer chips, cables, adapters, complete systems, component parts, software, add-ons, etc.: computer items for all. I could continue with the list, but just picture it this way: someone built a mall, knocked down all the inner walls and now they just call it "Fry's."

> *"Fry's is the blueprint that all computer stores should build upon."*

Fry's is the blueprint that all computer stores should build upon. The store is a busy intersection of people. Credit cards whip out like pistols at the OK Corral as swarms of people stimulate the Taiwanese economy. My wife usually threatens suicide from boredom while I have to be dragged bodily from the store. She always gets retribution for her sacrifice later by making me trudge through a local mall for hours with her looking at clothes!

Fry's has three locations in the Bay area: Palo Alto, Sunnyvale and Fremont.

SWAP MEETS

Another favorite place of mine is the swap meets in the San Francisco Bay area. These are flea markets for price savvy computer geeks. It's like having 75 computer stores squeezed under one dome. Quality products at great prices surround you, but be careful of the occasional paper-thin motherboard and "slightly used" hard drives. If the vendor's product and price list is written on the back of a Sushi Restaurant flyer; don't expect a warranty. You have to look at every booth before buying anything; it's a rule you never break. If you do, the minute you buy a hard drive for $200.00 you'll see the same one for $175.00 somewhere else and the Asian guy you just bought it from will suddenly forget his English.

The parking lot at these places is always about one parsec away from the actual computer meet. Most city bus routes are shorter than the walk from your car to the computer meet. You keep expecting a shuttle to come pick you up. One never arrives. These places are always a blast when it comes to computer shopping though. You just can't beat the selection and prices. No one place on earth other than Comdex has as many computers and parts for sale under one roof. The atmosphere is charged with excited buyers and busy vendors. The place is fun. Even my wife enjoys herself. I think it's because they serve hot dogs there.

You can wander around in these huge meets for hours and not see everything. If you get separated from your group you need a native guide to bring you back to your party. There's always a wide range of booths available. There are those selling brand new products of the latest innovation to those selling dirty, broken down, overly used crap. There are booths selling new computers, used computers, computer parts, software, books and more.

One thing that puzzles me though is why they have a chiropractic booth at every one of these meets. Do they just assume that we all have poor posture and need spinal adjustments? I figure they must be there to fix your back after you break it playing pack mule on the long journey back to your car carrying heavy computer parts. These are not the only guys out of place either. There is always the one guy at a booth with a computer display and a box of flyers trying to sell some market gimmick. The guy is always impeccably dressed, young, ready to articulate the wonders of his evolutionary, million-dollar making computer pyramid, multi-level marketing wonder. Don't go near this guy.

Disregarding a few minor hardships, the computer meets are hardly ever disappointing.

Call (800) 533-7220 for information on times and places of the computer meets. Or use their BBS Hotline at (415) 340-9370 for updates.

λ λ λ

Editor's Note:

I took the liberty to edit this column to be more applicable to SLOBYTES members. If you have any questions the author can be reached at P.O. Box 1321, Monterey, CA 93942-1321 or on the NiteLog BBS at (408) 340-9370, 2400 baud (address mail to SYSOP) / (408) 655-1096, 1440/9600 baud.

Both Fry's Electronics and the Bay Area Computer Swap Meets are well worth a special trip up the coast.—TS

Configuration Problems

By Curtiss M. Trout—Twin Cities PC User Group

—From plug PalmBeach Users Group newsletter, January 1993

NEWCOMERS TO THE COMPUTER arena are frequently impressed when their questions, and particularly questions about problems, are answered by out more "experienced" members. They don't seem to realize that we all went through a learning process to gain whatever knowledge we have. Some of that knowledge came from books, manuals, courses, etc. But even more seems to come from the best teacher of all—experience.

Frequently we say that there are only two classes of people: those that have made mistakes and those that are about to. Making a mistake isn't so bad if you know how to recover from it. Learning that sometimes takes a while. Of course, it's better to simply avoid making mistakes in the first place.

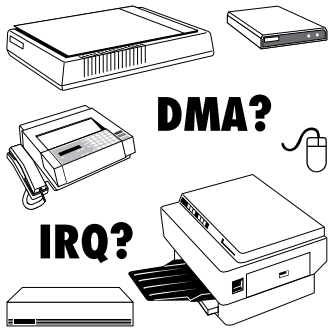
Planning and documenting your PC's configuration is a pretty good idea. But how many of us take the time to do it? And, more importantly, how many keep it up to date when we make changes? I suspect that most of us don't bother.

Until very recently, I was in that vast majority. I kept my computer's configuration "in my head." Let's see, internal modem on COM1, mouse on COM2, COM3 set up with a nonstandard configuration using IRQ5. Now the floppy controller used DMA channel 2 (the standard), the scanner is set up on DMA channel 1. Or is it on DMA channel 3? If you think it's confusing reading all of this, just think how difficult it was to mentally reconstruct it.

I guess I was pretty lucky because I avoided serious problems for quite a while. Usually, if I created a conflict when I installed a new piece of equipment, it became obvious immediately. Problems that show up while you're making changes are usually very simple to resolve.

CONFLICTS

I recently encountered errors while attempting to read a floppy disk under Windows. Since this is a pretty simple and straight forward operation, my first thought was that something was wrong with the diskette; it was a demo diskette that I had recently received through the mail. But just in case, I tried to read another diskette. I was surprised to get the same error. Exiting Windows didn't resolve the problem. Just



for the heck of it, I rebooted and tried to read these floppies again. Both worked. Another attempt under Windows failed.

I rebooted again and started Windows in Standard Mode (by using the /S switch). The floppies worked just fine. I was thoroughly confused. What did executing Windows in 386 Enhanced Mode have to do with floppy drive problems?

I called my good friend, Dave Stavert, for advice. His first question: "What'd you just change?" Well, I had just replaced one internal modem with another, but that didn't change any setups. But it did get me thinking. What configuration changes had I made recently? I had

Continued on page 8

Murphy's Laws of Computing

By Interface Technologies

—From Big Blue & Cousins (BBC), newsletter of the Greater Victoria Personal Computer User's Association, March 1993

EXPERIENCE is something you don't get until just after you need it most.

CONFIDENCE is the feeling you get just before your hard disk crashes.

WHEN YOU GET to the point where you really understand your computer system, it's probably obsolete.

YOU ALWAYS FIND the information you need on the page of the manual you look at last.

CONVERSELY, the first place to look for information is in the section of the manual you least expect to find it in.

WHEN THE GOING GETS TOUGH..., upgrade.

FOR EVERY ACTION, there is an equal and opposite malfunction.

TO ERR IS HUMAN... to blame your computer for your mistakes is even more human.

SO IF AT FIRST YOU DON'T SUCCEED, blame your computer.

IF ON SECOND ATTEMPT YOU FOUL UP, blame it on a virus.

IF YOU CAN DISTINGUISH between good advice and bad advice, you probably don't need any advice at all.

HE WHO LAUGHS LAST probably made a back-up.

A COMPLEX SYSTEM that doesn't work is invariably found to have evolved from a simple system that worked well.

NO JOB IS SO SIMPLE that it can't get screwed up.

THE PERSON THAT SAYS THAT SOMETHING CAN'T BE DONE should never interrupt the person who is doing it.

THE NUMBER ONE CAUSE OF COMPUTER PROBLEMS is computer solutions.

A SPECIALIST is someone who knows more and more about less and less until he gets to the point where he knows absolutely everything about nothing.

YOU CAN ALWAYS SPOT AN EXPERT IN A CROWD: it's the person who says that the project will take the longest to complete and will cost the most.

THE COMPONENT WHICH HAS THE SHORTEST LIFE SPAN will always be located in the least serviceable location.

WHENEVER YOU DO NOT UNDERSTAND WHAT YOU ARE DOING, remember to always do it neatly and take good notes.

IN ANY DEPARTMENT THERE WILL ALWAYS BE ONE PERSON who understands the department's computer system. This person usually gets transferred to another department.

THE SECRET TO A SUCCESSFUL PRESENTATION IS SINCERITY. Once you can fake sincerity you've got it made.

A PROJECT ALWAYS EXPANDS to fill your system's available memory.

Using Ascii Symbols In Word Processing

By Keith D. Smith

—From RAM Pages, Fresno PC Users Group, February 1993

RECENTLY I MET A PERSON who works from her home providing secretarial service. She was typing a job résumé that included bulleted items. The word "résumé" lacked accented "e"s and the bullets were represented as asterisks. She was amazed when I produced an accented "e" (é) by holding down the ALT key and typing the number 130 on the numeric keypad.

Our standard keyboards do a lot of the work for us. We can press a single key and an "A" or a "Z" appears on the screen. But what about when we need some more exotic characters to make a document look right?

While the young woman admitted to never having heard of ASCII characters, those of us familiar with personal computers too often forget some basic tools like the ASCII table symbols.

ASCII stands for American Standard Code for Information Interchange and is a standardized way of representing characters.

ASCII tables can be found as part of many memory-resident utilities like Sidekick and are commonly reproduced in computer books. Hold down the ALT key and type in the numbers from the "decimal" column using the numeric keypad to produce characters missing from your keyboard.

Foreign language words often require using the ALT key, plus...

142 = Ä	137 = ë	149 = ò
132 = ä	138 = è	162 = ó
143 = Å	139 = ï	154 = Ü
134 = å	140 = î	129 = ü
160 = á	141 = ì	150 = û
128 = Ç	164 = ñ	151 = ù
135 = ç	153 = Ö	163 = ú
144 = É	147 = ô	152 = ÿ
130 = é	148 = ö	

... and even the Spanish "¿" produced by ALT 168.

Our own keyboards fail to provide the occasionally handy...

155 = ¢ (to count our pennies)
156 = £ (to request money from the Queen)
146 = Æ (to read Æsop's Fables)
145 = æ (to praise Caesar)
171 = ½ (to write a recipe)
172 = ¼ (to divide a pound of butter)
248 = ° (to express temperature: 73° F.)
253 = ^{2} (to square a number: a^2)
227 = π (to bake a mathematical pi)
230 = µ (to specify capacitor values: 5µfd)
246 = ÷ (to divide and conquer)
...and so on..
241 = ±
242 = ≥
243 = ≤

Caution: the ASCII characters, above, should work as described with most word processor software, but some graphics/desktop publishing programs, including CorelDraw!, Ventura Publisher, and Pagemaker, and some printers, may produce radically different results. Check your software manual before trying to use the ASCII characters.

Find and photocopy and ASCII table for your desk. Keep an ASCII table handy to dress up your routine word processor work.

λ λ λ

Editor's Note:

Some of the characters in this article had to be typeset by substituting the equivalent character from the Windows/Type Manager Symbol or ANSI character sets. Other possible ways to typeset a desired character would be to insert it as inline graphic created in another program (such as CorelDraw!), or to use another font whose desired character is mapped to an accessible key or ALT-key combination. I even typeset the fraction and square characters by using Ventura Publisher Windows' Equation Editor and Superscript functions.

ChkDsk

By Kenn Johnson—Chicago Computer Society

—From Boca Bits, Boca Raton Computer Society, Inc, February 1993

THE CHKDSK COMMAND is most commonly used to check RAM and files on your hard disk, and optionally repair some file allocation problems. But, did you know that CHKDSK also can report on file fragmentation? And that CHKDSK can show you hidden files on your disk?

The CHKDSK syntax is:

CHKDSK [D:][FILESPEC][/F][/V]

The /F switch is used to fix any problems that CHKDSK finds. CHKDSK looks for lost clusters, and converts them into files. Lost clusters are clusters that have been allocated in the File Allocation Table (FAT), but have no entries in the disk directory. CHKDSK stores these clusters into files named FILEnnnn.CHK in the root directory. You can then look at these files to see if there is any usable information in them.

When you specify a file specification, CHKDSK will check to see if the file(s) are stored in contiguous sectors on the disk (that is, if the files are fragmented). Files stored in contiguous sectors can be read and updated faster then fragmented files.

The /V switch (Verbose) will cause CHKDSK to list all filenames as it runs, including hidden files. In fact, CHKDSK /V is the only DOS command that will show you hidden files.

Some examples:

- CHKDSK /F — Display a status report on the default drive and repair file errors.
- CHKDSK A:*.* — Display a status report on file fragmentation for all files on drive A.
- CHKDSK C:*.* /V — Display a file status of the hard drive and display a list of all files and directories, including hidden files.

Be aware that there is a quirk with the CHKDSK command. It will not fix errors unless you use the /F switch. If you don't use /F and errors are found, you will be asked if you want them repaired. It doesn't matter what you answer because the errors won't be fixed. Just say NO.

λ λ λ

Redirection

By Paul Shapiro

—From the Monitor, Capital PCUser Group Inc, February 1993

THE GREATER THAN (>) SIGN / symbol on your keyboard is used to "redirect" files, a nice feature of MS-DOS. SUPPOSE you want to print a file. TYPE the command TYPE FILENAME > PRN. The output of the command TYPE is redirected to the printer and printing occurs.

I very often use the command DIR > PRN just to print the current directory. But suppose I want to print the contents of two directories (or sub-directories) on the same page if possible. First type DIR > filename and then with a different sub-directory type DIR >> filename.

Use the same filename, but two greater than signs. Each time the double greater than sign appears, the redirected material is appended to the end of the existing file. Later (below) I will discuss handling of more than two directories.

What is so nice about this is that you can use a text editor to edit or insert other information. Here for example, when printing out a directory (or directories) you can prefix things with your own descriptive commentary, easily and quickly.

Instead of using COPY CON PRN, followed by [Ctrl+Z], redirection and be used:

ECHO This line only will print! > PRN will print just the words: ***This line only will print!***; capital letters not needed here.

This is a good quick and easy way to see if your new printer prints at all, and further, can custom print what you want; a rather satisfying feeling when checking out a printer!

Now, create a short file, MONITOR.TXT, by typing: ECHO Say you say it in the Monitor. > MONITOR.TXT

TYPE MONITOR.TXT > PRN will then print the line: ***Say you saw it in the Monitor***.

ECHO .. and it was really a nice article! >> MONITOR.TXT will result in the following display via TYPE MONITOR.TXT:

Say you saw it in the Monitor.
...and it was really a nice article!

What has happened is that by using two greater-than signs at once, the material echoed has been added (appended) to the named file.

The use of ECHO, redirection, and a text editor can simplify things considerably.

With DOSKEY and MS-DOS 5.0, I find a handy technique to combine several floppy disk listings consecutively is to successively redirect the directory to the same file and then to print that file.

Insert a diskette in floppy drive A:. Use the command DIR A: >> NEWFILES.DIR to send a copy of the directory to the file NEWFILES.DIR. With the double greater-than signs, if such a file does not exist, it will be created. Then use the up-arrow key to display the above command, replace the diskette in floppy drive A: with another diskette, and press the [Enter] key. Now two directory listings are in NEWFILES.DIR.

This is the procedure I use with a new software package in order to find what I have in a hurry. I can then plan how the material is to be organized in file containers.

Using of one of the many available print utilities to maximize the material on a page makes the resultant compact listing often more easily examined. I have written my own program to combine and print text of less than 80 columns onto lines of length no more than 160 columns using a type size of 20 characters per inch; or for directories which are 40 columns themselves, when I am willing to mess with wide paper (11 inch), I print six 40-column directory listings, most useful when getting a printout of the entire hard disk, which I do occasionally (one of the few practical advantages of having a small hard disk is that a listing of all the sub-directories can be done in one sitting). From the root directory, the DOS command DIR / S DOSFILES.DIR or DIR / S > PRN will do it (again) with DOS 5.

MUCH ADO ABOUT NOTHING?

There are times when it is desirable to create a file of zero bytes length. We now jump from the simple to almost esoteric.

For example, you might want your directory listings to include a file with a name of your choice, either the same as the Volume Label of the directory, or some other(s).

Another application is when you are making a backup copy of a new software package and decide to re-label all the disks according to some custom preferred numbering scheme. It could be a good idea to use the 11 character maximum original label name as the name of your null file. For example, suppose a master disk original had the label THE LIBRARY. Before changing that label to say MYDISKS999 to meet an adopted cataloguing convention, create a null file as described here and call it THE_LIBRARY. That way you will assure a record of the original label can always be associated with that disk in the event that label should have stayed that way as a label in the first place.

Some of you may remember how I got myself into a jam some months back when I put new labels on GeoWorks Pro backups before installing and then could not install until I had re-labelled the disks with the original labels. If I had taken the precaution of creating the null files I (at least) would have had some kind of warning flag set up should I ever recognize the need. (You could use the ECHO command (ECHO directory descriptive > PRN) to prefix your own diskette identifier before a printout of the directory which shows the original software Volume Label identifier. This would have to be custom typed every time the same directory is printed.)

Another use is in a batch file which will test for a specific disk that has been inserted into the drive. By knowing the name of a null file created on the disk sought, the batch command IF NOT EXIST filename GOTO.. can be used to test the presence (or absence) of the particular diskette.

Here is the way to create a file called NULL.000 that has zero bytes (upper or lower case irrelevant). Use a text editor. First create a file called NULL.NUL as follows:

```
N null.fil
W
Q
```

Then create a batch file called NULL.BAT:

```
@ echo off
if %1==x goto nofile
debug < null.nul
ren null.fil %1
echo %1 just created with zero bytes
goto end
:nofile
echo Must specify name of NULL file to
be created
:end
```

Run the batch file by typing NULL NULL.000.

Check the directory (type DIR) you are in and you will notice the new file NULL.000, zero bytes in length.

λ λ λ

Paul Shapiro spends some of his spare time instructing spreadsheet techniques for the very beginner at the Washington, CC/JCA Senior Net Computer Learning Center at Mazza Gallerie. He also consolidates submitted material in his capacity as Editor of the Center's bi-monthly newsletter BOOTINGUP.

WHAT'S NEW—
Continued from page 1

was because the BBS really wasn't on line. It was busy doing something else.

CPA's take note. This month we have Curtis Blume from Great Plains Software demonstrating their "high-end" accounting modules. Quicken this is not! Anyway you will probably go away knowing more about accounting than before you sat down. Hey, education is the name of the game.

In September we run into another 3 day weekend. Now I ask you, first they scheduled the 4th of July during a meeting now Labor Day. Can we blame this on a Democratic President or is it just a coincidence? I'm not sure what we will demonstrate, although I have a couple great looking Windows graphics programs that will keep you all interested. Perhaps Logitech will send us down one of their digital cameras to try out and demo at the meeting. I'll have something in mind before the next newsletter.

Please note the address label on your newsletter. In the upper right corner is your expiration date. Please renew before that date. It saves us time and money when I don't have to send you a reminder. Right now I'm sending about 20 per month. That's 6 bucks and saliva for stamps. I'd like to save both.

λ λ λ

- Mechanical Switch Box $5.00

CD-ROM Disks:

- Windows & OS/2 Conference Jan '92 Demonstration System—$5.00
- Too Many Typefonts—$15.00
- Bibles & Religion—$15.00
- Microsoft Knowledgebase Jan '93—$5.00
- SIMTEL CDROM December '92—$15.00

Call Bob Ward if you're interested (phone #'s on page 9)

CONFIGURATION PROBLEMS —
Continued from page 5

installed as scanner board, but it was working. I had also had problems writing a MAC format diskette using a special board. That problem had been traced to a DMA conflict between the special board and the scanner. It was fixed by changing these boards to use different DMA channels. Um, how did I resolve that conflict? Each board had been originally set up to use DMA channel 1. Documentation for the option board suggested that it should use DMA channel 1 unless problems were encountered. It said that conflicts could be resolved by changing the option board to DMA channel 2. And that's what I did.

DMA channel 2 is normally used by floppy controllers. That was the source of my problem. The special hardware worked fine. But somehow, Windows' attempts to use DMA channel 2 conflicted with the other board. I finally resolved this problem by putting the option board back on DMA channel 1 and moving the scanner board to DMA channel 3.

SOME DEFINITIONS

These types of problems seem to have two parts. The first is determining the original problem. This is usually difficult, at best. The second part, deciding what to do about it, is either trivially simple, or painfully difficult. You need to assign facilities (IRQ numbers, I/O port addresses, DMA channels, etc.) to avoid conflicts and fit the constraints of your particular hardware, and perhaps the limitations of your software.

What are these things? Let's spend a little time looking at each one.

I/O ports are facilities that allow software to talk to particular hardware facilities. This is how your communication software sends data to your modem or how mouse software learns how far the mouse has been moved. The nature of PC architecture makes conflicts in I/O ports relatively rare and relatively easy to correct. There are lots of I/O ports available and most boards can be configured to use one of several base addresses. Standards exist for many devices; e.g., serial ports COM1 and COM2, parallel ports LPT1 and LPT2. Well established conventions exist for other devices, such as COM3, COM4, and LPT3.

IRQs (Interrupt ReQuest lines) are the most common cause of confusion and conflict. An interrupt is used when a device needs to signal the processor that it needs some service. The original PC and XT only had 8 IRQ lines and several of those were used by the floppy drive controller, hard drive controller, keyboard, and timer functions. COM1 and COM2 normally use IRQs 4 and 3, respectively. LPT1 and LPT2 normally use IRQs 7 and 5, respectively. Depending upon the computer IRQ2 may be available for use. IRQ5 is a favorite for add-in boards since few computers are equipped with two parallel ports.

AT class machines ('286s and up) have 15 effective IRQ lines available. Unfortunately, most expansion boards that need to use an IRQ are limited to a subset of the first 8. The most frequent choices are IRQs 3,4,5, and 7. Some boards and computers can also use IRQ2. Newer boards, always using a 16-bit expansion slot, may be able to use higher IRQs, e.g., IRQs 10 or 11.

DMA (Direct Memory Access) is a facility that allows data to be transferred between a controller and RAM without using the facilities of the central processor. DMA channels are even more confusing because they seem to be more poorly documented. Actually, they're usually ignored. DMA channels 1, 2, and 3 are frequently used by 8-bit controllers that need DMA facilities. DMA channels 4 through 7 may be used by 16-bit controllers. Most systems use DMA channel 2 for the floppy controller.

SUGGESTIONS

It'd take quite a bit of space to discuss all the ways these three facilities are used. Suffice it to say that each machine should be configured so that no two devices use the same port, request line, or DMA channel. This is possible on many machines. But as we add more and more facilities to our machines, such as CD-ROMs, sound boards, fax boards, additional COM ports, scanners, additional printers, or tape drives, this becomes more and more difficult.

It is very unlikely that any two devices could be installed to use the same I/O ports successfully. It may be possible to share IRQs and DMA channels. A basic requirement for this sharing is that the devices that use the shared facilities may not be operated concurrently. As an example, I currently have my scanner, tape controller and COM3 all assigned to IRQ5. This works because these devices are never operated together.

Do I have a solution? No. But I do have a suggestion. Create a configuration file for each computer. Dig through the owner's manual and determine what facilities are used by the base computer or what facilities are available for add-ins. Document them! Then, every time you add another board, update your configuration. Keep it current. Trust me, you'll be glad you did.

λ λ λ

Club Information

HARD COPY is a monthly publication of SLO BYTES PCUser's Group located in San Luis Obispo, California. Information in this Newsletter is derived from both our own membership and other PCUser Group Newsletters. The purpose of this publication is to inform our members of meetings and provide information related to the use of IBM PCs and compatible computers.

Membership: Dues are $20 per year. Newsletter only is $12 per year. Full membership entitles you to our monthly newsletter, full use of the public domain software library and discounts at local computer stores.

Article Submission: Deadline for submission of articles is the 15th of each month. Articles should be provided in ASCII format without any type of formatting from your wordprocessor including tabs, indents, extra spaces, or highlighting. We prefer articles on disk but will accept hardcopies if necessary.

Disclaimer: Neither SLOBYTES PCUser's Group, its officers, editors, or contributors to this newsletter assume liability for damages arising out of this publication of any article, including but not limited to the listing of programming code, batch files and other helpful hints.

Reprinting of this Newsletter: Articles from this newsletter may be reprinted by other user groups if credit is given to both the author and newsletter from which it was taken. Reproduction of articles with a specific© Copyright notice is prohibited without prior permission from the original author.

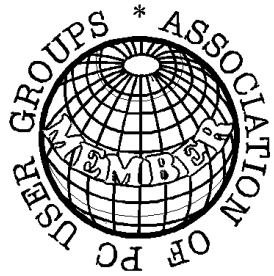
Advertising: Commercial advertisers, request ad packet from Bob Ward. Members may advertise personal computer equipment or software for free. Submit your ad to Bob Ward.

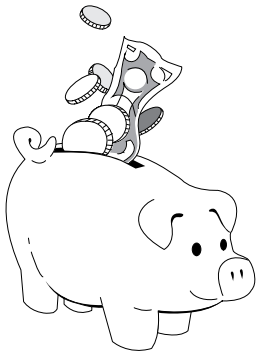
Direct all correspondence and newsletter submissions to:

BOB WARD, SECRETARY
2100 Andre Ave.
Los Osos, CA 93402
Call (805) 756-2164
M-F 7:30 am - 4:30 pm
and (805) 528-0121 all other times

Meeting Times

- General meetings are held the 1st Sunday of every month, unless noted otherwise in the newsletter calendar, at 2:30 pm in the Cal Poly University Biology Department, Fisher Hall 286.
- Special Interest Groups (SIGs) meet at 1:00 to 2:00 pm
  — General Information SIG: Fisher Hall 286
  — New computer user SIG: Fisher Hall 292
- Our Public Domain Library is in the Fisher Science Museum. Hours are 12 pm to 5 pm





Treasurer's Report

SLO BYTES PCUG
EXPENDITURES
July 1993

Beginning Balance:	$ 769.36
Expenses:	
Newsletter 6/21	- 117.36
BBS Phone Bill	- 8.93
Long Distance Phone	- 28.13
Deposit — 07/12/93:	270.00
Balance — 07/12/93:	$ 769.72

PAGE LAYOUT COMPLIMENTS OF TERI A SORGATZ COMPUTING ASSISTANCE

Floppy Disks 4-Sale at the Meeting

DSDD 360K Formatted Floppy Disks with labels, tabs, and sleeves . . . . . 55¢ Each
DSDD 360K Formatted Label Over Floppy Disks . . . . . 45¢ Each
Generic High Density Formatted Floppy Disks (5.25" X 1.2 Mb) . . . . . 70¢ Each
Generic 3.5" X 720K Formatted Floppy Disks . . . . . 70¢ Each
Generic 3.5" X 1.44 Mb Formatted Floppy Disks . . . . . 90¢ Each
New Library Disks . . . . . 90¢ Each

All Disks fully guaranteed against defects.

Slo Bytes Officers

President	George Campbell
Vice President	Sam Powers
Treasurer	Marilyn Jenkins
Secretary	Bob Ward
Editors	B. Ward & T. Sorgatz

Slo Bytes BBS

(805) 528-6172
14,400 / 8 / N / 1
PCFiles (9,000+)
and Message Section