SLO Bytes GROUP
SAN LUIS OBISPO PC USERS
HARD COPY

What's New

By John Ewing

If you like utilities that make your computing life easier, then the New Users meeting is where you should have been on September 9th.

George demonstrated several shareware directory utilities that perform as well as the commercial stuff but takes up much less system and disk memory (not to mention dollars).

FIND.EXE does what the name implies, it locates files on your hard disk and floppy drives. This is very useful if you can't remember the fourth level subdirectory that contains your tax data(especially on April 15th).

DE.EXE color codes the directory listing to quickly identify different file types. The programs allows you to select up to 14 file extensions. Not only will you quickly identify your batch files, but the listing will be a little more exciting.

BAT2EXE.EXE converts .BAT files to .COM files. This speeds up the batch execution, especially if the batch file generates a lot of text. SUB.EXE deletes subdirectories painlessly, including hidden files and read only files. With just a few keystrokes, you can delete several levels of directories without getting those nasty little messages telling you to delete the files first.

DISKDUP.EXE allows you to copy from one floppy to another using the same disk drive. The program copies files from the floppy drive to a temporary directory on the hard disk. It then copies the files from the hard disk to a new floppy inserted into the original floppy drive. DOS 3.2 or greater is required to use this program.

In addition to the directory utilities disclosed above, George demonstrated BIGTIMER.EXE. This program displays a VERY LARGE elapse timer. This could be useful if you had an old computer laying around and you wanted to time an activity (i.e., phone call, dark room, etc.)

As usual, there were numerous questions for "DR.DOS", after which we had the compulsory break between meetings.

OCR Software

by William J. Bonner
Alaska Computer Society

Optical Character Recognition, or "OCR" to the cognoscenti, has been a bit of "vaporware" that has always been just over the horizon. Each lawyer or law office administrator who mentally designed a thoroughly integrated office for the practice of law had to have that piece to round out the picture. But the picture is still incomplete as of April 1989.

First, let's look at the development within a typical legal office. In 1984, most legal offices depended heavily upon dedicated word processors. Most had graduated from the Selectric typewriter, although that still was retained for envelopes. Only a venturesome few had launched into the world of desk top personal computers, since that seemed more the realm of hobbyists.

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Club Officers

President George Campbell
Vice President Sam Powers
Treasurer Teri Sorgatz
Secretary Bob Ward
Editor John Ewing

Afraid of Flying?

COMPUTERS ARE THRILLING

By Sidney Simon

I learned to fly airplanes at one time in my life. With a certain flair, I did landings and takeoffs, not necessarily in that order, and I came to know enough navigation to be able to do cross- country flying. I could stall and recover, fly "under the hood", and not see where I was going (or coming) and just with instruments survive. Once I even did what they call a dead-stick landing. Those are useful if your engine dies. You dead-stick it or you die.

All of this is told to you not to make me seem impressive, but to help raise the question; so what's this fascination with computers?

Because, you see, I could take flying or leave it. Actually, I left it. Because, to me flying was boring (interspersed with those moments of stark terror!). There was a lot to learn of course, but learning it was somehow dull for me. And from day one, computers have never been dull.

Learning about computers has become totally engrossing. I would not have predicted it that way.

You sit in front of a glowing ersatz television screen, choosing to push your fingers around a tool, finding yourself alternately frustrated, tortured, filled with despair and occasionally tasting disaster. This is fun?

Yes, it is. Among the grandest fun I have known. And I have had my share of fun, even if I have only played one computer game in my life. The fun is in the learning.

Learning interests me. I have been a teacher all my life and after some thirty-seven years practicing, I am finally getting the hang of it. During all those years, I have struggled to intrigue, excite, even enthrall my students with the magic of the content, the winder of the theories and the allure of the acquisition of learning.

My XT clone enthralled, intrigued, excited and captured me in a week. Without much charm or grace, it thoroughly enamored me and has made me a continuing computer addict.

I am most embarrassed to say no other learning I have ever done has been so completely engulfing. Certainly not learning how to fly an airplane. Not learning Spanish, nor calculus. Worse, I can't seem to figure out just what this all devouring appeal of the computer is about. Have you figured it out? Have your children, when at a time of crises they have to wait for you to solve a problem like how to get your printer to print in compressed mode, figured it out? Has anyone figured it out?

The Appeal of Instant Gratification.

In computers, if you get it right, the computer gives you precious gift by instantly rewarding you with the right answer. In a world which is increasingly bewildering, where politics confuse us, where the media uses us, where relationships are storm-tossed and careers unpredictably chaotic, what a comfort it is knowing that PG will bring up a prompt that you can believe in and that PG will do it every time. Carefully you weigh the alternatives, make a decision and results magically appear, the printer dances and gratification abides in your heart, instantly.

So it is with everything about computers. If you get it right, the gratification will be instant. The first time you make a directory, e.g., (md\Salvation) and it works, even if it comes out \SALVATIO, it's instant gratification. Do you remember that thrill?

Do you remember typing something single spaced and then instantly switching the whole document to double-spaced. What greater moment of instant gratification can there be than that?

The Dependability of Predictability

That's the second thing I get from computers -- predictability. Instant gratification is nice and sometimes over-powering nice, but it is when the instant gratification is dependably predictable that computers begin to be addictive.

It is comforting because it is predictable. At this level of my computerhood I can insert something into my AUTOEXEC.BAT and know that if I did it right, what I inserted will produce a predictable result.

So, instant gratification and predictability are two of the factors with which the computer has me hypnotized.

The Elegance of the Solution.

I know I must be simple-minded, but after almost fifty years on a typewriter, I was dazzled and remain dazzled by how the little letters can be juggled on a computer. And it is always with such elegance. Anyone who writes knows what I mean. You arrogantly insert an adjective and watch the little letters jump ahead of it in perfect order, never losing a space or a comma, that's elegance.

You Will Never Run Out of Things to Learn.

Finally, there is one last fascination, nay, mesmerization with this thing called a computer. I don't know if that is what fascinates you, but it is clearly one of the most enthralling things for me. Flying had some of that and so did Spanish, but nothing like the opportunities to learn that a computer user is provided.

So what is the appeal of the computer for you? Are you captivated by the thrill of the instant gratification? Is it the predictability in and otherwise unpredictable world that fascinates you? Is it elegance of solutions that charms you? Or is it the fact that you will never run out of things to learn?

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Of Mice and Menus

By John Rodrigues

Boston Computer Society

Recently, we had to incorporate a mouse into a software program. How is this done? Information is available; it is just not generally known where to get it. This article reviews the official Microsoft documentation.

Microsoft has a Mouse Programmer's Reference Guide. We got it directly from them for $25. It comes with a Mouse Tools diskette which contains programs to add Mouse support to other programs which do not have it built in. The diskette also has example source code and utilities for building mouse control directly into new software applications.

A caveat: we got our diskette in December 1988. It has Mouse library v6.0 with programs dated in early 1987. These include support for text, Hercules, and EGA display modes. We asked Microsoft about VGA. They said that some of the modes are handled, but it is not explicitly supported with the current release of Mouse libraries. You are on your own.

How DOS Sees the Mouse The Microsoft mouse has 2 buttons and the interface software can recognize when either, or both, are pressed or released, as well as when the mouse is moved around. The interface is handled by the "driver."

Every program that uses the mouse expects a driver to be loaded into memory. This can be either MOUSE.SYS, the DOS device driver which is loaded upon system booting, or MOUSE.COM which is started by the user and stays resident in memory. Interrupt 33H is used by the interface library to invoke mouse functions. The control panel familiar to mouse users, CPANEL.EXE used to adjust the mouse sensitivity (how far the screen cursor moves when the actual mouse moves), talks to the driver using some of the interface functions.

The mouse has a "virtual screen" which is an array of horizontal and vertical points. These points are then mapped onto the actual screen depending upon whatever display mode is currently in use. The driver is smart enough to intercept calls to interrupt 10H, which changes screen modes, in order to change the virtual screen accordingly. It also automatically tracks the mouse cursor movement for you and updates the display on the screen. As the mouse track ball rotates, the motion is recorded in "mickeys." Each is approximately 1/200th of an inch. The mickey count is compared to the sensitivity (the number of mickeys it takes to make one character, or 8 pixels, on the screen) and the displayed cursor is moved the right amount.

There are three types of cursors that can be displayed: graphics, software text and hardware text. The first allows you to define what shape the user sees where the cursor is located on the screen in graphics modes. You define a pixel map for the shape. The second controls text attributes over the cursor (e.g., reversed). The last makes scan lines flash to form a blinking block cursor, half-block or underscore. In the documentation, there are definitions for eight example graphics cursors. These are familiar to mouse users and include the arrow that points up and to the left, the up arrow, left arrow, check mark, pointing hand, diagonal cross, rectangular cross and hourglass. The driver also has an internal flag which indicates whether the mouse cursor is to be displayed.

Build Your Own Menus The first part of the manual talks about Mouse Menus. These are batch-like files with commands to display pop-up menus or dialogue boxes and to interpret the mouse activity. You can use these to display your own prompts and to tell the mouse what to do if the user "clicks" at a certain region on the screen. Menus can be used to automatically enter text into whatever program is currently running, or to run additional programs. The diskette has examples which add Mouse support to Multiplan (both IBM's and Microsoft's), Lotus Symphony, Visicalc and Wordstar. You can use the tools to add support to other programs yourself.

Mouse menus are first created in a .DEF text file. The MAKEMENU.EXE program compiles these statements into a more efficient .MNU file. MENU.COM is then run to drive the mouse interface. It interprets a given menu file and responds accordingly. Of course, the keyboard still works normally. Only the user's mouse activity is translated into keyboard input or DOS commands. You can make the menus smart enough to locate text at a certain position on the screen and do something based on the contents and attributes of the text. Attributes can be ignored upon matching or can recognize normal, bold, inverse or particular foreground and background colors. MENU.COM is 7k, so the menu program cannot exceed 57k, since .COM files must work in 64k or less. The minimum that MENU.COM will allocate is 6k so it will always take 13k or greater of memory. Type MENU NAME to start your menu program. Later type MENU OFF to end it.

The original .DEF file uses Mouse Menu Language statements. These 13 unique statements handle response to the mouse keys, menu display, string matching on the screen, and output of text to simulate keyboard input. A simple program which types a down arrow when the right button is clicked and an ENTER key when both buttons are pressed would look like this:

```
; Quick Mouse menu program
BEGIN   dn,up,ent   dn:TYPE   0,80
up:TYPE 0,72 ent:TYPE enter
```

Actually, BEGIN is smart enough to recognize more than just clicking left, right or both buttons. It also handles relative motion of the mouse to the left, right, up or down, and can change sensitivity on the fly. TYPE is used to simulate typing the given keys. It can be given standard or extended ASCII codes, as above, predefined keys (enter, tab, backsp, esc), or a string (e.g. "dir a:").

OCR

Most who toyed with the idea of computers leaned toward a centralized processing system, such as Wang's System 25, and somewhat later, System VS-100.

Oh, certainly the legal office had gone slightly beyond the quill pen, but lawyers are a curiously cautious sort, tending to copy most of their best from those who have gone before. As Gordon L. Jacobs of the Toronto law firm, McMillan, Binch, says, "When the Bell organization offered to place telephones on the desks of lawyers for a free promotional device in the early 1880's, the lawyer's reaction was 'Heavens no. Place them on the secretary's desk. We're lawyers and deal with our clients across a desk, not by an impersonal contraption such as that."

Only after the business world had long abandoned carbon paper did attorneys finally recognize the fine art of xerography (a copyrighted term, mind you) to be as good as an imprint from an impacted key. But lawyers, once they recognize a good thing, do tend to overdo their newly learned skillssuch as turning out millions of sheets of paper, keeping the pulp mills of International Paper and their brethren churning madly.

Let's look at what most law offices really do. Lawyers do their thing to gets words on paper; paralegals and legal assistants to do all the grunt work; one production typist/secretary for each two or three attorneys; at least one file clerk/messenger for six attorneys; one bookkeeper/administrator; and then the hardware and software: ideally, a PC on each lawyer's desk, networked to send drafts to the secretary's PC or access to the mainframe, so she (almost always not a "he") could polish them into final briefs, correspondence, or pleadings.

The system should also be networked so that each attorney could send his billing time directly to the bookkeeper at the end of each day or month, so that cash flow can sustain this commercial enterprise. (Don't labor under the misapprehension that the law business is such a noble profession that it doesn't grovel at the knees of the money lenders along with the others on the Anchorage business scene, to tide themselves over until the client pays.)

Next come laser printers, collating and binding machines, facsimile transmittal and receiving machines, and telephone systems that record time and client data. All of this is calculated to spew out the product upon which modern law has been based, at least since the time of Justice Brandeis when he was a practicing attorney: immense amounts of paper with words on it, calculated to overwhelm, if not convince, someone of the rightness of your client's cause.

All of this effort consists of men, women, machines, blood, sweat and not a few tears, trying to get the word onto paper. (Carpal tunnel syndrome is a familiar symptom when it comes to workers' compensation filings from law offices)

That is where OCR is supposed to come in, to relieve the need for a battery of production typists putting words to paper, or more likely words to a screen in front of a terminal or PC. OCR's promise was that you could place a stack of paper into a tray, have the machine read the information into your computer, and then go about any necessary manipulation.

Perhaps the promise never could be fulfilled completely. Although the courts and others have specified rules as to the appearance of the type face (Courier, generally, with at least 10 Point typeface, with margins of at least 1 inches at the top of the first page, etc., etc., ad nauseam), the development of laser printers and numerous inexpensive soft fonts made a proliferation of typefaces not only possible, but also desirable for documents not intended for the courtroom, as each attorney, or at least law firm, tried to differentiate his appearance from the next. That made the task of scanning a typeface and recognizing it much harder.

One's eye can distinguish between a "v" and a "y", or an "o" and a "g", by the descender below the line. An OCR device often has difficulty, since it looks at precise squiggles between given parameters. Since each font has many different attributes, going beyond about two complete sets of fonts to be recognized presents a formidable computing task for an OCR machine.

In practice, what has happened is that after an initial rush to embrace new technology by a few large firms, economic reality has set in. Performance did not match promise. The scanners would read approximately 90-95% of straight typing, assuming that one had good copy using Courier or OCR type face. If there were columns of information, or odd tabulation, the recognition dropped to around 40%. Charts and other graphics were a big fat zero. Scanning speed was generally around one and one half to two 8" x 11" sheets per minute.

Thereafter, close proof-reading and editing consumed considerable time. One could not generally put a stack of papers in the feeder tray, so someone had to monitor the input. If the matter to be scanned was blurry as from a facsimile brief from another law

Calendar

October 7	Telecommunications. Come learn how to use your communications software and log on to your favorite bulletin boards.
November 4	Unison World's Avagio, desktop publishing software will be shown by Paul Doell, sales manager.
December 2	Come see the Poquet computer. It's so small it will fit in your shirt pocket.

The Sadness of Spreadsheets and Laser Printers

By Claude Delphia

Modesto PCUG

First off, let me state that there are serious problems in using laser printers with spreadsheets. I will detail as many of these as I can.

I had my first experience with laser printers over two years ago when I helped the Patterson newspaper set up an Apple LaserWriter. Two later items in this column will detail the two main kinds of laser printers and the problems using a LaserWriter with spreadsheets on IBM-PC compatible computers. I hope you will take the time to wade through a technical explanation about type fonts, characters per inch, and proportional spacing. It is critical in understanding the problems between spreadsheets and laser printers. I took the plunge and bought my own laser printer, an HP Laserjet II, in late February of this year. I needed it for some serious business word processing so I felt I could finally justify the cost.

Spreadsheets and Type Fonts

There is a technical problem with spreadsheets and type fonts in general. The basis of the problem is proportional spacing versus fixed spacing. All lettersalpha characterscome in sets of one style and size which constitute a font. The most common font is Courier which was found on most IBM Selectric typewriters. All typewriters came with a single font or type style until the print wheels and ball heads came along which allowed you to vary the font and spacing. Courier is a fixed line-spacing font. Fonts that have fixed spacing are specified in 10, 12 and 15 characters per inch. Another common type-face or font is Times-Roman which is proportional (PS). Proportional spacing is where the letter m takes up more space than the letter i, the two extremes of individual character sizes. PS or proportional can not be specified in characters per inch because each letter takes up a variable amount of space. PS has many advantages especially as it relates to the visual appearance of the print out. But there is a hidden advantage also. Any given amount of words will take less page space when typed in PS. For example, using a PS font would probably reduce the number of pages of the PC Post by 25% because there would be more words per page. Other variations using desk top publishing and a laser printer could reduce the number of pages even further. Another type face or font variable is the character-size as specified in height. The average typewriter or printer is 12 points in height or about 1/8 of an inch. In general, PS fonts can be any size in points from 3, barely readable, to 72 points or 1 inch in height or even larger such as those seen in newspaper headlines.

The Font Problem

The problem with 1-2-3 and Symphony and their compatible spreadsheets in general revolves around font size variations and the differences between fixed character and PS line spacing. If you have ever tried to make an expanded head in a spreadsheet, then you have experienced the problem. Its appearance on the printed page is often quite surprising in terms of size and spacing.

Of the two main problems, fixed versus PS is the biggest. The spacing of columns of figures, which is mainly what spreadsheets do, is destroyed when PS type fonts are used. In other words, the variable spacing means that your columns will not line up.

Now we will explore the individual problems I have encountered.

Lotus and the Laserjet The first problem you encounter with the Laserjet is the fact that it comes with only three fonts. The traditional Courier at 12 points, a bold version and a small type face for very compressed print. Both work although the Courier looks old fashioned somehow. The problem is, I like to use a character size which just fills the printed page less appropriate margins. Neither of the two sizes included with the Laserjet allows for serious page layout variations.

Excel and the Laserjet The Laserjet and Excel present a somewhat different problem. since Excel is graphics based, it has only minor limits when it comes to character size and fonts. The problem is that you have to buy the additional fonts, whether by cartridge or soft fonts, in order to take advantage of Excel's Laserjet capabilities. Excel comes with fonts built in which make your screen look super, but you can't get the printed effect without adding fonts to your Laserjet. Oddly enough, Excel will create special fonts on a 9 or 24 pin printer.

The problem with Apple LaserWriter is that it was not made for the IBM-PC world. Foremost, its interface is serial. Therefore your Print Screen key won't work among other problems. The next one is that many kinds of software for the PC does not come with Apple LaserWriter drivers although this is changing. The LaserWriter is a super machine if you can overcome its limits. It is probably the best choice if you are doing nothing but word processing. It is a must for most Desk Top Publishing situations. But spreadsheets are another story altogether with the exception of Excel.

Solutions

If you remember, the biggest problem with laser printers and spreadsheets is PS, proportional spacing, versus "fixed" spacing. Fixed spacing is almost required in order to keep columns of figures in line vertically. To understand the problem you need to realize that a 1 takes up less line space than other numbers. So using PS would mean that any set of figures that had a 1 in it would be out of alignment. And the misalignment will compound itself across the page. The main solution is to use "fixed" fonts where each number takes up the same line space. Now for the solution:

You have four choices. No. 1 is use the built in fonts that come with most laser printers. You may want to keep this in mind if you are considering the purchase of a laser printer. Always check out what built in fonts are included.
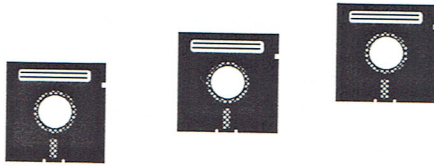
SLO Bytes Library

We have several good programs being added to the library this month. Here's what SLO Bytes is offering:

#387 ISE095 - The integral scientist. Mix solutions, find dilutions, check atomic weights, etc. Excellent for the chemist.

#388 Children's Educational: WORDWORM - make the worm consume the correct letters. Children's Graphic ver 1.23 - Now your child can have their very own simple graphic program.

#389 Draft Choice ver 1.4 is an impressively fast object based graphics tool which uses floating point mathematics to record the size, shape and position of objects you design. PC_HOME - home management system.

#390 - Potpourri! FNL16 - a fishing log for all you sportsmen. IBG - instant "buzzword" generator. (Great for Comdex!) VM1088 - nice music program. DZONE - the DOS ZONE (practical joke) LSL3PTS - Leisure Suit Larry version 3 point system. BIKE31 - bike gear ratio analysis. BIKE_LOG - log your bike trips. QTITLE21 - Make nice large screen titles instantly!

#391W Windows 3.0 programs: DESKTOP - just as it says. EYE30 - the roving eyes follow your every move. LICO10 - lists icons on screen. NEWPAPER - every time you enter windows, a new background. WIN3RISK - warning, windows 3.0 is not compatible with every computer setup. XVTDRAW - nice windows drawing program.

UPDATES:

#082 - LIST73A updated to version 7.4

#309 - Con-format upgraded to version 1.06

#374 - FIND211C updated to FIND214

#381 - All VirusScan programs upgraded from 64 to 66.

Demo Disks

#164 DrawPerfect by WordPerfect (EGA required) #165 Abacus II by Comsoft Inc. #166 Countdown by Access Software (VGA + 1.2 meg required)

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New Members

Welcome to the following people who joined us in the month of September:

Norman Donaldson 489-0221
Anne Gowan
Verne Moore   238-2950
William Palmerston 466-0308
Terry Richardson   528-1075

Just a fiendly reminder to those of you listed below. You membership expired in August of this year. You will be dropped from the membership list if you do not renew before the next meeting.

Julia Boarino
Clifford Buttschardt
Beverly & C.P. Cotter
Helen Ann Cunningham
Patrick Farley
Robert Frost
Bob Harrison
Dorothy Irvin
Steve Kapa
Steve Kenney
Allan McKibben
Art Perrella
Donald Smith
Rex Thornhill
Wilmar Tognazzini
Tiffany White

Spreaedsheets & Lasers

The 2nd choice is to buy one of the laser printer cartridge font sets made by Hewlett Packard or others. Some cartridges comes with a small selection of fixed fonts. But the choices are limited and the cartridges are expensive.

The 3rd choice is to buy one of the mega cartridges which contain a large variety of fixed and PS fonts. These cartridges run from $300 to $500.

The 4th choice and the one I opted for is a new piece of software made just for the Laserjet and spreadsheets (and also DBMS programs). It's called the Laser Manager by Laserpoint Corporation which is located in Tiburon.

All of the soft fonts with this software are "fixed" and you have numerous choices. The sizes range from 4 to 16 points. With the 4 point it would be possible to get 25 characters per inch. The 33 font sets (both portrait and landscape) also include 9 graphics characters for lines and boxes.

The best reason to buy this program is the price$99.95. You simply can't get set up for spreadsheets or other columnar formats for less than this unless the laser printer has them built in. If you do something for less, it probably won't include as many soft fonts. Like all software, Laser Manager has procedural features that you might think should be done differently. But what software doesn't. And I would like to see them include more graphics features. But the final point is that I believe this is the best choice at this time.

Next Meeting Will Be Sunday, October 7th

OCR

firm, consisting of forty pages that needed to be reviewed, redlined and then returned to the sender, you might as well dedicate the input skills of a good editor/typist for at least a full day, rather than trying to use the OCR.

DEST, one of the suppliers about five years ago and still manufacturing a mid- range model, no longer has a distributor or representative in Anchorage because of low sales volume, so if the device breaks down, you have to call Seattle.

The initial acquisition cost of approximately $8,000 could be amortized over one year if it supplanted the need for 1/3 of a typist, but that enticement, too, was not realized.

Other suppliers are now available, using slightly different technology, such as Hewlett-Packard and Kurzweil. HP's flat plate scanner uses digitally bit-mapped graphics. Although relatively inexpensive, (about $1,500) this is quite slow, but accurate, and not really suited for the type of production input that is needed. Other entries on the low end include Panasonic's Image Scanner RS506, retailing for about $1,300 and Datacopy's 730 Scanner for $1,200 from some mail order houses, as well as some line by line hand held scanners for as little as $150.

All of these add visual interest to such documents as promotional newsletters, but do little towards the bread and butter of the firm. Kurzweil's product is much more production oriented, but the initial cost of approximately $30,000 is beyond the financial ability of all but the highest end of the market.

The need is still there. Most lawyer's tasks are not really original. They are some of the best (or worst) plagiarists around, always preferring to take another's work product, in the form of paper, and modifying it to meet the present need. In the old days that took the form of "cut and paste."

Today, the modern lawyer looks to his stable of wills, or acceleration clauses, or whatever the form field, which is resident on his computer, and assembles a document electronically. When he sees a new clause worth copying, he (or she) doesn't type it out himself at $120 per hour. Instead he asks his secretary to type it out and insert it for him.

Reduction of personnel costs will easily justify equipment acquisition over a two year payout. A good secretary does not come cheaply, with the going out-of- pocket salary costs at least $2,500 per month, and fringe benefits and pension costs adding another $1,000.

If a machine that reads 99% accurately and has a scan rate of at least three pages per minute can be developed that will read most of the fonts in current use, there will be a ready market among the legal profession, even if the initial acquisition cost is $6,000 - $8,000. Lawyers are not the only ones who probably could use the equivalent of a good five cent cigar. If the equipment manufacturers will take notice and the technical obstacles can be overcome, there may be a ready market for Optical Character Recognition in the Anchorage legal office place.

Mr. Bonner is an Anchorage attorney at 431 West Seventh Avenue, Suite 105, Anchorage, Alaska 99501-3551, (907) 279-8352, and is an avid computer user/owner at home and in his profession.

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Bits n' Bytes

- For those of you going to Comdex (November 12-16) Las Vegas is filling up fast. There may still be rooms at Circus Circus. Call (800)634-3450. I hope to procure several free passes (will save you $75 registration). Contact Bob Ward in mid October.

Mice

The manual has an example program which is used so that major DOS commands can be executed from a menu.

Design a Mouse Interface Every mouse function call is described in the programmer's guide. These include the functions that make it possible for the mouse to do the things described above as well as some other interesting capabilities. For instance, the mouse can emulate a light pen where both button down means that the pen is down. Also, there are 8 languages available to the international version of the mouse driver. The language is chosen via the "Set Language for Messages" function and includes English, French, Dutch, German, Swedish, Finnish, Spanish, Portuguese and Italian.

The logistics for making mouse function calls directly from assembly language, or high-level languages (even Borland's Turbo Pascal) are noted with examples.

Summagraphics Digitizer Do you have a digitizer on your system? Summagraphics Universal Mouse Emulator can be used to interface a SummaSketch tablet to allow the cursor to act like a mouse. This keeps the number of pointing devices down if you habitually use the digitizer for applications such as PageMaker, AutoCAD or others.

Summagraphics Corporation 777 State Street Fairfield, CT 06430 Phone: 203-881-5400

Microsoft Corporation 16011 NE 36th Way Box 97017 Redmond, WA 98073 Phone: 206-882-8080

John Rodrigues is a computer consultant at CADsmith Inc., 508-485-0414. He is experienced in microcomputer product development requiring original software for graphics, CAD/CAM, data translation, automation and embedded systems.

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Help support Your Newsletter

If you would like to submit an article , type articles into ASCII format, assist with mailing, or any other activity associated with the newsletter, give John Ewing a call at 528-7196. I would be happy to hear from you. If you have a criticism, tell Bob. (Just kidding, Bob)

Query Column
Warm Boots vs Cold Boots

Idaho PCUG Newsletter, vol. 04, no. 6
Reprinted from the Monterey Bay UG Newslet-

Query: I thought a "warm" boot and a "cold" boot were the same; what is the difference? Return: First, let me explain that a "boot" is simply the start up procedure for your computer and that there are two types of booting sequences; a "cold" boot and a "warm" boot. A cold boot happens when the computer has been completely powered down and then back up. A warm boot can be done by pressing Ctrl-Alt-Del (at the same time) from the keyboard while the power is on.

Cold boots force the computer to go through a complete memory check, and on some computers, a device check. Additionally, all functions on the computer are reset. This process is referred as a POST (Power on, Self Test). On many older PC's, a cold boot can take up to 60 seconds to execute.

On the other hand, warm booting does not perform the complete system re-set and for that reason it is much faster. Basically, all a warm boot does is clear the processor of all programs and

What's New

Lynn Boisen was not able to attend the main meeting as planned. But Bob Ward came to the rescue to demonstrate Unison World's Chest Top Publishing. The heart of the presentation was the special ribbon used to print the PrintMaster file along with the special color pens. A mirror image outline is printed on standard paper. The outlined areas are then colored with the pens. Place the artwork face down on a tee-shirt, press with a hot iron and, viola, you have Chest Top Publishing.

In October, George will be discussing (and demonstrating) TSR programs. For the unenlightened, TSR stands for Terminate and Stay Resident. These programs sit idly by in the background waiting to be called up.

There will be a question and answer session at the end of the demonstration, as usual.

functions. (There are some system errors, such as many system locks-ups, which the warm boot cannot recover, therefore, you must turn off the power and perform a cold boot.)

In summary, both are triggered by a call to a system interrupt but the warm boot completely bypasses the Power On, Self Test module in the bootstrap code.

Query: On some machines there is a button which you can push to boot the machine if Ctrl-Alt-Del doesn't work. Just out of curiosity, would that be a warm or cold boot?

Return: Actually, it appears to be somewhat machine dependent. Most reset switches or buttons activate the "cold" boot sequence, however I have seen machines where it was functionally the same as pressing Ctrl-Alt-Del. Again, this switch can be wired by the manufacturer to activate the warm or cold boot sequence. If you see the POST activating when you press the reset button then you are seeing a "cold" boot. If not, you are generally seeing the "warm" boot. --Rich..

After intermission, George will demonstrate QMODEM 4.2. This is a telecommunications program. The plan is to access local and national bulletin boards via Tymenet. This should prove very interesting.

As many of you know, we have lost a very fine Editor. Bob Ward will no longer be editing HARD COPY. He has been the editor for over five years and felt he should let someone else have a little bit of the fun. Bob isn't really done with HARD COPY because I've hounded him constantly since I began putting this issue together.

Bob is still going to be around (he's the club secretary, ya know) performing other duties such as tracking the membership, maintaining the library, contributing articles to HARD COPY, and anything else that needs to be done. Sincerely Bob, you have done an excellent job in the past, and I hope to continue what you have done.

Club Information

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

Membership: Dues are $18 per year. Newsletter only is $10 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 SLO BYTES PC User's Group, its officers, editor, 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 to Bob Ward, 2100 Andre Ave., Los Osos, CA. 93402. Call (805)756-2164 M-F 7:30am - 5pm and (805)528-0121 all other times.

Treasurer: Teri Sorgatz, 832 S. 7th Street, Grover City, CA. 93433 Phone 489-2516

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 1:30 - 2:15 pm.

New User's SIG - F.H. 286

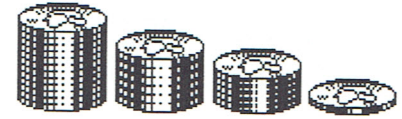Our Public Domain Library is in Fisher Hall 292. Hours 12 Noon till closing.

SLO BYTES BULLLETIN BOARD

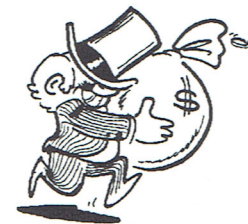(805) 528-3753 2400/8/N/1

PC Files & Message Section

SYSOP: George Campbell

All Welcome - 24 Hours

Treasurer's Report

Here's a list of expenditures and deposits for this past month:

Beginning Balance:	+1542.70
Expenses:	
Newsletter 8/27/90	- 99.28
Deposit 9/14/90	+ 316.00
Balance 9/15/90	+1759.42

DISCOUNTS

Star Computers 855 Morro Bay Blvd. Morro Bay 772-7827	5% 10%	Any software in stock. Paper, ribbons, cables, and other supplies.
Computer Logic 973 Foothill Blvd. #4 San Luis Obispo 544-8347	10%	Off list - all computers, software, computer peripherals, and products. Contact Bruce, Paul or Dave for discount.
WITCO Computers 3563 Sueldo, Bld. B San Luis Obsipo 549-0811	10% 5%	Off complete systems, peripherals, supplies but not including software. Off computers alone.