SLO Bytes
SAN LUIS OBISPO PC USERS GROUP

HARD COPY

What's New

By John Ewing

For those of you that haven't heard, the starting time for the early meeting has been moved up to 1:00 pm. This was done to allow time for Bob Ward to demonstrate new shareware that has piqued his interest. July's offering was a program called CONG. No, it is not a game centered around a giant gorilla, (although some might says it deals with monkeys). CONG is a program that provides information about our representatives in the federal government. The program is essentially a database providing the address of all Senators and Congresspersons currently holding office. It also provides the committees that these representatives serve on. A nice feature of the program is that a number of representatives can be tagged for inclusion into letters that are created using a simple word processor. The word processor is included in the CONG program. CONG will print the letters as well as mailing labels. If you write to your representatives, you may be interested in getting this program.

George Campbell followed up with a presentation of Visual Basic, a programming language for Windows 3.0. This is a commercial product developed by Microsoft Corporation (retails for $199, street priced around &100). Visual basic automates the programming required to create windows projects. In just a few short minutes, George was able to create a Windows application that he says would have taken three days using his standard language software. Visuaal Basic allows you to create command buttons, text boxes, color schemes, and many other features required to make an application perform.

Well, they have been absent from the scene for a while, but the early meeting disk is back. George demonstrated several shareware products for use with Windows. The most interesting to me is the YACHT2.ZIP file. If you are tired of the Solitaire game packaged with Windows 3.0, you will appreciate this. It is the dice game Yachtzee. I think George may have done a little programming of his own with this. It seems that every roll of the dice he made came up a high scorer (and on the first roll). The disk also includes a file called FONTER (written by George using Visual Basic). FONTER allow you to view a sample of the fonts available to Windows. Also on the early meeting ddisk is a file named WINFO.ZIP. This is a Windows program that lets yuo see the system information that Windows sees. It gives much more information than the Windows Information program.

The General Meeting was hosted by Bob Ward. He demonstrated the OnLine service PRODIGY. This is the service owned by Sears and IBM. The cost for Prodigy is a flat $9.95 per month. For this you get access to News & Information services, Travel services, Encyclopedia services, etc. Prodigy does not offer a file area for downloading. For what you get, the price seems to be very reasonable.

CONTENTS

Club Officers

President   George Campbell
Vice President   Sam Powers
Treasurer   Bernice Meador
Secretary   Bob Ward
Editor   John Ewing

LOTUS 1-2-3 MACRO

by Bill Duncan

SBPCUG, September 1990

A macro is simply a sequence of keystrokes which have been stored away and can be recalled by pressing one or two keys. Macros are a method of saving you the trouble of typing the same keystrokes over and over. Many programs have the ability to create macros, among them Lotus, WordPerfect, dBase, and programs such as Prokey which are written precisely for creating macros. DOS batch files are essentially macros. The macro is a powerful tool which not only saves time, but can prevent keyboard errors.

I use Lotus 1-2-3 spreadsheets to create balance sheets, income statements, and tables of activities such as monthly sales and annual income. In the course of creating and maintaining these spreadsheets I have found that I have four basic macros that I consistently use.

The first is a macro to save the current file to disk and continue working. Having had the experience of power failures, and the loss of hours of work, I routinely save my files every ten or fifteen minutes. The keystroke sequence of storing a file in Lotus is /FS~R. The slash calls up the Lotus menu, the F takes you to FILE, the S takes you to SAVE, the "~", called the tilde, represents the enter key, and the R stands for REPLACE. By creating a macro which contains this sequence you can execute the five keystrokes by pressing the ALT key and a letter key. The advantage to this macro is not so much the time saved typing, but the ease of saving the file.

Macros are stored in cells and rows within the spreadsheet. I usually place my macros to the right of my work area at the top of the spreadsheet, typically in the G or H column. To create the save macro, retrieve an existing file and position the cursor in cell G1, or another empty cell, and type '/FS~R followed by the enter key. The apostrophe causes the entry to be a label and prevents the menu from being activated as you type in the macro. With the cursor remaining on cell G1, call up the menu and go RANGE LABEL CREATE, and assign the name to the macro by typing /S. Press enter twice. The backslash represents the ALT key. If you have done everything correctly the macro is now ready to use by holding down the ALT key and pressing the S key. The file will be saved to the disk, replacing the old version automatically.

A word of warning, if you have not previously saved the current file to disk, this macro will write over the first spreadsheet on your disk. To avoid this error I make it a habit to save a new spreadsheet before I do anything else, assigning the file name right away keeps me focused. An alternate method would be to modify the macro and omit the R for replace. When the macro is executed it will pause at the CANCEL or REPLACE prompt and allow you to decide at that time if your want to continue with the save operation.

Lotus permits the creation of 26 macros, one for each letter of the alphabet. In addition a macro called \O can be created and will execute when the file is retrieved, just as the autoexec.bat file executes when your computer is powered up.

During the course of creating my spreadsheets I key in many columns and rows of data. One of my first complaints about Lotus was that when I typed a number and pressed enter, the cursor remained on the current cell. In order to move the cell below I had to reach over and press the arrow down key which slowed me down. Creating an entry macro can get around this inconvenience. Returning to our spreadsheet, position the cursor in cell G3. Note that you must leave a blank cell between the macros, in this case G2. This is because Lotus allows multiple lines in a macro, executing one line after another. If two macros are adjacent to each other Lotus will execute it as one macro. So in cell G3 type {?}~{down}{branch \d} and press enter. Name the macro by calling up the menu and going to RANGE NAME CREATE. Assign the name \d and press enter twice. If you activate this macro by pressing ALT D you will find that each time you press the enter key the cursor will move down one position. At the bottom of the screen the Lotus CMD indicator will light up alerting you that the macro is active. To break out of the macro press the CTRL key and the BREAK key twice. The computer will beep and the CMD light will go out.

This macro works by creating an endless loop. The {?} allows input from the keyboard, the tilde accepts the input, the {down} moves the cursor down one position, and the {branch \d} tells Lotus to execute the ALT D macro again. So each time you press enter the macro executes, waits for input, and then repeats itself. Pressing the CTRL key and BREAK twice aborts the loop, not very elegant but expedient. If you want to enter in rows, going to the right, create another macro called ALT R, {?}~{right}{branch \r}. When active ALT R will move the cursor to the right one position each time you press enter.

The word of warning on this macro is: turn it off before calling up the Lotus menu and executing commands. If left active it will continue to execute while you invoke commands and define areas, which can be unpredictable. Also when one macro is active another cannot be used, so if you want to execute ALT S to save your file you must first deactivate ALT D or R.

A TOUCH OF VIRUS

by Berl Golomb

SBPCUG, September 1990 (part 1)
October 1990 (part 2)

Editor's note: The following article first appeared in the Santa Barbara PC User's Group Newsletter in two parts. Both parts are reprinted here for your enjoyment and information. Hard Copy Ed.

PART ONE

Just after New Year's hell broke loose on my CSS 386 computer. I thought Halloween had come early, but these were no pranks: One evening as I fired up the trusty 386 the computer froze in mid boot-up. For long seconds, nothing happened. Finally, after a mini- eternity, the Moving Finger wrote on the screen: "FAILURE TO INITIALIZE DRIVE 1". That was ROM BIOS saying the delay was caused by Power on Self Test (POST) finding that the SECOND hard-disk, a Seagate 277R, refused to work. "0", the first drive, was OK because BIOS didn't mention it. Two choices were open: pretend the drive didn't exist, or check setup. I checked. Setup was OK. I rebooted. "Drive 1" didn't respond. I unbuttoned the case and checked physical connections. Everything looked fine. I rebooted. The disk still didn't work.

This overture initiated weeks of madness. "1" would reappear for a visit then go AWOL again, time after time. A virus called "1701B" appeared in the 386. It infected three computers before we nuked it to smithereens. Mysterious "VIRUS" volume labels appeared long after the virus was supposedly extinct. Phantom file names came up where no files existed. IBM's "fixed-disk" error code, "1701", was the same as the virus's name (based on bytes of code it added to infected files). Was this a clue? I was never sure what was casually connected and what was casual coincidence. Some of the Pranks were "hard" attacks - there was real, physical disk failure. Others generated weird happenings like phantom file and volume labels. I thought of these as "viral variations". Ultimately it cost me and others hours of effort, and I was out about a thousand dollars.

For help, I called Adaptec, makers of my RLL controller. After toll calls and eternities waiting for a technician, I got brushed off. Tech Support was solely for approved vendors. End users were to buy from vendors on the "Approved List" and not bother Adaptec. Only approved vendors could talk to Tech Support. Users with problems had to ask their vendor. The vendors, in turn, were clearly not competent because Tech Support had to be reserved full- time exclusively for them. Given such lunacy, Adaptec was useless to me. I next called Seagate, makers of the delinquent hard disk, on their Tech Support's toll-free number. A helpful Julian White- Eagle tried to puzzle things out. Unfortunately, he could only go by my reporting of symptoms and I didn't understand what was going on. His suggestions failed to exorcise the demons. Still, he tried. I appreciate his efforts and Seagate's cooperation.

With little help coming from afar, I sought nearby advice. One guru blamed power supply failure. Another friend was sure a virus was chewing up the Seagate's boot tracks. I tried all suggestions. I replaced cables and power leads again and got nowhere. I downloaded a virus scanner from a distant BBS and found no viruses. I bought a new power supply that worked temporary magic. I just walked in with the new supply, switched the old unit on one last time, and the disk was back. I returned the unopened new unit. The drive obviously worked without it, thank you. Then Power Supply Spec-ter lost power. The disk quit again a week later.

Time passed. Throughout all this, I was trying to work. A manuscript needed a sample directory listing. I shelled to DOS, redirected "Dir C:" to a file, appended file to manuscript, and returned to WordStar. This was how I discovered the virus:

```
Volume in drive C is MAXTR2190-1
Directory of C:\
ANTIDOTE
 1-13-90  1:45a
BAT
 8-26-89  6:05P
.....
COMMAND COM   27008 5-20-89  8:00p
FIND COM 2119  1-12-85  9:57p
CONFIG SYS 310  3-31-89  11:47a
AUTOEXEC BAT  565  3-28-89  7:22p
 41 File(s) 4016128 bytes free
```

COMMAND.COM 27008 bytes? PCDOS 3.3's COMMAND.COM is 25307 bytes.

I rushed to DOS and copied a clean COMMAND.COM. COMMAND was 25307 bytes again. Everything seemed OK. I ran "dir com*". COMMAND was 27008 bytes. I recopied the clean COMMAND.COM and checked. 25307 bytes. I checked again. 27008 bytes. As soon as I used it COMMAND changed length. It was 27008 - 25307 = 1701 bytes too long. And FIND.COM was not 2119 bytes. The real FIND was only 418 bytes. 2119 - 418 = 1701 bytes again. This had to be a virus.

It was my first face-to-face with a virus. I was scared it had done God-knows-what to the computer. I called the friend who had predicted a virus at the root of all this. He would know what to do. But he was on vacation. I called Wayne McCall, our fearless editor, but Wayne refused to get near me, pleading electronic immune-deficiency. He was afraid of contagion. Abandoned to my own

Calendar Creator Plus Version 4.0 A Review . . .

by John Ewing

SLO Bytes PCUG

Do you know what day it is?

Do you know what you're suppose to do today?

Well, if you had Calendar Creator Plus from Power Up Software, you would know this and much, much more.

Calendar Creator Plus (CCP) essentially has two main functions. The first is to allow the software user to create and then modify event lists. The second is to print out these events in a calendar format. More on this later.

Calendar Creator requires an IBM PC, XT, AT, PS/2, or compatable with at least 512K of RAM. One floppy disk drive with a hard drive is strongly recommended, but a two floppy disk system will also work. You must also have a graphics video card (Hercules, CGA, EGA, VGA, SuperVGA, or MCGA) if you wish to use the Print Preview and View Graphics features. Personally, I have found the Print Preview feature very useful since problems can be identified before actually printing the calendar.

The installation was straight forward and simple. I had the software up and running within a few short minutes after opening the box. The software is available in either 720K 3-1/2" format (1 disk) or in 360K 5-1/4" format (2 disks). Both formats were packaged together. To install Calendar Creator, all that is necessary is to insert the floppy disk into the appropriate disk drive, type "setupcc", press enter, and then answer the prompts. For the hard disk installation, CCP will name the directory for the program files C:\CC4\. If you prefer another location, you can enter this at the prompt. The same is true for the graphics directory, where CCP will ask you if C:\CC4\ART\ is acceptable. When installation is completed, you can run CCP by entering CCPLUS at the C:\CC4\> prompt.

The software is accompanied by a 122 page manual. The manual contains a chapter on the requirements for getting the program started; a tutorial that teaches the new user about events, event lists, and printing calendars; a discussion of events that includes an overview, creating, adding, and editing events, modifying recurring events, using text styles in events, and changing event lists. The manual also includes a section on printing calendars and organizers.

The event lists were a little intimidating at first. I wasn't quite sure how to begin. The tutorial was a tremendous help here. After a while, I felt comfortable with creating and editing the events. I was getting bold enough to use the function keys. All operations that can be performed with the function keys are clearly identified in the edit screens. For example, to duplicate an existing event, simply press F6 in the ADD EVENT screen. The current event will be duplicated and available for editing. This is a great time and finger saver, since you don't have to do a lot of redundant typing.

Calendars can be printed in any of ten formats including 1-year, 6-month, 3-month, 1-month, 6-week, 2-week, 1-week, 2-day, 1-day, and text only. In addition, orginizers can be printed in two sizes (5-1/2"x8-1/2" and 3-3/4"x6-1/2") and in five formats (1-year, 1-month, 1-week, 1-day, or text only).

Calendar Creator supports PCX graphics. You can print a graphic with each event, as well as printing a graphic on the calendar header. CCP comes with 87 graphics. Loading all of this on your hard drive is not suggested (unless you have gigabytes available). Loading the graphics at a later date is simply a matter of running the SETUPCC.EXE program and responding to the appropriate prompts. CCP also supports Ex-tended Characters. These are entered into the events as if they were text. The keyboard does not support these characters, so they have to be entered by holding down the Alt key and entering the corresponding ASCII number using the numeric keypad. This procedure is explained very well in the manual.

My primary use of Calendar Creator is to schedule employees. By printing the work schedules on a monthly basis, the employees are well aware of the shift, work location, and work hours required of them. If a change occurs, it is a simple matter to revise the event list and print a new calendar.

I am satisfied with Calendar Creator Plus Version 4.0 in every way except one. Calendar Creator will not allow you to load your own printer driver. This is not a problem on my home system. However, at work I am connected to a network and print to a Xerox 4045 laser printer. I have a driver for the printer that should work with CCP, but CCP will not allow me to load it. In order to print the calendar, I have to copy the CCP software and the specific files I want to print to a floppy, sneaker-net the disk to a computer in another building that has a local printer, upload the files to the hard drive, print the calendar, and then delete the files from the hard drive. This all could be avoided if Power Up would provide an option for loading stand alone drivers.

The lack of printer support not withstanding, I like Calendar Creator very much and highly recommend it to anyone that has to track schedules, meetings, appointments, etc.

Calendar Creator Plus Version 4.0 is available at retail outlets and through mail order. I have seen the price as low as $38.00. I do not know the suggested retail price, however.

Calendar Creator Plus
Power Up Software Corporation
2929 Campus Drive
San Mateo, California 94403

SLO Bytes Library

LIBRARY NEWS

By Bob Ward, Librarian

I'm adding several disks to our library this month... trying to catch up with the backlog of great shareware programs before they become outdated.

#434 - GAMES: OILCAP - connect the oil pipes together before the spill. **MORAFFW -** Moraff's World; good graphics maize program.

#435 - B&f131 - Back & Forth 1.3: switch up to 20 programs in and out of memory.

#436 - TCC - Take control of your Cholesterol. Great program for people with that problem. Create meal plans, check cholesterol in different foods, etc. **TIDES16 -** have a local tide table handy when ever you need it.

#437 - FASTZIP - prints name/address and POSTNET Bar Code on envelopes, post cards, labels. 1000 record database. **FLEXPLUS -** great hard disk backup program. Works similar to PCTools but shareware.

#438 - Educational: MCRAYON1 - great coloring book for the younger ones. Uses mouse for coloring pre-drawn figures. **BIBLEMEN -** quiz yourself on men of the Bible, both New and Old Testaments. **DOS-TUTOR -** If you don't know enough about DOS, try this one to learn more. **HARDFACT -** Here is a step by step text file on how to add a hard disk to your computer. Prices are a bit dated but practical information is still good. **HDYCAPBB -** a text list of BBS's throughout the country that deal with handicaps. **WORLDTIM -** find what time it is in over 30 countries throughout the world.

#439 - ATMFONTS - here are several fonts that can be used with Adobe Type Manager under Windows 3.0. **FONTER15 -** a program written by George Campbell in Visual Basic. Show Windows' fonts on both screen and print a sample.

#440 - CAR110 - keep your car maintenance records with this one. **WORKOUT -** log your aerobic exercise sessions. If you exercise your jaws on snacks in front of the TV instead, then just enter the TV program! **WEAKLINK -** communicate between two computers via serial cable.

UPDATES

#297 FORMQ152 to FORMQ170
#309 CNFMT106 to CNFMT107
#354 COPYQ221 to COPYQ226
#368 ANAD201 to ANAD204
#432 RIR130 to RIR132

Calendar

August 4th	Have you thought of buying DOS 5.0? Come see it run on the club computer.
September 1st	Max Sicher, SLO Bytes member will show us how he uses his computer in conjunction with HAM radio.

LOTUS 1-2-3- MACROS

The fourth macro is used for printing my spreadsheets. I frequently print my spreadsheets to a file which I then modify with my word processor and send to my laser printer. In order to get a "clean" file I want Lotus to produce an unformatted file. In addition, once I have created a spreadsheet I frequently print it over and over after updating it with information. The macro is typed in as '/FS~R/P-Ffilename~CAOOUQ-RA3..061~GQ. I usually name it ALT P. The apostrophe causes the entry to be a label and prevents the menu from being activated as you type in the macro. The /FS~R is the save macro from above. I repeat it in my print macro because I usually exit immediately after printing. The save will also protect my spreadsheet if I have accidentally left a prior print file on disk as this macro does not allow for replacing an existing print file. The rest of the macro calls up the menu again after the save and goes to PRINT FILE filename ENTER CLEAR ALL OPTIONS OTHER UNFORMATTED QUIT RANGE A3..061 ENTER GO QUIT. The filename is whatever name I have assigned to the print file and the A3..061 defines the area of the spreadsheet to be printed. This macro is an example of saving keystrokes, not to mention saving me the trouble of remembering the print area.

I have several variations on ALT P depending on the application. When printing to my matrix printer I will insert commands to change to compressed mode. If I have different areas in the spreadsheet to print I will string several of the macros together to print each page as I go for a cup of coffee.

As you can see, macros can save time, protect your work, and prevent errors. For the beginning user, macros are an opportunity to gain a greater insight on how programs work and how to get the most out of them. In addition, macros enable the user to take charge of the computer and the software, making it perform to the needs of the user rather than just answering menu prompts.

Bits n' Bytes

By Bob Ward

» Many thanks to George and Kathy for bringing coffee and cookies to the meeting. Last month even included a free ceramic mug. Expect paper cups this coming month though. They got enough donations to make this a perpetual thing. SLO Bytes started providing cold sodas for 45 cents each (we don't rely on donations). The coke machine was never full so now you will have a guaranteed "wet your whistle" drink and for a nickel less.

» Borland Internaional bought Ashton-Tate for about a half a billion bucks. Rumor has it they will change the name from dBase to d-Borland... or was that dBaseland.

» Have you noticed the price of math co-processor chips falling lately. Used to be you would buy a 386 co-processor chip for about $900. Now they are less than $300. It's about time. I think the built-in math co-processor found in the 486 has something to do with the fall in prices.

» We have revised both the source and price of many of our blank disks. MEI Micro used to be our main supplier but we have had too many bad disks lately so you will see a better quality, name brand disk for a nickel more. Remember that nickel you saved on the soda, now we get it when you buy a disk. You can't win, so give up, just empty your pockets at the meeting.

All our disks still carry the same warranty. If you buy a bad one from us or it goes bad later on, just bring it back and we will cheerfully replace it.

» Are you looking for that hard to find, oddball shareware program that hasn't been written yet. Ask George or myself, perhaps we can find it somewhere in the country for you. We both have access to some large shareware databases just full of programs... This includes both the PC-Magazine utilities and PC- SIG library on CD-ROM.

» Formula for seeing a computerized image of a solar eclipse. (I know, this should have been in last month newsletter. Save it for the next one.) Materials: one slightly used 5.25" floppy disk without sleeve, 1-3" X 3" piece of Aluminum foil, scotch tape, and a pin. Procedure: put the foil over the hole in the center of the disk and tape in place. Punch a small hole in the center. By holding the disk up to the sun and projecting it on a smooth surface you can view any eclipse safely. And it's computerized! Remove the foil before inserting this disk in your computer. Daaaaah.
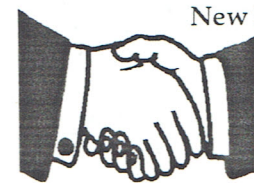
New Members

Here are the new members who joined our club in the month of July. **WELCOME!** We hope we can benefit from your computer knowledge and that others in cour club can increase your expertise as well.

Gary Bartell	528-4779
Gary & Virginia Brill	466-6511
Randy Craig	461-9651
Kurt Hillmer	549-9738
Randy & Beverly Poorman	481-7433
Jim Slade	601-798-9593
Jacquie Traub	237-1521

A TOUCH OF VIRUS

devices, I unleashed the virus scanner from the "Antidote" directory. A month before it found no viruses. Now it had a field day. "Virus 1701B" resided in memory. Every "*.com file called to duty got infected as soon as it was loaded. It was almost beautiful to watch. Here's a hint of what the scanner's action looked like:

Scanning 128K RAM
 Found 1701/1704 Virus-Version B [170X] active in memory.
Scanning C:\COMMAND.COM
 Found 1701/1704 Virus-Version B [170X]
Scanning C:\FIND.COM
 Found 1701/1704 Virus-Version B [170X]

Found 33 files containing viruses.

The scanner's "delete" mode overwrote infected files umpteen times and erased their very mention. Oliver North sure could have used something like this. Poisoned files disappeared without trace. I re-ran the scanner. The CSS Labs 386 was clean. No more virus. I had no idea how long the virus had been around nor what mischief it had done, but now it was over. The virus was dead. The virus- scanner was impressive and powerful. But Disk 1 still did not work.

PART TWO

I sneaker-netted the scanner files over to my AT&T 6300 and ran "Validate" command. This checks the scanner's "exe" to make sure it's not corrupted. The scanner was intact. I added it to Autoexec.Bat for automatic activation and rebooted. The scanner leaped to action. The AT&T was infected. Command.Com was 27008 bytes. File after file was bloated by Virus 1701B. Even its own "Validate.Com" was infected. I ran the scanner's delete mode. More files down the drain.

Concerned, I ran the virus scanner on "Thumper", the computer at Cam-X. It was the same as with the AT&T. The scanner found that Thumper was infected. It was eerie, but "delete mode" purged Thumper.

The AT&T lay dormant while I fussed with "drive 1" on the CSS. No new files reached it except the virus-scanner zip file. The only diskettes I had recently fed Thumper were a calendar utility and the virus scanner's "zip" file. Where then had the virus come from? Was I promiscuous on the BBS? Was one of my contacts innocently or knowingly spreading mischief?

I spent hours checking. Nervous Sys Ops scanned all files I'd downloaded. All my BBS downloads were clean. My commercial software packages were also clean. If the incoming software was clean, maybe the virus was NOT a newcomer? But that was impossible. When searching out viruses the prior month, the scanner swore the system was clean. The scanner found no pre-existing virus. It exonerated all files imported later. No virus existed before the scanner and none came in after it. It defied logic. However, with the virus extinct, the history of its origin was academic. I returned to the real problem, getting disk 1 to work.

After low-level formatting and partitioning the disk yet again, but before DOS-formatting it, I impatiently ran "dir D." I got an ominous greeting:

Volume in drive D is Opax Virus
Directory of D:\

????????.??? 68715016 15-27-81 4:16p
aiwan VI.rus 1917815107 13-06-41 5:22p
strad VI.rus 1635017028 10-11-24 11:28p
  File(s)   1019904 bytes free

I hadn't labeled the drive. It wasn't even DOS formatted. Too bad the drive didn't have the purported gigabyte capacity. One phantom file's name was in low ASCII "smiling

faces" the printer can't reproduce. The virus had obviously snuck back somehow in new disguise. Carelessly, I called Norton Disk Doctor. NDD signalled everything was cuckoo, then stalled. The system froze. I rebooted and ran "CHKDSK/f". Thousands of lost clusters and cross-linked chains! I let CHKDSK convert them to files. There were screens-full of "*.chk" files, all empty. In my fright I forgot the drive wasn't DOS-formatted. No wonder NDD and CHKDSK were in a frenzy.

When partial sanity returned I went to DEBUG and low-level formatted the Seagate yet again, then partitioned and DOS-formatted it. I ran CHKDSK. There were no more lost clusters or cross-linked chains, but D's volume label was again OPAX VIRUS. The voodoo file names still existed.

I was now certain the virus had indelibly marked the disk. As a last resort, I booted from a write-protected system diskette, partitioned and formatted the drive again, then used the floppy's CHKDSK. The drive was clean this time. No voodoo labels.

I changed to drive C, ran Autoexec.Bat to install the path, and FDISK'd the Seagate once more. Volume in drive D was OPAX VIRUS again.

Because I was still taking viruses seriously at the time, I believed I saw the light. All my copies of FDISK were the same 48216 bytes, yet FDISK on C stamped OPAX VIRUS on anything it partitioned. Virus 1701B could have been a diversion while The Joker altered FDISK without changing file length.

I called the virus scanner's author. He urged me to send him everything I had. I assembled screen captures of virus labels and ghoul file names, bottled up a copy of the infected Com-

A TOUCH OF VIRUS

mand.Com, and mailed him the diskette. Maybe we had a new Trojan Horse here, piggy-backing on a virus. Santa Barbara would go down in computer history.

Time passed. I heard nothing from the virus scanners. Drive 1 was still out-to-lunch. I have my suspicions now why they wanted copies of the virus and why they never got back to me, but I was then still naive and very frightened. I was on my own, and didn't know the powers I was dealing with.

My one certainty was Drive 1's unreliability. I needed a drive one could trust. CompuWare, my favorite computer products source, had a new 120 meg Microscience disk, 1/2 height, RLL and twice the Seagate's capacity, for under eight hundred dollars. I took it without checking the "Approved Vendor List."

Even with the new disk installed, the volume label of D was still OPAX VIRUS. Here was a brand new disk, a system certified virus- free, and OPAX VIRUS was still after me!

I had to think clearly. Drive C was virus free but its FDISK invoked the "Virus" ghoul names. FDISK on my DOS diskette did not. I had old PCTOOLS compare FDISK in "C:\DOS" to the original Fdisk.Com on "A:\". They were identical. FDISK was innocent.

By default, it had to be something in the process of booting from drive C that loaded The Joker into memory. I checked operating procedures. The only difference from pre-virus days was that AUTOEXEC now called up the virus scanner. Every time I rebooted, the scanner became memory resident.

I checked the scanner package. It had a list of viruses that looked a bit like this:

Increases

Virus	Remedy	Size (bytes)
Taiwan	CleanUp	708
Oropax	CleanUp	773
4096	CleanUp	4096
Amstrad	CleanUp	847
Payday	CleanUp	808

Here were the culprits: Taiwan, Oropax, Amstrad were source names for the "OPAX VIRUS", "strad Vi.rus, "aiwan Vi.rus" labels. With the scanner memory-resident, names were somehow being plucked from the virus list and converted to voodoo labels. That SOMEHOW had been toying with me. OPAX VIRUS was a creation of the virus scanner! I didn't care if an accidental bug or malicious programming had caused the voodoo baptisms. I deleted the virus scanner. There's been no more ghost messages nor other virus nonsense.

What of the Seagate? I had panicked into taking "anti-virus" measures. The virus that dutifully appeared, no matter whence it came from nor what damage it did, resided on Drive C. C had never been affected by the virus. Files had been infected, but the drive itself had never failed to work. Drive D, the supposed victim, had been AWOL all this time. It wasn't even around. Whatever caused the hard disk failure obviously had nothing to do with the virus. I'd been hopelessly slow to see the obvious.

I yanked out the AT&T's innocent MFM hard-card and plugged in the ST277R, using (ouch!) a spare Adaptec RLL controller. It worked. In the 386 it would work a week or so before taking French leave. I'll never know if the same fluke was happening now. Before the week ended, Ken Becker came to dinner, bringing tools and test instruments. We found hairline fractures in solder joints where the power plug connects into the drive's circuit board. The board is unsupported there and flexes whenever the plug is stressed. Ken resoldered the power plug. The Seagate has not been on vacation since.

What's New

The general meeting in August will provide us with a demonstration of MS-DOS 5.0 on the club computer. BobHunt will officiate.

On September 1st, SLO Bytes member Max Sicher will demonstrate how he uses his computer in conjunction with HAM Radio. This should prove very interesting.

I will be in Oregon next month, so Bob Ward has graciously aggreed to edit Hard Copy next month. If you have an article to submit or would otherwise like to volunteer, please contact Bob. I'm sure he would appreciate the help.

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 $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 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.

Editor: John Ewing, 1710 15th Street, Los Osos, Ca. 93402. Phone 528-7196.

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 - 2:15 pm.

New User's SIG - F.H. 286

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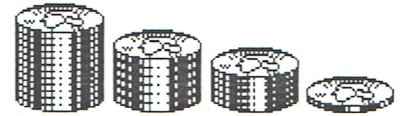

SLO BYTES BULLLETIN BOARD

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

PC Files & Message Section

SYSOP: George Campbell

All Welcome - 24 Hours

Treasurer's Report

**SLO Bytes PCUG
Expenditures
July, 1991**

Beginning Balance:.	+ 693.18
Expenses:	
Newsletter 06/20/91	-109.45
	=======
Deposit 07/08/91	+363.30
	=======
	+363.30
Balance 07/08/91	+ 947.03

DISCOUNTS

Star Computers
855 Morro Bay Blvd.
Morro Bay
772-7827

5% — Any software in stock.

10% — 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, Blvd. B
San Luis Obsipo
549-0811

$100 — Off regular prices on Whitaker computers
10% — Off service
Meet nearly any advertised price on same or similar computers. Bring ad to store.

Los Cerros Computers
11545 Los Osos Val. Rd #A3
San Luis Obsipo
544-6399

15% — Above cost on computers and computer peripherals.

20% — Above cost on software & supplies (Cost includes shipping & handling)

Ziff-Davis User Group Magazine Discounts

PC-Magazine - $24.97
PC-Computing - $14.97
Have your mailing label handy for renewals
Call 1-800-777-2547 and ask for your
user group discount