Taking 8 Bits to the 21st Century

The Wheels Saga, Mile 3

Of Boot Disks, Master Disks, and Late-Night E-Mail

"The most over-looked advantage to owning a computer is that if they foul up there's no law against whacking them around a little."

by Robert Bernardo

After I received Wheels 64, I had to make back-up disks of the program. Though the original master disk was copy-protected, Wheels came with a utility called MakeSysDisk, in order to make additional master disks or boot disks. The additional master disks would be treated as any other master disk, i.e., safeguarded in case anything happens to your everyday boot disks. The boot disks are those a person would use for his everyday computing needs. It was so easy to make master and boot disks with MakeSysDisk that the line between what was a master disk and what was a boot disk was fuzzy.

The main difference was that a boot disk can be driven from a CMD FD drive with a native partition, a CMD HD with a 1581 or native partition, or a RamLink/RamDrive with a 1581 or native partition, in addition to a 1541, a 1571 with a single/double-sided disk, a 1581, or a FD drive with a 1581 disk. A master disk can only be driven by the 1541, 1571, 1581, or FD drive with 1581 disk. The boot drive must have a device number from 8-11, except for RamLink.

I reread that section of the Wheels owner's manual a few times to make sure of what I was doing. Then I went on with the section that explained how to make another master disk. I had my original master disk in my C-128D (device 8) and wanted to make a 5 1/4" back-up in my 1571 (device 9). MakeSysDisk could use one drive in order to make a back-up, but that required tedious disk-swapping. I had write-protected the original disk previously, and so it was just a matter of putting a blank disk into the 1571. I

booted up Wheels. Viewing the desktop, I clicked on the icon of drive A which opened up a standard 8-icon window. Then I clicked on the MakeSysDisk icon--a pair of drives stacked upon each other.

This brought me to my first query, "Select operation to perform Build a 'WHEELS MASTER' disk Make a disk/partition bootable OK Quit." I ticked off the bubble that said "Build a 'WHEELS MASTER' disk," and clicked on OK. Then I was presented with another query, "Select the drive to install the system files on A B C D Cancel." I clicked on B, the 1571 of my 4-drive system. Another query-- "Insert the new disk OK." After clicking OK, MakeSysDisk will proceed to make a new master disk out of the blank disk. If a person were using a previously-formatted disk, MakeSysDisk would ask, "This disk will be formatted. Any files will be lost. Shall we proceed? YES NO" A user should check that this is the disk to be formatted, and if it is, then he should click YES. My 1571 started formatting the disk. After formatting it, there was a file-copying exchange between the C-128D and the outboard 1571.

After a total time of 4 minutes and 25 seconds, the screen said, "New WHEELS MASTER disk created successfully. OK." I clicked OK and was returned to the first query screen. I quit from that screen which returned me back to the desktop, and I clicked on the new Wheels Master disk on drive 9. It looked like an exact copy, with the exception that MakeSysDisk had automatically detected my 1571 and made the disk double-sided. I powered down the computer and laid the program aside for a few days. My intent was to give the FCUG membership a sneak peek at Wheels during the mid-meeting break at that Saturday's meeting. The June meeting arrived all too soon.

After the usual old business, new business, disk-of-the-month demo, and question-and-answer period, we came to the break. I took out my Wheels Master disk copy, powered down the club's C-128, attached my CMD 1750XL 2 meg. RAM expander to the computer, powered up the computer in C-64 mode, inserted the disk into the 1571, gave the command "LOAD 'STARTER',8: RUN", and waited for the program to start...and I waited ...and waited. The screen was black; the drive was not spinning the disk. Thinking I had made an error, I tried the procedure again. No success. The members looked up from their coffee and doughnuts, wondering why I was still hassling with the computer instead of having a break. I gave up. No Wheels preview today.

That night I tried to get the disk to work. Failure. I made more master disks--perhaps the first one had some error. No luck--the other 1571 disk copies wouldn't run either. However, when I made a 1581 master disk or a 1541 master disk (with the use of my SX-64 and an outboard 1541 set as drive 9), there were no problems. Wheels would boot correctly.

Finally, I broke down and decided to E-mail Maurice the following Friday night. By the next day he had responded to me. It was a TURBO-BOOT problem. It locked up a 1571 drive. A quote from Maurice, "I'm going to address this issue in the next release. It's gotten a few others too. You need to either delete TURBOBOOT

from the disk and it'll boot from the 71 ok. Or, you need to put the 71 into 71 mode prior to booting. The TURBOBOOT created needs the drive to run at 2mhz instead of 1mhz which is what 41 mode does. Likewise, that disk can't work on a 1541. It's a 1571 boot disk. I think the problem is that I forgot to have TURBOBOOT switch the drive to 71 mode for you." Whew...and I thought it was my fault.

Not wanting to go through the process of commanding the C-128D drive into 1571 mode all the time, I deleted the offending TURBOBOOT. Thank goodness for an easy solution. Next I wanted to go through the procedure of making a Wheels boot disk. Using my 1581 master disk in device C, I booted up Wheels and clicked on the MakeSysDisk icon again. The first screen popped up; the bubble that said, "Make a disk/partition bootable," was already ticked off. I clicked on OK. Then I was presented with a second screen, "Select the drive to install the system files on A B C D Cancel." I clicked on A, the internal 1571 of my C-128D. A third screen was presented, "Drive A Directory OK-Use this disk/partition Disk-Change disk/partition Cancel-Use different drive." With a 1571 disk, I didn't have to change partitions; if I did click on Change disk/partition, it would ask me to change disks. If I cancelled, I would be brought back to the second screen, "Select the drive...." I clicked on OK. The screen now said, "This disk appears to be unformatted. Shall we format it? YES NO." I clicked YES. Another screen--"Enter a disk name... 1-sided 2-sided Cancel" The 2-sided bubble was already ticked off; I entered a name and pressed return. Still another screen--"Operation will be to drive A, ...Continue? YES NO" I clicked on YES. The disk was formatted in a minute.

If I were using a previously-formatted disk, these last 3 screens would not appear, and I would go directly to the next one, "Would you like to fast-boot Wheels using TURBOBOOT? (not needed with JiffyDOS) YES NO." I clicked on NO. The operation commenced. About 1 minute, 45 seconds later the screen said, "Operation completed, you now have a new boot disk OK." When I pulled up a directory of the new boot disk, it looked very similar to the master disk, except there was no MakeSysDisk utility, no variety of input drivers, and no house-keeping bits needed by a master disk. I noted that there were 202k bytes free on the two-sided disk. I made a 1581 boot disk, too; the 1581 would boot Wheels faster, and I would have scads of space on which to store applications, fonts, drivers, and utilities. I had not yet explored the wonders of the Wheels Toolbox nor formatting a RamDisk from within the Toolbox. I was eager to try out my applications within the Wheels environment. That would come later...and more problems would come later also.

TO BE CONTINUED

The Wheels Saga, Mile 4
Parking the Wheels

by Dick Estel

I have found the initial release of Wheels 64 unsuitable for my use of GEOS. I have the utmost respect for programmer Maurice Randall. In order to be as fair as possible to him, I have decided to suspend any further review of Wheels until the upgrade disk is received.

I asked Maurice by E-Mail when that might be; he gave no finish date, but the start date is "AFTER Wheels 128 is released." The latest information on THAT date was that Wheels 128 would premiere at the Chicago Commodore Expo in late October. However, the 128 version was incomplete at Expo time, so it will occupy Maurice a while longer before he can get back to the 64 version.

Creating Headers and Footers in TWS

by Dick Estel

One of our members asked me about placing the following line of information on each page of a multiple-page document he was creating: Page 1 of 5

This type of thing is called a header or footer. This involves placing the same information in the same place on each page. For example, you might have a list that consists of an artist, a song title, and the location, such as the following:

Artist   Title   Cassette Number

If you want this to appear on each page, without re-typing it, you create it as a header. Every word processor has its own methods; these instructions are for The Write Stuff. Although the manual explains headers and footers, the explanation is a bit unclear, especially as to step by step specifics.

The format is as follows (italic material must appear on the screen in REVERSE type):

*he6;*Artist   Title   Cassette Number

The meaning is as follows:

he = header
6 = number of lines from the top of the page (this number must be LESS than the top margin)
; = denotes that what follows is formatting codes or text to be printed as typed.

The same format works for footer using a reverse *fo*.

If you want your footer to appear centered, or flush right or left, use the first letter of the desired position. For a flush right header the format is as follows:

*he6;r*My Report

Reverse # will cause a number to appear.

fo5;c# would cause the page number to appear five lines from the bottom, centered on the page.

To achieve the results described at the start of the article, Page 1 of 5:

*fo5;*Page # of 5 (It's hard see italics with the # sign, but all such signs in header/footer formats must be in reverse type unless you want the actual # sign to be printed.)

To have the header appear on the first page, it must be defined at the very top of the document, before even a [RETURN] is entered. If it is defined anywhere else, it will start on the second page.

For a header or footer of more than one line, place a reverse [BACK ARROW] between the lines.

To have two different footers, for example one on odd-numbered pages and one on even, enter the odd-page footer, then a reverse colon (:), then the even-page footer.

*fo5;r*Page #*:l*Page # will place the page number at the right side of odd-numbered pages and the left side of even (just like the Write Stuff manual).

You can include formatting codes, such as bold or underline, in your headers and footers. Put the appropriate codes, in reverse type,   AFTER the semi-colon and before the text.

*fo5;ub*Monthly Report will place the words Monthly Report, bold and underlined, at the bottom of each page.

Manual reference: Page 31 (C-64 version); Page

What the Editor Said

We've been discussing the future of Fresno Commodore User Group a bit lately...
wondering how long we can "hang on," talking about the ever-diminishing bank account, looking at the paltry income from our once lucrative enterprises like disks, The Write Stuff, etc.

However, here are a few things to consider that might put things in a little better perspective. Sandy Dippollet commented recently that he recalls writing a letter to the club five years ago when he was treasurer, expressing concern about our financial stability. We're still rolling along.

Our bank account, now at its lowest in a number of years, is still far higher than that reported by most Commodore clubs around the country. Indeed, it's well above the typical figure even five or six years ago.

Finally, there are these words from Dick Leiby, editor of the HACKS (Huntsville AL) Newsletter, in an article headed "Life at the Bottom of the Food Chain." He starts off reporting the demise of a club in Arizona:

"Of course, I don't know what their situation was, but I've always wondered why clubs shut down completely. As membership dwindles, costs also dwindle--a meeting hall may no longer be necessary. We are down to fewer than ten, but two of these come down from near Shelbysville TN (a bit over 50 miles), so we must be doing something useful. We maintain the newsletter as a window on the Commodore world, and appreciate that those with whom we exchange hang in with us.

"So, I encourage those who see their membership slipping away, to hang in. You don't need large numbers to have a viable club (unless, of course, you don't even like each other!) Just think--a six member club doesn't need officers!!"

Thanks, Dick, for those encouraging words. And hey, we've got people coming from Avenal, a distance of 65 miles; as well as Visalia, Hanford and Squaw Valley. We're doing something right too!
—DE

GEOS Copying Tip

By William E. Robblets

If you have files on Drive A that you are going to copy to drive B, instead of dragging the ⒶMulti-File@ to Drive B and clicking, you can copy the files as intended by simply pressing the F2 (shift F1) function key.

This works if you want to copy a single marked file or several marked files from Drive A to Drive B.

To reverse this and copy from Drive B to Drive A press the F1 function key.

I have tested and used the above tip for copying files only on the regular Desk Top of GEOS 128 version 2.0. No other GEOS versions have been tested as of this writing including C-64 versions.

(From GEOS Publication, February 1997; copyright 1997 William E. Robblets, used by permission)

ENIAC Marks 50 Years

1996 marked the 50th anniversary of the ENIAC computer, the first large-scale general purpose electronic computer. Built at the University of Pennsylvania's Moore School of Electrical Engineering, the ENIAC (Electronic Numerical Integrator And Computer) was the worlds first electronic digital computer that used vacuum tubes for switching circuits rather than mechanical relays. The ENIAC was a monster. It's thirty separate units plus power supply and forced-air cooling, weighed over thirty tons. The 19,000 vacuum tubes, 1,500 relays, and hundreds of thousands of resistors, capacitors, and inductors consumed almost 20 kilowatts of electrical power.
The ENIAC could differentiate the sign of a num-

ber, compare quantities for equality, add, subtract, multiply, and divide. A maximum of twenty 10-digit decimal numbers could be stored by the ENIAC. The ENIAC was completed too late for the war effort, but the first major problem it had to solve was related to the design of atomic weapons. It took the ENIAC only 2 hours to solve a problem that would have taken 100 men a year to complete

ENIAC-on-a-Chip: A group of students at the Department of Electrical Engineering have designed ENIAC (TM)-on-a-Chip This was done as part of the ENIAC 50th Anniversary Celebration.

The Museum of Archaic Computers
by Brian Crosthwaite

LEFT: The first clone! Six months after IBM introduced their PC, a company called Compaq introduced this machine --the Compaq. Totally luggable --no, it is not a sewing machine!

RIGHT: This is where the full sized cards meet at the side of the computer for things like CGA and

composite video, RS232c and parallel port, all hidden behind a little sliding door.

Scape
by Robert Bernardo

What! Have I turned? Have I gone over to the dark side? Have the forces of light fallen to the shadows? Have I become a traitor, a turncoat, a Benedict Arnold? Have I turned my back on the Commodore universe?

In October of 1997 I went to the first annual Vintage Computer Festival, a mostly 8-bit computer fair, held in Pleasanton, California. I went looking for Commodore; I found many Commodore hardware exhibits and several software vendors. After going around the vendors' tables to scan what they had for sale, I decided to start buying...a few accessory Koala programs here, a few older Amiga programs there.

My friend, Larry Anderson, and his wife, Diane Hare, had set up a few tables. It had only cost them $15 for the tables, but as vendors, they didn't have to pay the $15 weekend entrance fee. I had met Larry months earlier when he helped me with a software problem. He was also the SYSOP of the Commodore bulletin board system, Silicon Realms, at 209 754-1363.

As I looked through the various hardware and software goodies on Larry's table, I spied a dream computer. There it was--a Tandy 100 portable laptop computer. No, we're not talking of modern-day laptop computers with full-color screens, Pentium processors, big hard drives, and CD-ROM capability. This was a Tandy 100, a laptop sold by Radio Shack back in the early 1980's. It had almost a full-sized keyboard, and it had several programs built into ROM. It had no disk drive, but it did have a built-in modem. The entire computer ran on 4 pen-light batteries. I remembered Radio Shack selling it for $595 or

$695; in fact I should have an old RS catalog with the advertisement for the computer.

Larry's Tandy 100 was missing a very important part, though. It didn't have the liquid crystal display! Yes, it would be very difficult to gauge what was going on with the computer if I didn't have the 40-character per line, 8-line screen. I asked Larry about the missing part. He wanted $50 for the Tandy but was willing to go lower. He was certain that others would have the screen, for example, Club 100, the Tandy 100 club of the San Francisco Bay Area. Larry even mentioned that another vendor may have LCD panel for sale, and he pointed me to another table across the room. It was the end of the day. He and the wife were leaving for dinner, and because the room was closing, they would leave the materials at their table for the next day. Larry trusted me; he said that I could bring the 100 to the other vendor for comparing the required part and that if I wanted to buy his machine, I could leave the money in a bag by his table. If I didn't want the computer, I would just leave the machine in the bag.

Surprised at his trusting me, I walked across the room to the table of Stephen Stone of Santa Barbara. Stephen had been one of the speakers that weekend, and his specialty was CP/M. He had quite a number of CP/M computers at his table, including transportable Kay-Pro Computers (bigger than a Commodore SX-64). I asked him whether he had a LCD screen for the Tandy 100 I was carrying. He didn't have any extra ones, but he was selling complete NEC-8201 laptops. The NEC was a sister computer to the Tandy 100. They were both manufactured by Kyocera in Japan, and they differed in some details. The NEC was decorated in 3 shades of gray and beige compared to the black of the Tandy. The NEC had dedicated cursor keys and a wedge profile; the Tandy had neither. However, the Tandy had that built-in modem; the NEC had an accessory mo-

dem that plugged into the back.
Though the fair was officially over for the day, Stephen let me stay, let me try out the NEC's to my heart's delight, let me pore over the instruction books, and let me ask him plenty of questions. I was sold. I bought an NEC-8201 which came with the outboard modem, greater internal memory, 2 ram expansion packs, a datasette recorder (!), and 3 instruction books. I paid $75 for everything.

This NEC is not a Commodore. When the computer is powered up, the top line of the screen says "(C) Microsoft." It does have a version of BASIC, numbered 1.2, and rumored to be the last BASIC that Bill Gates personally worked on. So, why should I want it when I'm a Commodore person? This is where long-term memory comes into play.

> ## "I SEEM TO LOOK AT ALL MODERN HARDWARE FROM THAT VIEWPOINT--HOW CAN THEY SERVE THE COMMODORE?"

Years ago in RUN magazine I had read an article in which the author interfaced his Tandy laptop with his Commodore. The NEC/Tandy came with a text editor in ROM. Via a null modem cable and the built-in term program, the author could transfer anything from the laptop to the Commodore. I bought the NEC to be a slave to my Commodore 128! When on the road, I could pack the NEC and write my articles on it. Upon my return home, I could dump the text article to the Commodore and read the article into Zed 0.77 for more text editing or into the Write Stuff for further word processing. Another method--I could be on the road and E-mail the article to myself; then upon

my return, I could read the E-mail into the Commodore.

Thus I have my first PC, a 2.4 mhz. tool to serve my Commodore. I seem to look at all modern hardware from that viewpoint--how can they serve the Commodore? When I pass by the latest Pentiums, I think, "I wonder how well a Commodore emulator would run on them?" When I pass by Macintosh computers, the same question pops up--can a Commodore emulator run on them? From my travels to England in 1997, I brought back a Commodore emulator which runs on accelerated Amiga computers. I look at the newest printers...you've got it...I think about whether they are Commodore-compatible. After years of training, this way of thinking is pretty much automatic.

I'd like to thank SWRAP (South West Regional Association of Programmers) president Randy Harris and member Craig Prendota for taking care of me at the October 24 Chicago Commodore Expo. Going to a different area, whether overseas or within the U.S., is always difficult, but having friendly faces welcome you makes the journey

Incredibly Useful Sites

(From Yahoo=s Most Useful Sites)

Check Before You Buy:

www.productreviewnet.com

When you are thinking of buying something costly, do you typically visit the library to see how it has been rated by a certain magazine that is famous for its extensive consumer testing? Not anymore.

Product Review Net links you to dozens of reviews from technical and popular magazines for everything from camping equipment to the latest rear-projection TV. Just choose a product area, type in key words, and you are on your way to making a well-informed choice. It may not have Consumer Report's 40 years of lab testing experience, but it is a fast fix of informed opinions.

If you want even more power to your purchasing, check out another site, Consumer World. One click and you are linked to federal and state consumer offices, as well as to the Better Business Bureau.

Find The Closest ATM

www.visa.infonow.net/usa

Got an automatic teller machine card; need money; but haven't a clue as to the closest ATM location? Or did you just forget? Either way ATM Locator, sponsored by Visa, tells you where to stick it. You just tell it where you are, and it tells you where you ought to be to get some dough. Finding money "on the street" has never been easier.

Look Up Anything

www.refdesk.com

Of all the "Swiss army knife" sites on the Web, My Reference Library not only has all the blades and doodads, but also a laser and a fission reactor, too. It's extremely well-organized, and the dictionary section alone links you to 131 different, definition-related sites, including a poker dictionary, a dictionary of cell biology, and an English word finder.

Track Down Any FAQ

http://ps.superb.net/FAQ

FAQs are online documents, with answers to those "Frequently Asked Questions" about a particular subject. They are usually created and maintained by zealous Net users.

FAQ Finder provides the map to the FAQs -among the most important treasures of the Internet!

(From The Computer Chronicle, Oct 97, HACG, via Random Bits, newsletter of NOVACOM, December 1997)

Another favorite of your editor is All Music Guide:

http://www.allmusic.com/index.html

This location lets you enter the name of an artist, an album, a song or a record label, and find information on thousands of musical artists. An artist listing brings up a photo, biography, a listing of albums including other peoples albums the artist has appeared on, and references to artists who perform in similar styles. Not every artist gets the full treatment, but it's certainly the biggest collection of such information I've ever seen.

School's In Session!

By Jim Brain

Well, as many of you already know, I'm spending time getting my house ready for our new arrival, creating a nursery, buying baby furniture, etc. I knew about all of this ahead of time. I am enjoying the remodeling, and I am bearing the many trips to ABaby-(insert any word here)@ stores to search for that perfect crib. (And they wonder why men hate to shop). Anyway, my wife informed me a while back that we needed to sign up for classes.

WHAT! I graduated from high school and college not too many years ago and I vowed never to return. (I suppose I've softened a bit, but still.) She explained that we needed to learn techniques, refresh our CPR knowledge, blah, blah, blah. This did not sound like fun to me.

Someone wiser than I told me the future father who endured the shopping, answered "yes" to the endless questions, and took the high road would not regret doing so. Well, we signed up for classes, even though they will take me away from the GOCUG meetings this month and next. I'll be there for my wife in class, at least until they start replaying the delivery video.

While I am away, I challenge all of you to follow in my footsteps. No, I'm not suggesting a bumper crop of children, any major remodeling of your home, or a killer shopping spree. I am speaking of education. A child is new territory for me, so classes don't seem out of line, but education isn't just for new topics.

I challenge you to further your education on the Commodore or computers in general this year. For the adventurous, consider a class at the local college or university on any number of computer topics. Sure, they won't cater to the Commodore owner, but don't discount the information solely on platform usage. For the folks who learn by doing, grab a good book or a new software program and start learning. Formal education isn't for everyone, but everyone has a style that works fr them. Find yours and learn something new about your computer this year.

In this era of 32 bit Pentium II machines with plug-and-play hardware and zero-administration software, many users treat computers like toasters: no education needed and throw it away when it breaks. However, we're not there yet, and today's PC is hard to understand completely. Commodore enthusiasts can celebrate the fact that our platform is Amature@ and well documented, software compatibility is likewise well understood, and users can troubleshoot their own systems instead of pitching them into the trash.

However, you can't enjoy this fact if you've decided you know everything about your computer. Developers update existing software and create new software with new features to learn and put to work. Some folks continue to uncover new secrets about this 15+ year old technology and document them.

Please take up my challenge to become more knowledgeable on your computer system. If you didn't heed my suggestion last month to go enjoy the great outdoors, consider starting your education today. As for me, I'll see if they can upgrade our child with the "toilet-trained" feature.

(From GOCUG newsletter)