The Zero Page

The newsletter of the Commodore Users of Wichita

"For the sharing, learning, and love of Commodore computers"
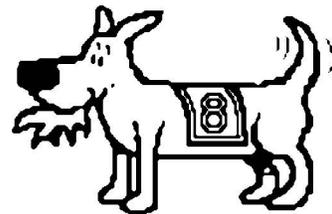
Eight-bit keeps takin' a byte
out of Commodore computing

Moe's Soap Box
by Moe Shouse

This month I have some very bad news. About 4 weeks ago Z-Software closed up. Some of you may not know about Z-Software. Mr. Dave Zimmerman owns Z-Software, or did. The "Z-Man" as he likes to be called, is very talented at working on computers. The neat thing about Dave is that he doesn't give up on a problem. Once, I saw Dave take a main board out about 6 or 7 times before he found a surface mount resistor missing. This is a very small piece and hard to see if one is missing. Dave started Z-Software about 2 years ago. What he did was buy the inventory of Software Exchange from Mark Walton, and start a new company. Dave did OK for a while, but in the last six months he has been losing money. I think that part of Dave's troubles is that he wants to give the customer a good deal. One time he had a very rare serial buffer. He asked $5 for it but I gave him $10. After I got to know Dave well, it was clear that he is as honest as the day is long. A hard worker, he would sometimes clean the shop till 2 or 3 in the morning. He was always open at the posted times even if he wasn't feeling good, or was tired.

Most of the times that I went in the shop I would find something interesting or someone to talk to that was interesting. In October 1996 our club held an open house, or call it a users day, at Z-Software. We had door prizes and a lot of fun. Z-Software donated a 64 system to raffle off to raise money for the computer club. And I think Dave did some business and made a little money. Dave was always supportive of the Commodore Users Of Wichita. More than once he offered the shop to us for our meetings. One of the neatest things was that whenever I told someone that Z-Software had computers stacked up like cord wood, they thought I was telling a tall one. Then after they saw that

Dave did have computers stacked like cord wood, they would say they didn't think anyone could have that many computers! The most prized Commodore piece I have I bought from Z-Software is a game cartridge called Jack Attack. I don't have room to get into it here, but it is named after the founder of Commodore.

I don't think very many people know the true impact that Z-Software and Dave have been to the 8 bit Commodore people in Wichita. This shop was truly unique, different, strange, and fun. The Z-Man is what made Z-Software what it is. Z-Software will be missed, but the Z-Man will be missed the most.

Next CUW Meeting:
Saturday, August 8
1:00 - 4:00 pm
1411 South Oliver

Come for a look at Nate Dannenberg's custom C128 "tower" system.

August Meeting Agenda

1:00 - 1:30	Equipment setup, informal meeting
1:30 - 2:00	Business meeting
2:00 - 3:00	Feature demo
3:00 - 4:00	Meeting over, informal gathering, equipment teardown
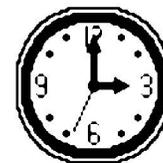
Your CUW Steering Committee members are:

Morris Shouse	Chairman
Robert Bales	Vice Chair
Bob Frisbie	Member at-large
Dale Lutes	Newsletter Editor
Don McManamey	Disk Editor
Jerry Shook	Member at-large
Mike Shook	Member at-large

Don's Digest
by Don McManamey

I would like to say that July just flew by but for me it did not. It was at least 31 days long. I don't have much idle time. It would seem that every daylight hour that I am not at work I am cutting someone's grass. In fact, I don't cut mine as often as I should because I'm cutting for someone else. Little wonder I have no time for computers or anything else for that matter. I do, however, find some time to get on the net or play with my train. Yes, you heard right, train.

I have been a model railroad enthusiast for just about as long as I can remember. I have collected rolling stock (cars) for some time now and in just the past year received as a gift a very high quality engine. In about April or May I started buying a railroad magazine on a regular basis. I am surprised what they have now that they did not have a few years ago. A few years back I wrote about a new watch I bought that had 64k of memory. Here was something small enough to fit on your wrist that had the memory of a Commodore computer. You would think I had been living in a cave. As I looked through the magazine I saw things I did not know existed and apparently they have been around for quite a while. I had heard many years ago that Lionel had put a TV camera in an engine but now they have them that fit in smaller trains and provide full color images you can record on your VCR. There are micro miniature circuits that provide lighting in passenger cars and cabooses. This lighting stays the same brightness at any voltage from about 3.5 volts up to 18 volts. There are crossing signals and gates which operate just like the real thing because of super small computers.

This engine that was given me has what is called a "mars light." Now if you don't know about trains you probably don't know what a mars light is. A mars light is the light on the front of the engine which lights the track ahead at night. But a mars light does more than that. It moves in a sideways figure eight pattern. This allows the engineer to see around curves, up and down hills, and to see on either side of the tracks for things like wild animals or automobiles that might get on the tracks. The mars light is simulated by a miniature computer. The thing that impressed me the most though is one that eliminates the complex wiring that modelers had to learn in the past.

Time was that layouts were divided into sections with each section being wired separately. The section of track you planned to run the train on would be powered along with the section just ahead. In this way you could have more than one engine running at one time. When you got more that two trains running wiring could get a little tricky if you wanted your train to go anywhere on the layout without stopping. They now have a system in which all the track receives 100% power all the time. Each engine has a computer on board which controls everything from lighting to speed and direction. Another computer controls up to 99 trains. This system will keep the train running at the same speed both up

Random Access
by Dale Lutes

When I first came up with the name for this column, I figured it would give me an excuse for writing disjointed articles.

More often than not, however, I've come up with a theme or idea that manages to fill an entire column. Well folks, be forewarned: This is a random month.

I am truly saddened at the passing of Z-Software. Although I didn't buy a lot from Dave, I enjoyed browsing through his shelves every month when I stopped by to drop off copies of *The Zero Page.* Occasionally, I found something I just had to have. A couple of Infocom games ("Nord and Bert" and "Bureaucracy") and a copy of *Compute!'s Guide to Adventure Games* are directly responsible for my article on text adventures a couple of months back. More than just a place to buy Commodore accessories, Z-Software was tangible proof that Commodore computing in Wichita is not dead.

Have you ever picked up some used equipment, but run into difficulties because you didn't get the manual along with it? I've found that a lot of companies can still provide copies of manuals, even for equipment that is several years out of date. It is likely that you'll have to settle for a cheaply printed or even a photocopied manual. But when you need the information, the paper quality is not an issue. You can often get a customer service address from a different product on a store shelf. When my wife found an electronic keyboard at a grarage sale, we got the address for Yamaha in this fashion. They sent us a photocopied manual at no charge. The internet is also a good way to contact a manufacturer -- most have web pages. This is how I got a manual for my Canon BJ-300 printer. Unlike the keyboard manual (which was only a few pages) I had to pay a small, but reasonable fee. Be careful when using the net as some companies may try to charge you for "technical support". Another source for company addresses is the public library. There is an annual publication that lists every corporation which does business in America. I can't remember the title, but I am sure the librarian could point you to the right shelf.

I am sure that many Microsoft Windows users would laugh at GEOS as a "toy" operating system. Whenever I work with GEOS as a programmer, I am always impressed with what the programmers at Berkeley Softworks were able to put together. One of the most important jobs of an operating system is to insulate the user from the underlying hardware. At the user level, GEOS does this through the use of mouse and printer drivers. At the programmer level, this is accomplished by an extensive and thoroughly documented set of subroutines for screen, keyboard, mouse, and disk I/O. The documentation is almost as good as what I use daily on my VMS system at work, better than a lot of Unix documentation, and far superior to what I had to deal with on the IBM mainframe at Wichita State University.

In the fifteen-plus years I have been working with computers, I

Looking at GEOS
by Mark McGuinnis

*[This article was first published in August 1993.
It comes to us courtesy of Peter Hunt, geoClub OZ]*

Well boys and girls, it's time to up the ante and get a little more in-depth with our discussion of GEOS.

Let's look at the GEOS desktop. I'll try to cover identifying desktop icons, menus, and the disk note pad as well as managing files, using more than one disk drive, using a non-GEOS disk and using Basic programs. Most of the above topics have already been touched on in previous articles and we will get a little more specific now.

The desktop is the first screen to appear after you boot GEOS and the command menu lies along the top of the desktop. To select a menu or menu item, point to it and click.

The desktop clock is at the upper right corner of the screen. The information in the clock can be changed in a couple of ways. The easiest way is to point and click on the clock and type in the changes. It's a good idea to enter the time and date when you boot up as GEOS will list the time and date info on any files that are changed or up-dated. Other ways to change the clock information will be covered in later articles, if I don't forget.

Along the right boarder and stacked vertically are the disk drive icons. There can be as many as three icons here representing disk drives or a Ram Expansion unit (REU). Note that only two drives can be used at any one time. GEOS will work with one drive however multiple drives, especially a REU makes a great big performance difference. Mixing drive types will require the Configure 2.0 file. We will touch this base a little later.

The disk note pad, not to be confused with the note pad desk accessory, is the large area in the middle of the screen that contains information about the currently open disk. The disk name appears in the title bar and to the right of the title bar is the close icon.

There can be up to eight file icons on each page of the disk note pad. The name of the file is listed below it's icon and the design of the icon indicates the file type, such as application or document. A single click on a file icon will highlight (reverse video) it and a double click will open the file. Not all files can be opened from the desktop as they may be auxillary files to other files. In other words, one file must be opened before a dependent file can be used.

The area just below the disk note pad is the border, which is used temporarily to deposit file icons you are moving or copying. When you make a run for the border, the maximum file icons that can be placed there is eight.

The printer icon appears in the lower left corner of the desktop only in you have selected a printer. The name of the active printer driver is listed under the icon.

Making a Toaster Fit for a King
By Sivasis Panigrahi
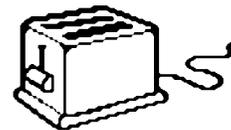
[This item appeared in the IEEE newspaper. Reprinted without permission]

Once upon a time, in a kingdom not far from here, a king summoned two of his advisors for a test. He showed them both a shiny metal box with two slots in the top, a control knob, and a lever. "What do you think this is?" he asked.

One advisor, an electrical engineer, answered first. "It is a toaster," he said. The king asked, "How would you design an embedded computer for it?" The engineer replied, "Using a four-bit micro controller, I would write a simple program that reads the darkness knob and quantifies its position to one of 16 shades of darkness, from snow white to coal black. The program would use that darkness level as the index to a 16-element table of initial timer values. Then it would turn on the heating elements and start the timer with the initial value selected from the table. At the end of the time delay, it would turn off the heat and pop up the toast. Come back next week, and I'll show you a working prototype."

The second advisor, a computer scientist, immediately recognized the danger of such short-sighted thinking. He said, "Toasters don't just turn bread into toast, they are also used to warm frozen waffles. What you see before you is really a breakfast food cooker. As the subjects of your kingdom become more sophisticated, they will demand more capabilities. They will need a breakfast food cooker that can also cook sausage, fry bacon, and make scrambled eggs. A toaster that only makes toast will soon be obsolete.

"With this in mind, we can formulate a more intelligent solution to the problem. First, create a class of breakfast foods. Specialize this class into subclasses: grains, pork, and poultry. The specialization process should be repeated with grains divided into toast, muffins, pancakes, and waffles; pork divided into sausage links, and bacon; and poultry divided into scrambled eggs, hard-boiled eggs, poached eggs, fried eggs, and various omelet classes. At run time, the program must create the proper object and send a message to the object that says, 'Cook yourself.' The semantics of this message depend, of course, on the kind of object, so they have a different meaning to a piece of toast than to eggs.

"Reviewing the process so far, we see that the analysis phase has revealed that the primary requirement is to cook any kind of breakfast food. In the design phase, we have discovered some derived requirements.

"Specifically, we need an object-oriented language with multiple inheritance. Of course, users don't want the eggs to get cold while the bacon is frying, so concurrent processing is required, too. We must not forget the user interface. The lever that lowers the food lacks versatility, and the darkness knob is confusing. Users won't buy the product unless it has a user-friendly, graphical interface. When the breakfast cooker is plugged in users should see a cowboy

and down hills. One of the really neat things in my opinion is that in the past if you wanted two engines working together they had to be matched. Now, the computer will take care of that. Let's say you had an engine that did 100 scale miles per hour and another one that could only do 80 scale miles per hour. You had better not put them together under the old system but with the new system the computer will give just the right amount of power to each to let them work together just like the real thing. The passenger cars can sit behind an engine which is sitting at the station and the engine headlight and passenger car lights can all be on. The entire package starts at about $200 with the decoders being extra. This may sound like a lot of money but If you consider the real cost of wiring a layout the old way with miles of wire and switches galore plus the control panel, it really is not that much more.

It boggles the mind to think of where computers have gone in the few short years they have been around. Who knows where they will go? Interestingly enough, we have talked before about the computerized world our children are inheriting and how they will have to learn how to operate them but more and more they are getting so easy to use that many times we don't even realize we are using them.

Until next time, keep your computer on track and compute with a full head of steam.
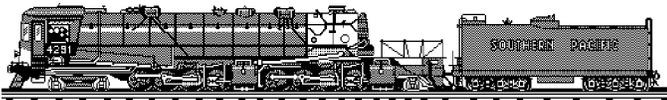
boot on the screen. Users click on it, and the message 'Booting UNIX v. 8.3' appears on the screen. (UNIX 8.3 should be out by the time the product gets to the market.) Users can pull down a menu and click on the foods they want to cook. Having made the wise decision of specifying the software first in the design phase, all that remains is to pick an adequate hardware platform for the implementation phase. An Intel 80386 with 8MB of memory, a 30MB hard disk, and a VGA monitor should be sufficient. If you select a multitasking, object oriented language that supports multiple inheritance and has a built-in GUI, writing the program will be a snap."

The king wisely had the computer scientist beheaded, and they all lived happily ever after.

often wonder at how few hearing impaired people are employed in this profession that is almost exclusively visual. I can only guess that we still have far to go in removing the barriers for deaf people in our educational system. I recently completed an introductory sign language class and I have a new appreciation for how difficult it is to attend to a class and take notes even with an interpreter present.

If you are ever feeling paranoid about the expansion of our computer and telecommunications networks, read Arthur C. Clarke's short story "Dial F for Frankenstein." It has been reprinted in several science fiction anthologies, including Clarke's own collection, *The Wind from the Sun.*

Three cheers for Bill Amend for the terrific computer jokes in his "Foxtrot" comic strip.

Is it just me, or is anyone else fed up with IBM and Microsoft's over-use of the word "browse?"

This month marks two years since I began corresponding with my friend, Dave Elliott in England. For this I have to thank Willis Patten and a little newsletter called *GEOS Publication.*

I can't thank Don and Moe nearly enough for continuing to supply me with a steady stream of articles for *The Zero Page.*

As long as I am thanking people, I want to recognize Susan Bales once more for taking care of the newsletter while I was on vacation. The graphic that went along with the meeting notice on the front page was a nice touch

I am sorry to have missed our last meeting. I count the CUW members among my best friends and the El Mexico Cafe is one of my favorite restaurants. I did have a great vacation, but I am glad to be back and am looking forward to seeing all of you again on Saturday.

Last but not least is the waste basket icon in the lower right corner of the desktop border. Throw a file in and it is as good as gone. The name of the most recently deleted file will appear below the waste basket.

As previously mentioned we will get into special desktop functions, file management, file functions, disk management, using multiple disk drives, using non-GEOS disks and GEOS and Basic next time.

The Helping Hand

This column lists those users willing to share their experiences and knowledge with other club members.
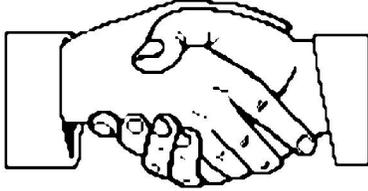
Robert Bales   831-0008
trebor@southwind.net
Telecommunications, Internet, CMD HD and FD drives

Dale Lutes   721-0835
lutes@feist.com
GEOS, Programming, Word Processing, Desktop Publishing, CMD FD drives and RAMLink

Don McManamey   265-2560
dmcmanamey@geocities.com
Word Processing, Print Shop, Printing

Jerry Shook   776-2683
jls695@gte.net
Databases, Label Making, Word Processing, Printing

Let us know if we may include your name in future Helping Hand listings. If we don't have a category for you already, we'll add one!

The Commodore Users of Wichita is a club dedicated to "the sharing, learning, and love of Commodore computers." Meetings are held on the second Saturday of each month from 1-5pm at 1411 S. Oliver, one block north of the corner of Harry & Oliver. Anyone who owns or uses a Commodore computer system is welcome to attend.

Family memberships cost $15 per year. Members receive a monthly newsletter, a quarterly disk publication, access to an extensive library of public-domain software, and the right to vote on matters of club policy. Other membership options are also available. Contact any of the officers (listed elsewhere in this newsletter) for more information. We are looking forward to seeing **you** at our next meeting!
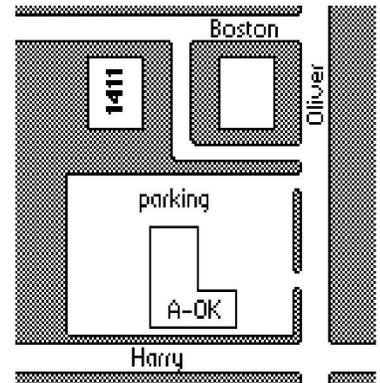
You may join or renew your membership by mail.
Complete this form and mail with a check payable to:

Commodore Users of Wichita
c/o Dale Lutes
11102 W. 17th Street N.
Wichita, KS 67212-1187

Type of membership:
❏ Family - includes Newsletter & Disk O'Quarter ($15 per year)
❏ Newsletter-only ($5 for 12 issues)
❏ Disk O'Quarter by mail ($12 for 4 issues)
❏ Disk O'Quarter by mail plus Newsletter ($15)

Name: _____

Address: _____

_____

City: _____ State: _____ Zip: _____
Phone: _____

List additional family members who are interested in participating:

_____

_____

What Commodore systems do you use? (please check all that apply)
❏ C-128   ❏ C-64   ❏ SX-64   ❏ VIC-20   ❏ C-16   ❏ Plus/4
❏ Other (specify) _____