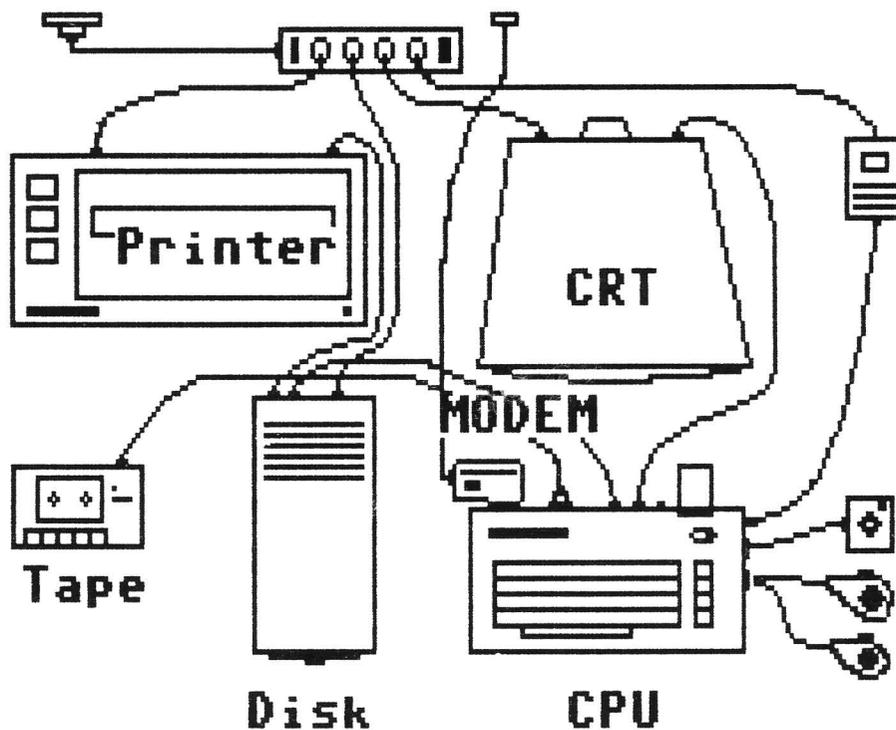


The MIDNITE

SOFTWARE GAZETTE

A BI-MONTHLY JOURNAL OF NOTES, REVIEWS AND ARTICLES



Expanded home computer system
(A self-portrait)

The First Independent U.S. Magazine for
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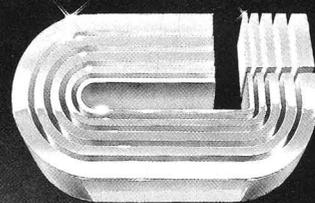
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THE MIDNITE XPRESS NOTES

Midnite Meanderings

by Jim Strasma

1985 TOP 200

Last year at this time we sent our subscribers a neat little book, Consumer Guide's The Best VIC/64 Commodore Software. Ellen and I called it our Top 200 book, and planned to make it an annual. Another year has come and gone, and it's time for 1985's "Top 200." It won't be a book this time--Consumer Guide's 1985 offering went another direction--but we hope you'll find it well worth keeping. The next two issues will be collector's items: our annual top 200 software guide, followed by a new top 200 hardware guide. Amazingly, many products are so new that they've not been reviewed yet, while other products that made last year's list no longer qualify, either because their vendors have gone under, or better competitors have appeared. These compendium issues are my personal favorites, because they allow ES to show off her incredible ability to organize huge amounts of information for instant reference, distilled into the briefest usable form. Just what one would expect of a Master librarian! My contribution will be making sure each entry is fully up-to-date and still of vital interest.

YOU CAN'T EAT AN ANIMAL WHEN IT HAS A NAME

Most Midnite readers are familiar with **4 Minute Copy**, a fast 1541 backup program that has circulated widely among user groups, and been incorporated in many other disk utilities. For a long time its author was unknown and the program presumed to be public domain; however, this is not the case. It was written for commercial sale by Thomas Tempelmann, of Ernst-Ludwig-Kirchner-Str. 25, 2900 Oldenburg, West Germany. Those who find it helpful should send the author a suitable donation. He has reportedly sold fewer than 80 of the 10,000 or more copies of his program now circulating, making it the largest case of unintentional piracy since the first version of **Space Invaders** for the PET was circulated by user groups the same way a few years ago.

THINKING OF BUYING A SECOND COMPUTER?

John Gantz made some good suggestions for those thinking of buying a second computer in a recent Infoworld: 1) Price is more important than before, because you know what you want better than you did before; 2) Free software gets in the way, because it isn't the programs you really want; 3) Copy protection gets in the way, because you don't want to buy the same programs twice; 4) Timing matters more than before, because prices drop over time, and ailing vendors offer risky bargains.

MAX MAXWELL RETURNS

You'll notice one new feature this issue. Max Maxwell is back, reporting in from his new home in PC City. With Commodore still planning to sell their IBM PC-compatible "Hyperion" in Canada and Europe, even hardened Commodore loyalists can benefit from Max's view of things to come. We'd also like to hear from other readers who've added other brands to their stable of computers.

Max Maxwell Notes

MAX MAXWELL: BRAVE NEW WORLD

by Ken Penny
alias ahhh yes, Keith Peterson!

Max leaned back with a sigh and slurped on his coughdrop thoughtfully. It had finally begun to bother him more and more that everything new for the 64 was a game "like" every other game. If only he had a new challenge....

THE REAL ME

Friends, neighbors, fellow midnight-burners, it's sad but true. All this time there was no Ken Penny. Circumstances led me to value honesty above credit, and the combination could have been detrimental. Since I didn't plan a career with Midnite....

So, for better or for worse, here I am, just the real me. For those of you who never knew who I was, a bit of background. I started "Commodoring" in '79. I was an engineer who used the things to read lasers and calculate least squares curve fits. After an association with a dealer, I found myself working for Commodore as, progressively, dealer support manager, systems engineer, member of R&D staff, member of Commodore Special Forces group, etc. I led a standard Commodore career: 2 years, 5 re-organizations, 7 bosses.

For those of you who wondered where I went, I went to work for Motorola as a Quality Control manager. I spent quite a bit of time making computers do the hard work while I take the credit. In the process, I went through an evolution that all of us are facing: the conversion to the new "standard", MS-DOS. Since then I have owned perhaps 10 MS-dos machines, spent many hours understanding them, and still cuss them a bit.

Now before those mighty initials get mentioned, let me say I am no fan of Big Blue. As long as they were dropping the shoe, they could have let loose with a new technology, advance-the-state-of-the-art type computer, but they chose a safe path instead.

There is a benefit, however. Any non-vegetable company is capable of impacting the market with their own version of what IBM should have done. My personal favorite is the Corona, although there are several nice machines out there. Lots more about that later. Stay tuned, we're going to have a good time...

WHY SHOULD YOU WANT TO KNOW THIS?

First you ask, "Why are you telling me all this?" I could say it's a tough job, but someone has to do it, or that it's for your own good. Best would be that those who do not move with the times end up in the tar pits (the average dinosaur). Imagine the guy who can make a Radio Shack Model I do everything it is capable of....Big deal, no?

Actually, there is less to learn about the MS-DOS machines than there is the 64. There are fewer fancy peeks and pokes, fewer "waveform envelopes," "joystick reading routines," "disk command confusers" and whatnot. Thus the average 64 jockey can easily get into the MS world with barely a ripple. The key is to understand how it all fits together. Over the next few months or years (however long it takes), I will be discussing the new, the old, the transition and the tribulations. For those of you with an interest, I hope to it will be informative, or at least interesting.

Max was startled to hear the doorbell. He must have dozed off.... It was dark, and a fog had rolled in. He staggered to the door to find a tall dark stranger in a cape standing beside a huge pile of boxes. "Your destiny awaits you" intoned the dracula-type figure as he stepped back, poofed a bit and flapped off to the nearest cave.....

PAPERCLIP QUESTIONS

Q: The two main questions I want answered about **Paperclip** are: a) How do I get it to start at the top of the sheet, instead of down one inch, and b) is it possible to do proportional spacing without losing the right margin justification? If you could shed some light on these questions, I would be most grateful. -John & Charlotte, Apartado 35, Puerto Santa Maria (Cadiz) Spain

A: 1) Are you using a "vp" or "ln" command in your format line? If so, take it out, because **Paperclip** normally starts printing exactly where you set the ribbon. Otherwise, check your interface and printer switches; the problem is not in **Paperclip**. 2) Yes, it is possible to use a form of proportional spacing and retain right margin justification, but only on printers explicitly supported by **Paperclip**. For true proportional spacing on the 64, you may need to use **The WordProcessor** from Pro-Line Software, but check that it supports your specific printer. -ES

SUPERBASE HINTS

After you have created your file and are entering data, you can hit the <SHIFT/RETURN> keys before reaching the end of the file entry screen to save what you have just entered, without going through the entire file entry sequence.

A key field requires data be entered in the entry mode. If you want more than one field to have data entered, you can format another field as a key field when you format the file entry screen. This makes the formatted field a "forced entry field." When you are entering data, it requires you to enter some data in this field before filing.

Every time you want a carriage return in your output, you have to write a '@1,0' for each carriage return. If you want 3 carriage returns, you would write '@1,0@1,0@1,0'. '@1,0' will position the output, either on the screen or printer, at the beginning of the next line.

If you are creating a new file and want to use the same entry screens as a file already in use, just: 1) Go the Prog Maintenance Menus and select FB. 2) Enter "c0:NEWFILE=0:OLDFILE" (NEWFILE can be any name you choose and OLDFILE is the name of the file you want to duplicate. 3) Go to Menu 2, File option and enter the name you gave NEWFILE at the prompt. You then will have a file under a new name, with the same format as your old file.

Superbase doesn't mention that you can have reversed characters. Here's how:

```
100 DISPLAY @5,15@+"This is rev field characters"
```

Don't expect this to work with a non-Commodore printer (I haven't tested a Commodore).

Did you know you can use 2 disk drives with Superbase? To access the second drive, just include its device number with the command (i.e., DATABASE"test",9 or LOAD "PROG",9). -Doug Hayward (in CCC of Toledo Newsletter)

WHAT PROGRAM CREATED THE MIDNITE INDEX?

Q: I assume that Ellen Strasma used a computer program to do her very fine indexing job of issues 1-19. Could she tell us the specifics, in case some of us might want to use hers as a "template" for indexing other articles/items which are important to use? (I assume she used a commercial database, but have no idea which one, or what sort of parameters she set.) Is it something for sale? -Sarah Knutti, Bethesda MD

A: I'm embarrassed to tell you that I'm a "one-program" computerist. Since all the Midnite pages were already in my word processing files, I did the whole thing in **Paperclip**, using its Append File, Delete Range, and Column Sort options. I even do my annual tax information in **Paperclip**, using the Column Add, Row Add and 120-column Line Length options. Whenever I try a database, I have to type in the same repetitive

category information for each entry. Using a word processor, I just enter each category once in its own file and make lists; I use the Append File, Copy Range, and Save Range commands when I want the same data in more than one category. A spreadsheet could work almost as well, but most of my lists use too many words, instead of the several columns of numbers for which spreadsheets are designed. Once you start thinking in lists containing rows and columns, it's hard to change to a database format. -ES

Commodore Notes

ADVERTISING PLOYS

Several recent computer ads have drawn a lot of comments from readers, including TI's ad about kids flunking without computers, Apple's "1984" ad, and now Commodore's nude in the German edition of Cosmopolitan. (The black square is courtesy of Infoworld.) Readers will remember Commodore's promise to attract more women earlier this year.



FAREWELL TO ...

The Northwest Users Guide reports the SX-64 is no more, "gone the way of the B-128." Electronic News reports VP and General Manager, Sol Davidson (the man who signed our check for writing the revised 1541 manual) has left Commodore, and was replaced temporarily by John Kelly, VP of Finance. Neal Harris, our tour guide at Commodore last summer, and the one who suggested we rewrite the 1541 Users Guide, is now at Atari, as Director of Publications, a job he once held at Commodore. We'll miss you, Neal. Commodore closed out several of its older software titles over Christmas, at \$6 each retail. At that price, the problem of piracy pretty much solves itself.

IS SOFTWARE COMPATIBILITY NEEDED?

Jim Dionne of Commodore has been quoted by Infoworld as considering making the Plus/4 software-compatible with the 64 (via a C-64 adaptor), but is reportedly "uncertain if buyers want it." That was in late October. A month later, not one person had written or called us to say they'd bought a 16 or Plus/4. Unfortunately, at this late date, I doubt if even Commodore is capable of making the Plus/4 or 16 truly compatible with the 64. But if you wish they would, write Jim Dionne at Commodore, 1200 Wilson Dr., West Chester PA 19380.

VAPORWARE IS A NO-NO

The Federal Trade Commission has apparently convinced Commodore not to advertise Vaporware--products that you can't buy. Early 64 owners will remember the CP/M option that didn't appear commercially until 2 years after it was completed and advertised, and then only for a brief while. The FTC says that's a no-no. (So do we.)

Commodore' last quarter net income was up 14% from a year earlier, and sales up 17%. That's relatively good for tough times, but shows a slight squeeze of profits, and doesn't match the speedy growth of the past several years. Retailers also report Holiday sales of the 64 were down 10-20% compared to last Christmas.

WILL COMMODORE SELL REALISTIC UPGRADES TO THE 64?

One of the more interesting viewpoints in recent issues of Infoworld was written by a happy 64 owner who has just realized Commodore offers (in late Fall of 1984) no realistic upgrade path from the 64. Ready to move on, he wonders where to go--Apple or IBM? Probably a PC clone. Too bad Commodore hasn't released its Hyperion model yet.

Since I know the feeling from my work with churches shopping for computers, I enjoyed the article. More than that, I enjoyed the reader letters a couple of weeks later--largely from outraged Apple owners, instead of the 64 loyalists who would have written a few months earlier. By all accounts, 64 sales are down somewhat from their earlier fever pitch, even though the 64 still dominates the retail market place outside of computer stores. The Plus/4, rather than saving the day, appears to have accelerated the decline, by giving Commodore the kind of publicity it doesn't need. There was even a steep but temporary decline in the rate of new releases for the 64 last summer and fall.

Rumors persist that Commodore's real game plan next year is to get itself sold off to a big company. Maybe that's why they were late in providing a true step-up model from the 64, but it may cost them. Computer+Software News now reports that although Commodore has a bigger installed base than Apple, Apple dominates "intention to buy" surveys, and Apple makes more on each][c than Commodore does on each 64.

WAS THIS ANNOUNCED AT CES?

We all know Commodore has two good machines, and three needed accessories to announce at the Winter CES (one of which, the C-128, will include a mode in which it is fully 64-compatible), plus even better things in mind for later in the Spring (the Amiga). Careful readers will note the accuracy of the specs on the wish machine mentioned last issue when checking out the C-128. But will they be enough, and will they arrive in time? Probably so, but it may be a close thing, like the arrival of the Cavalry in the movies.

ABOUT THE AMIGA...

Although not introduced at the Winter CES, Commodore's Amiga machine is creating a lot of excitement inside the company, and will probably be announced later in the Spring. It uses a true 16-bit microprocessor, has 128K RAM, exceptionally good color graphics, an IBM-compatible disk drive, and will sell for under \$1,000, which means it may finally be the long-needed "Trash 68," that is, it will be for the mid Eighties and true 16 bit computers what the original TRS-80 was for the mid Seventies and 8 bit computers. There is still some question who will sell it.--due to the price, Commodore may try to resurrect the dealer network it cast off over the past couple of years. No one has yet suggested it is even slightly compatible with existing Commodore models. Normally, this would upset us, but not this time. Unlike every other new Commodore computer since the first PET, the Amiga has a good reason for being incompatible. Its truly different 68000 microprocessor has a completely new machine language with enough added speed and power to be worth the inconvenience of rewriting programs for it.

Competitors Notes

JANUARY CES

I really wish I could write this after the January Consumer Electronics Show. It will feature Atari's first new models since Jack Tramiel went West, head to head with new Commodore models, in the very next booth! By February we should also know about IBM's rumored PC-2 and new versions of Apple's Mac. Whoever said Winter is dull?

COMPUTER INDUSTRY GROWTH

Infoworld's John Gantz has a cheery word for us all in this time of layoffs throughout the industry. He reports the growth rate of the computer industry is still 30% a year, excellent for one of its size. The only problem is that since growth used to be 40% a year, some temporary downward adjustments must be made.

APPLE

Apple is flying high, although it appears demand for the 128K Mac is flattening out, due to rumors of a Color Mac, and price gouging on the memory upgrade to make it match the new 512K Fat Mac. Some expect a MAC with two double-sided disks and a faster hard disk at the shareholders' meeting in January. If recent comments in Infoworld are correct, Apple no longer believes in "Apple][Forever." A 16 bit Apple][x project is now being denied. On the other hand, The][c is selling well, except against the resurrected IBM PCjr, and will soon be available in upscale department stores. It appeals to people who like alligators on their shirts. As for Lisa, some dealers are having success hawking it as a new SuperMac--a ploy reminiscent of passing off your mother as your daughter on a blind date.

The Apple issue of Newsweek was a bust; no surprises except a program allowing folks to borrow a Mac overnite for free. But there were two good quotes from Apple Chairman Jobs in the last issue of Microcomputing (R.I.P.): 1) "The Mac is going to halve in price by next year." 2) "Both IBM and Apple will have proprietary software by the fall. The way our machines run applications or languages, whatever, will be a closely guarded secret." The][c has already dropped almost 50% in price. But as for secrecy, IBM claims open architecture will continue. Funny how open design got Apple where it is, and now they can't wait to give it up.

Mac graphics are big news everywhere this winter; Digital Research's version is called GEM, and due on a new model from Atari.

ATARI

Atari 800 prices are down to \$120 tops. (Tramiel reportedly once threatened to price computers at \$3 per K, but the 800's well below that now.) Commodore's immediate response was to offer 2 free software packages to those who buy a 64. New ads also remind consumers the Commodore 64 will be supported for a good while, unlike some competing products. (As we suggested last time, keep the price up, throw in something good for free and remind consumers that the 64 will still be around next Christmas.)

Here's a familiar story, coming now from Atari--who stood up the Atari Con user group show. Those who'd promised to come had been fired. Similarly, Post cereals reports Tramiel's new Atari refused to honor a joint promotion of Atari products by Post, leaving many schools out in the cold.

Jack also said, in a recent London news conference, that if Atari weren't successful by Dec. 31, he would pull out. He may only be threatening Warner Communications (who would be left with the bag), but it can't be comforting to those who followed him to Atari.

Atari has two new models coming. One is an 8088-based model with 128-256K RAM and

one 3-1/2" drive, running MSDOS or a clone thereof, to be announced at CES. The other model, to be announced in April, is 68000-based, has 256K RAM and a 3-1/2" drive, plus 600 by 400 color graphics, possibly on an ordinary color TV, 8 channel sound, a MIDI synthesizer interface, and a Macalike GEM operating system from Digital Research, possibly for \$300, or \$500 with a hard disk.

Contrary to the impression given by Michael Tomczyk's new book, Atari won't save American industry--the new machines are to be built overseas.

COLECO

Coleco is reportedly selling more dollars worth of dolls than computers, so the latest promotional gimmick shouldn't surprise anyone--buy an Adam, and Coleco will throw in one of their still scarce Cabbage Patch kids for free.

IBM

IBM continues to barrel along. PC AT orders were recently backed up 6 months, and jr sales up phenomenally--beyond Apple][c sales at some stores. PC and PC XT orders, on the other hand, were somewhat soft compared to production capability. The resulting sale prices are making life tougher on the clones again. A lap computer from IBM is still expected. It may use 3-1/2" disks.

Computer+Software News expects a Valentine from IBM, a new PC-2 and PCjr2. Both will reportedly use the 80186 processor now in the Tandy 2000. Jr2 will reportedly have 256K RAM, dual 3-1/2" disks, and better graphics, including a video monitor. So will the PC-2, per the rumor, and sell for \$2,000. So how will you tell them apart?

It's been funny to hear people complain about diskettes for the PC AT being exotic and hard to find, because they're the same diskettes Commodore's 8250 drive has used for 2-1/2 years. The only problem is the price--triple the cost of generics.

Infoworld reports general success running an IBM PC AT at 50% about its rated clock speed, by simply swapping clock crystals. Lots of room for improvement!

KAYPRO

Computer+Software News reported in late November that Kaypro will offer an IBM PC AT-compatible (KAT?) next Fall. Talk about premature announcements! They are just now selling the Model 16 PC-compatible they announced a year ago (looks just like all the other Kaypro's--a cheap metal box that offers good value.)

TANDY

The new Tandy 1200 and 1000 are very attractive units. Anyone in the market for a PC compatible computer right now should give them careful attention. They are much cheaper than any PC true compatible I've found available in this area. Only the very low school price on the Zenith 150, and the giveaway price of the barely compatible Sanyo 555 can compete. If it weren't for the IBM PC AT, Tandy might have cornered the market last Fall, and even after AT, the Tandy 1000 is selling VERY well. More and more Tandy is taking over a niche Commodore once filled well, but has since abandoned. Like Commodore's 8032, their wares are a bit different, but better in some ways than better-known competitors, and far cheaper. Tandy's recent earning reports haven't been good, but much of their product line is excellent, from the lap-size Model 100, to the second-cheapest MS-DOS computer on the market, through a PC XT 30% cheaper than Big Blue's, to the largest installed base of Unix machines anywhere. Meanwhile, Commodore sells only entry level systems.

2400 MODEMS

This year's hot item in the modem market is 2400 baud modems. Keith Peterson tells us they're more reliable than 1200 baud models, but cost close to \$900. A couple of the infotilities are experimenting with 2400 baud service, but no need to hock your 300 baud modem any time soon.

by Jim Strasma

HOW TO CLAIM COPYRIGHT

As an attorney specializing in the computer field and therefore dealing with copyright matters on a regular basis, I am not aware of any provision in the federal copyright statutes or any reported court decision permitting the letter C enclosed in parentheses to serve as a valid notice of copyright. The copyright laws specifically require either the familiar symbol (enclosed by a circle, not parentheses), the abbreviation Copr. or the word Copyright. Until this requirement is modified by Congress or by interpretation of the courts, the convenience of using (C) could prove very costly. -Robert B. Clifton, Jr., Atlanta GA (in PC World)

PIRACY PROBES

A local computer dealer told us of FBI infiltration and mass arrests in a couple of Apple user groups in California. Seems the clubs were making pirated copies of commercial software at club meetings. The Feds took entire memberships away to the hoosegow in buses! At last week's MARCA meeting, the president of a large Pennsylvania Commodore club told us he was approached by Government agents investigating user group piracy and was warned to keep his club's meetings "clean." It appears that software publishers have decided to crack down on copyright violators and view user groups as primary targets. -Mindy Skelton (in Eight Squared)

PROGRAM TYPING SERVICES

We knew it all along, but Infoworld reports the judge now agrees--program typing services are an illegal infringement of copyright. They wouldn't be if they actually did what the name implies--type each copy of the program in separately from a different legitimate copy of the magazine involved. But instead they type it once and copy it for every customer.

A NEW ROUND OF COMMODORE COPY PROTECTION

I recently reviewed 3 copy programs, any one of which could once have copied every commercial program on the market other than themselves. However, by holding themselves immune to the right of backup, they provided other software houses with a way out, and by the time of our test, new programs from several companies were uncopyable. As I then predicted, another program arose to copy these, along with the uncopyable copiers. Unfortunately, it too is uncopyable by its own methods. Now, instead of a final and long overdue victory over DOS protection, we merely enter a new round in a long fight. The pirates and protectionists alike will stay up nights studying how **Mr. Nibble** copies the works of others, but not itself. Six months from now many new programs will be protected that way, and broken copies of **Mr. Nibble** will probably also be widespread.

Why do I care? Because each new round of DOS-protected programs seems more fragile than the last. The new ones no longer thump drives out of alignment, but some won't run at all on some machines, especially those that are "only" able to accommodate the 35 tracks Commodore made them to support, and not precise enough to accommodate programs recorded between tracks. Worse yet, owners of the popular and durable MSD disk drives are often forgotten by the makers of the more elaborate new protection schemes.

DISK PROTECTION IN THE IBM MARKET

As I've become more knowledgeable about the IBM PC market recently, I have been amazed to note its size and health, despite a general opposition to copy protection, and

especially DOS protection by users and software houses alike. Most programs for the IBM PC are not copy protected at all. As a result, they are usable on machines with vastly varying capabilities, from the puny Jr. to the mighty AT--unchanged!!! And that's not to mention the dozens of so-called 100% compatibles that also run most such programs unchanged. Sure, the companies lose some sales to pirates, but they also gain sales from people whose slightly unusual equipment would not permit them to buy the program if it only ran on a plain vanilla IBM PC.

PC owners have an interesting and admirable philosophy--they seem quite willing to look at anything, perhaps even make a copy of it. But if it's any good, or useful, they go buy a legitimate copy. Many companies encourage this fair-minded attitude by selling or passing out to user groups a nearly complete version of their programs at a token price, as a demo. Other companies pass out complete versions, and simply request voluntary payment, to be paid by anyone who keeps and uses it.

As most of our readers know, I waste too much ink opposing DOS protection in particular, and copy protection in general, and often feel alone among editors of Commodore magazines. However, in the PC world, my views are more prevalent, and copy protection is commonly mentioned in product comparison reviews as a negative feature. The occasional practice of requiring a protected diskette in drive A even when the program is stored on a hard disk has come in for particular ridicule. Imagine how your PC-owning friends would react if you told them well over half of your commercial programs couldn't be used with Commodore's (now discontinued) hard disk at all.

THE "WORM" INVADES COPY PROTECTION

One nasty feature of the original **Jinsam** program was its attempt to header the program disk if it decided yours wasn't a legal copy. Info Designs tried a similar gambit by punching a hole in the diskette and trying to send the drive head there on copies, in hopes it would self-destruct. Now the IBM world is upset over a similar but even meaner product called **Killer Prolock**. It is a copy protection scheme that releases a "worm" program when an unauthorized copy attempt is detected. The worm in turn destroys whatever programs and data it can find. The problem is that the popular hard disks allow a vast potential for disaster if such a thing got loose in them.

From the fuss, several interesting facts have emerged. First, no one has admitted "arming" the worm in a commercial product. Second, users and reviewers seem unanimous in refusing to buy or recommend any product so protected, and PC magazine reviews barely tolerate copy-protected software at all. Most best-selling serious products can easily be copied, and I have yet to see a PC program that can't be easily backed up by commonly available programs. (I haven't seen more than one or two for the Commodore, either.)

Out of all this comes a new plea to forget about copy protection. Several of the most profitable IBM vendors don't use it. Just before Thanksgiving I learned that a neat new program would be in short supply for Christmas, because the copy protection methods used to make it took so long. I learned this just after hearing that the program had already been broken by pirates and was even then being circulated in an easily-copyable form. The only people who couldn't have it by Christmas were those who wanted to buy it.

HOW CAN WE "PROTECT" THE SOFTWARE WE WRITE?

Oh well, next month I put my money where my mouth is. Larry Woolard, Ken Bedell, and I have developed a new church package for the 64, called the **Home Evangelist**. It will be available February 1, from Midnite Software or interested dealers. It will provide full membership information and mail list services for congregations of up to 700 persons, at a cost of \$100 (about \$1,500 below the going rate for such programs). **Home Evangelist** will not initially be copy protected; those of us who developed it believe strongly that this is best, and that you will respect our copyright. Wish us luck! If you'd like to be notified when the **Home Evangelist** is ready, just send a post card to **Home Evangelist**, in care of Midnite Software, 1238 Richland Av., Lincoln IL 62656.

Dealer Notes

DATAMOST

Good luck finding Dick Immer's highly recommended book, Inside Commodore DOS. He reports his publisher, Datamost, is in big trouble--it's far enough overdue paying royalties to authors that some may sue. There are apparently only a few hundred copies of Inside left, and no more can be printed unless Datamost finds money to pay the printer. Dick is still waiting to collect his first dime as the book's author.

One item of special interest to me in all this is that Dave Gordon is the head of Datamost, just as he was the head of Programma International when it mysteriously went broke a few years ago. In both cases, the companies had several best-selling products, should have been making money hand over fist, and nonetheless reported themselves as in deep financial trouble. It seemed very suspicious to me then, as a Programma author, and makes me even more curious now. -JS

The club received a promo for a DataMost product this week, offering low crates for a quantity purchaser. Because of the legal problems and our own moral qualms, we put the promo in our circular file. We hope the difficulties can be resolved to everyone's satisfaction; but until they are, we can't endorse the sale of DataMost products. We're hearing about similar problems with another Prentice-Hall company, Reston Publishing. -Mindy Skelton (in Eight Squared)

GOOD DEALERS

I have had good luck and excellent service from a number of mail order houses on everything from a piece of software to my new Gemini-15x printer. These include: Cosmic Computers, Walnut CA; PC Gallery, Cherry Hill NJ; Big Bytes Computers, Poland OH; ABC Data Products, San Diego CA; Arena Company, Roseville MI; Starpoint Software, Gazella CA; and a few others. -Al Harsch (in WCUG News)

SUPERSUCCESSFUL PACKAGES

According to Infoworld's John Dvorak, the key element in hardware success is software support, and a key feature of successful software is that it runs on lots of machines. Moreover, supersuccessful packages are programmable, always expensive, always overdocumented (as opposed to well documented), require no changes to the computer, and are not protected against copying. A reader adds that they are also true innovations.

TRAVELERS' ADVISORY

The U.S. Dept. of Commerce now requires an export license if you take computer gear or programs valued at over \$1,000 out of the U.S., unless you can convince them they are for personal use. The fine if you don't is \$10,000.

UNIVERSAL SOFTWARE

I have had excellent results ordering from Universal Software in New Hampshire, with no hassle. -John & Charlotte, Puerto Santa Maria, Spain

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Disk Notes

BUMP-KILLER COMMAND CREDITS

We've now seen the amazing 1541 bump-killer command from Midnite #20's Education Notes credited to everyone from Dick Immers (Baron's Microcomputing Reports) to the Tooth Fairy (hmmm, we seem to have misplaced the reference) in Commodore newsletters from across the country--everyone, that is, except the one who revealed it, Mike Todd. As the few others present can attest, the command came out of an offhand comment by Mike at the end of an intermediate disk-handling class he and I taught at our LC⁴ camp last summer, and might never have become known here at all if those who heard Mike hadn't insisted he help us write it down on the blackboard in working form. Apart from that, this poke is a good example of just how fast important news can travel. -JS

DISK REPLACEMENT POLICY

Commodore has a new disk replacement policy. If you have any Commodore labeled software diskette go bad, you can return it along with \$5 for a replacement. Write Commodore Disk Replacement at Commodore Business Machines, 1200 Wilson Dr., West Chester PA 19380. -R.D. Connely (in Joplin Commodore Computer Users' Group Newsletter)

8050 DISK DRIVE CHANGE

1) The 80 SuperDOS (reviewed by J. Paton Dellow) is now beng shipped installed in all recent 8050 drives from Commodore in Canada. -Sieg Deleu

2) The drives in the 8050 I got from Protecto are made by MPI (model 101), not Tandon as we had suspected from the price. The wiring resembles a rat's nest, obviously not made for the unit, but they work very well, and the circuit boards in the drive are exactly like the 8250 boards (less 2 wire jumpers). These units were probably returns to Commodore and have been refitted with MPI drives for better reliability. I installed the jumpers and moved my 8250 drives into the unit and wahlah---an 8250! Now my other disk drive thinks it has two heads and gives me error messages when the absent head is asked to read or write. Is this a problem? Not really; double headed, 100 tpi MPI drives (model 102) are available for about \$100 each. Double your storage for \$200 and a few hours of tinkering. You will have to align the heads, though, a real problem without a dealer in town. -R. Dale Connely (in JCCUG Newsletter)

1541 DRIVE ALIGNMENT TEST PROGRAM

Here is a test to tell if your 1541 drive alignment is marginal. First, type the following line exactly as shown:

```
OPEN 15,8,15,"M-W"+CHR$(106)+CHR$(0)+CHR$(1)+CHR$(193):CLOSE 15
```

This prevents your 1541 disk drive from seeking data more than once, or to either side of where it should be, thus insuring that the head is within .007" of proper alignment if the next command works.

Insert a diskette you are sure was created by a properly-aligned drive, such as most commercial program diskettes. Then try to load the directory:

```
LOAD"$",8
```

If the disk error light doesn't flash, your drive is probably aligned properly. Otherwise, you may have a problem, and should have the drive checked. Either way, remove the diskette and reset the drive (i.e., turn it off and on) before using it again. -Adapted by JS from a hint by Max Yoder

RECORD # COMMAND CORRECTION TO THE REVISED 1541 MANUAL

The revised 1541 manual did make it into print, and in time for Christmas, but we haven't seen the final version yet. It contains one error worth noting--although the character position byte in the Record# command is listed as optional, as it is in Basic 4, it isn't really, and leaving it out does not default to the first character of the record as it should. Fix? Always specify the character position desired when selecting a relative record in Basic 2 and 3.5. The sample "relative file" program on the revised Test/Demo diskette does so properly. Sorry I didn't catch that one earlier. -JS

UNIMPLEMENTED SECONDARY ADDRESS CODES

Q: Is anyone aware of unimplemented secondary address codes in the 1541 DOS? I haven't had time to search the code about this, but have seen them used. -Greg Wetzel, Box 116, Coopersburg PA 18036

A: Another new one on me. Any ideas, readers? -JS

WHAT DOES "EATING" A DISK MEAN?

Q: What did they mean in the issue #18 reviews of disk copy programs that DOS protection "eats" 1541 disk drives? I have a lot of problems with my system when trying to get it to do things like **Script** in the **Zorks**, for example. There are a lot of commercial packages, like **Synthy-64** and **Screen Graphics-64** from Abacus that almost won't run at all on my unit, and now I'm wondering if perhaps it's not me but THEM. What do you figure? -Tony Rietzke, Long Beach CA

A: "Eating a disk" is one of those highly technical terms that so clearly illustrates the highbrow nature of this magazine. The type of copy protection that works by creating intentional errors on a diskette can have the less-intended result of causing the drive head to misalign itself while trying to read the sector containing an error. This can happen because part of the error recovery process includes thumping the drive head against a metal bumper at least ten times. This, in turn, can cause the head to move out of position on its mount, especially if the drive is hot at the time. If this happens, you'll have a hard time loading programs afterwards, so yes, your drive could be out of alignment. Fortunately, it is possible to modify the drive so it probably won't happen again. Warren Radio of 800 S.W. Jefferson, Peoria IL guarantees alignment won't slip again after their repair. -JS

ATTENTION COMMODORE 64 OWNERS *We'll pay for your mistake!*

We know that it's difficult, especially since everyone is trying to come out with one. Now that error track protection is going the way of the dinosaur, you probably purchased an obsolete piece of software. Well we will give you \$25.00 credit* for any original copy utility software disk that you would like to trade in for the "NEW REVISED CLONE MACHINE." Our program can now back up non-standard sectors with complete control, detect and reproduce density-frequency alterations, alter the number of sectors on a track, sync to particular reference sectors (including a single sync Bit copy) PLUS reformat a single track.

Other back up programs have only recently caught up with our ability to reproduce errors. Included is fast close as well as all of the other standard Clone features, we've even made it more user friendly too! THE CLONE MACHINE was the first utility of its kind and others followed. Well, we still feel that it's time for the other to try to play catch up again.

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only a couple of these kinds of special programs in the club library, but Mrs. Richardson contacted Ms. Kitty Shadman, President of ComputerKids, a local firm specializing in computer instruction and educational software sales. (Ms. Shadman is active in our Rockville club and demonstrated programs at our last meeting.) She graciously allowed Mr. Gatling and Mrs. Richardson to borrow some suitable software. Ms. Shadman personally ran through the programs with Mrs. Richardson, highlighting the educational advantages and the teacher's drill and quiz preparation modules.

The school demonstration was greeted enthusiastically by the kids and was thoughtfully received by the teachers and principal. However, the greatest hit was a demonstration of "S.A.M." afterwards! We don't know, if Commodore computers will become the workhorses of Matthew Henson's first graders, but we do know this was a splendid example of the value of user groups in their prompt response to requests for help.
-Rockville [MD] VIC/64 Club Newsletter

Wanted: CLASS SCHEDULING PROGRAM FOR THE 64

Q: Do you know of a class scheduling program which will work with a 64? -John Clark, 11129 Pioneer Blvd., Norwalk CA 90650

A: At present I only know of workable programs for the CBM 8032 and 8050 combination--our own Lincoln College programs, and those by Rich Rediker (reviewed in Midnite #15 and 19). You may want to write Rediker Software at 67 Genevieve Dr., Hampden MA 01036, to see if his programs can be adapted. The biggest problem may be disk storage space on the 1541. Any more suggestions, readers? -ES

WHAT SOFTWARE IS GOOD FOR A HIGH SCHOOL BUSINESS APPLICATIONS COURSE?

Q: Our secondary schools here in Sioux Falls, SD are equipped with 4032's and 4040 drives. Would you please recommend software we can use in a semester course in which students become familiar with such applications as word processing, databases, and spreadsheets? -Kenn Anderson

A: Since I expect one of your needs is for a single copy of a program that can honorably be loaded into all class machines, you'll prefer DOS-protected programs, such as **Superscript**, over ROM-protected programs such as **Word Pro 3 Plus**, and **Paper Clip**. However, with only a 40 column screen, you may only be able to buy the **Word Pro** for your machines. Unfortunately, you could buy a Commodore 64 and **Word Pro 3 Plus/64** for the \$300 asking price for **Word Pro 3 Plus** on the PET. Therefore, I suggest you contact Precision Software about **Superscript**, and also consider **Pagemate**, sold by A.B. Computers, and available in a special schools version on request. Galt's Educational Consultants, Orange CA offer a matching workbook for it.

For data management, Precision's **Superbase** would be the most flexible, but likewise may not be available in a 40 column version. If you are willing to buy a copy for each student, **The Consultant** from Batteries Included is available, as is **Flex File** from A.B. Computers. Of the two, **Flex File** is simpler, but also a good bit cheaper.

In spreadsheets, you could contact Handic Software about **Calc Result** on 40 column PETs, but I've only seen it for the 8032. If that's unavailable, the original **Visicalc** will work, but like **Calc Result** requires a ROM in each machine. You could also contact Skyles Electric Works about their **Busicalc**, reportedly available in a PET version.

Be sure to tell all these companies that you have 4040 drives, as most business software for the PET comes on 8050 diskettes. For more information, nearly all of these products have been reviewed in past issues. -JS

YOUR MANTRA IS "OM"

Commodore will once again sponsor the 1985 "Olympics of the Mind" programming competition, June 6-7, at the U. of Maryland, College Park MD. Participating schools send teams of students from grades K-5, 6-8, and 9-12 to the finals. Commodore is supplying one of the problems, plus 50 systems to be used in the competition, and will lead a parents' workshop. Interested schools may write the OM Association at Box 27, Glassboro NJ 08028, or call 609/881-1603.

For Sale Notes

For Sale: CARDPRINT/B PRINTER INTERFACE

A Cardco Cardprint/B universal parallel printer interface for the VIC and 64. In factory condition. All functions software controlled. \$40 or best offer. - Jim Kohlenberg, 9801 111th Lane N., Seminole FL 33542

For Sale: EIGHT INCH DISKETTES

One box of 7 eight-inch diskettes. \$5. -Jim Strasma, 1238 Richland Av., Lincoln IL 62656

For sale: KEYBOARDING, by Don Johnson

I have a copy of **Keyboarding** [for the PET with 4040 disk drive or CBM 8032] that I cannot use on my 64. Maybe there is someone out there who has the right machine, a CBM 8032, and would like a copy of **Keyboarding**. -Dorothy Schoenwetter, 356 S. Congress St., Rushville IL 62681

For Sale: MDS SD-2 DUAL DISK, BUSCARD II and P-I CABLE

A 3-month old, MSD SD-2 dual disk drive. Included is a BusCard II interface and PET/IEEE cable--everything needed to operate the drive with the faster parallel data transfer. \$625. -David Dye, 833 S. O'Brien St. Lot 181, Seymour IN 47274 (812/522-8543)

For Sale: MORE ON THE 64 BOOK and DISKETTE

More on the 64 book and diskette, by H.C. Wagner. Contains important subroutines, tricks and hints in machine language, how to modify DOS, how to connect a parallel and serial printer, how to design your own terminal program for communications and networking, and digs into I/O for cassette and diskette. In factory condition. Table of contents/directory listing provided upon request. \$25 or best offer. -Jim Kohlenberg, 9801 111th Lane N., Seminole FL 33542

For Sale: 64 OR VIC COMPUTER CARRYING CASE

Computer carrying case for 64 or VIC and one 1541 disk drive. Original cost \$125. Now \$50. -Jim Strasma, 1238 Richland Av., Lincoln IL 62656

For Sale: TRS-80 POCKET COMPUTER AND CASSETTE INTERFACE

TRS-80 pocket computer (full Basic +2K RAM) and cassette interface. Original cost \$300. Now \$50. -Jim Strasma, 1238 Richland Av., Lincoln IL 62656

For Sale: VIC GAME CARTRIDGES

The following game cartridges are now \$10 each: River Rescue, Shamus, and Serpentine. The rest are now \$5 each: Cloudburst, Jawbreaker, Predator, K-razy Antics, Trashman, and Robot Panic. -Jim Strasma, 1238 Richland Av., Lincoln IL 62656

Hardware Notes

ELECTRIC LINE INTERFERENCE

Q: We are using an 8032, 8050, and an 8023 separated from the rest of the system by an unshielded 15' IEEE-488 cable. As we use our attendance program, a nearby classroom clock which is corrected hourly from a master is causing the printer to reset. I have a couple of ideas--spike filter on the printer AC, shielded IEEE cable, turn off the clock, work at night, do report cards by hand. Any suggestions? -Bob Bergevin

A: Warren Radio, of 800 SW Jefferson, Peoria IL will be happy to sell you a long shielded IEEE-488 cable. That should solve the problem, unless you go beyond 25' between devices (the standard says 15'). Unless the clock and printer are on the same electric circuit, a spike filter wouldn't do much. But if they are, a power line filter could help. We reviewed a \$50 Radio Shack version I like a few issues back. -JS

64 POWER SUPPLY

\$10 power supply for your 64--All Electronics, 6228 Sepulveda Blvd., Van Nuys CA (818/997-1806). These are official Commodore supplies--the kind with screws so they can be repaired if they break. The salesman said they "have thousands." -SFVUCUG User Port

MAKING THE RESTORE KEY WORK MORE EASILY

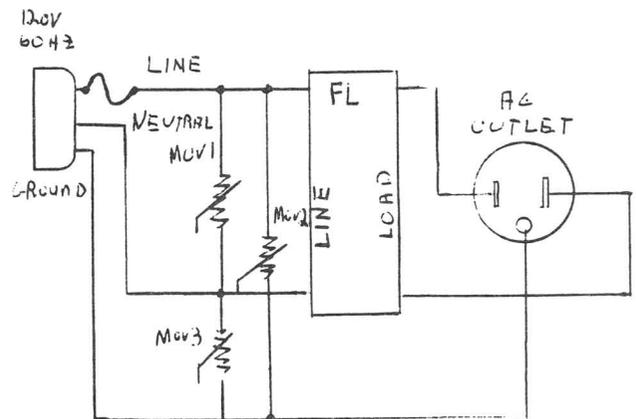
The RESTORE key must be hit hard and repeatedly to perform a warm start (RUN/STOP-RESTORE sequence). This situation can be easily remedied by bridging part C38 (a 51 picofarad capacitor) with a 0.01 microfarad capacitor. Part C38 is a coupling capacitor which is connected to PIN 6 of integrated circuit part number U20 (a 556 dual timer which on our circuit boards is located at the front left-hand corner of the unit). -Jeffery Hock and Richard Roffers

HOW TO MAKE A SURGE PROTECTOR

Here is the proper way to install MOV's (metal oxide varistors) on a multi-strip connector (used to avoid unplugging your power supply each time). Each strip will require 3 MOV's. Connect them to the socket nearest the cord. Plug your computer into its socket. You will find 3 colors of wire in the strip: black (hot), white (neutral) and green (ground). Connect one MOV from the black to the green, one from the white to the green and one from the black to the white. The MOV will short any voltage above its rating (130 volts or 150 volts) and keep it from getting to your computer. For added protection, you can add an R/C network from the black to the white wire. The R/C value should be .5 microfarad for the capacitor and 220 OHM for the resistor. You can purchase them or buy your own capacitors and resistors. I've never had a failure on my computer since I installed them. -Jerry Carter (in CCC of Toledo Newsletter)

Those who do choose to build the protector please use good construction techniques and proper electrical safety habits. Any questions or comments please call.

Jay 619 449-9748 after 8 pm



Assemblers:

COMMODORE ASSEMBLER

Q: I note my Commodore Assembler does not work for low-high bytes (arithmetic operations). Hence, I could not complete an assembly of a music (machine language program) published in Commodore magazine. The manual does state, "Arithmetic operations in the .BYTE directive is not supported in this version of the package." How does one receive an updated version and/or how does one know what version he is buying prior to opening the software package? -Harry Metz, Bronx NY

A: That's a question for the Commodore Customer Support Group at 1/215/436-4200 in West Chester PA. Keep trying their number from 9 a.m.-8 p.m. EST Monday through Friday until you get through. Sorry we can't help you. -ES

WHAT ASSEMBLER PROVIDES SYMBOLIC ADDRESS AND MACRO CAPABILITY?

Q: I am interested in finding an assembler that uses the standard mnemonics of Supermon and Micromon. One that allows the use of symbolic addresses and macros would be very helpful. -Warren L. Pollans, Orangeburg SC

A: For both symbolic addresses and macros, I recommend MAE from Eastern House Software in Winston-Salem, NC. PAL from Pro-Line Software in Mississauga, ONT Canada is also excellent if you don't need macro capabilities. MicroPACE Computers in Champaign IL is a U.S. distributor for both products if you can't get them direct. -JS

DEVELOPE-64

Q: The French Silk Assembler does not work on my printer. Do you know a good assembler that works on a 1526? -Harry Metz, Bronx NY

A: Try MAE and Pal. Pal has to work, because it uses Basic to interface with the printer. Surely the Commodore assembler will also work. -JS

Basic:

COMPARING RAM MEMORIES

Q: In principle, the 64 can make use of more memory than the old PETs. But I am beginning to think it doesn't do more. My PET gives me 31K free, and the 64 gives me 38K, and a 4K block of RAM that Basic does not use. Am I being kidded about the memory capacity of the 64, and if not, why can't we get more memory out of the PET using similar techniques? -J. G. Frajkor, Ottawa, ONT

A: Both the PET and the 64 can address the same amount of memory at one time, 64K. The difference is that the PET came with less than 64K of RAM, and the 64 comes fully equipped. Both take some of the 64K for ROM memory, although in the 64's case, normally-invisible RAM memory shares the addresses used by the ROMs. The same is true of PETs equipped with the 8096 add-on memory board. In both cases, only machine language programs can take advantage of the added memory. No one is fooling you about the 64's memory, but if you want to use all of it from Basic, you'd be better off with the new Plus/4 model, which uses special techniques to make all of its RAM memory available to Basic.

CHANGE CURSOR SPEED

To change the cursor (blinking) speed, POKE 56325,SP where SP is a number between 0 and 255. The lower the number, the faster the blinking. -South Maine 20/64 Newsletter

DATA STATEMENTS

If you get an error in a data statement and want to know on which line the offending data value is, try PRINT PEEK(64)*256+PEEK(63). -Ron Schmars (in Fox Valley 64 CUG)

ERASING LINES DIRECTLY

If you poke a line number from 0 to 24 into address 781 and then do a sys59903, it will erase that line. -CCC of Toledo Newsletter

POWER QUESTION

Q: Warning: One maddening thing about **Power** is its failure to give any warning when it fails to find a referenced line during a renumbering. Rather than change the reference to 65535, as **Basic Aid** does, it leaves that line unchanged. Intended as an advantage--to ease re-pointing of the line to the correct destination--the practical effect is to hide the existence of a problem. Anyone found a cure? -JS

SLOW DOWN A LISTING

To slow down the listing on your 64, try this: POKE 56325,0:POKE 56324,50. The listing will stop as long as you hold the control key down. Press the shift lock for slow, hands free use. Hit any key to slow the listing even more. Any number can be put into the 56324. The smaller the number, the slower the listing. -CCC of Toledo Newsletter)

Pascal:

USCD PASCAL SALES

"SoftTech reported a net loss for its fiscal quarter ended Aug. 31. The company blamed the current shortfall on SoftTech Microsystems, which 'fell substantially below plan.' The Microsystems division is...a worldwide licensor of UCSD Pascal and the p-System." -Computer & Software News

Machine Language Monitors:

MORE ON PSEUDO OP-CODES

Q: I am interested in your answer to the question about pseudo op-codes in Midnite #19. You mentioned that lists of these extra op-codes have been published in at least 2 magazines. I am aware of the article by Joel Shepherd in the 11/83 Compute!. What are the others? -Warren L. Pollans

A: Micro and The Transactor. I don't remember which issues. Unfortunately, Micro has gone under, so try the Transactor (see their ad in this issue). -JS

Low-Level Languages:

OS-9 STANDARD OPERATING SYSTEM FOR THE SUPERPET?

TPUG is recruiting support for converting the OS-9 operating system to the SuperPET. Now that Commodore has abandoned the SuperPET, this is a sensible attempt to ensure future software support, via the many other 6809-based computers that use OS-9. (OS-9 is the standard 6809 operating system.) Cost will be about \$150, a pittance compared to the prices on Waterloo products for the SuperPET. Supporters of the SuperPET are asked to send a \$68.09 deposit to TPUG at 1912A Avenue Rd, Suite 1, Toronto ONT M5M 4A1 CANADA. If too few SuperPET owners do this to ensure the success of the project, TPUG will return your money.

Modem Notes

COMPUSERVE

1) Want to update your version of **Vidtex** to 4.0B? First, have a formatted diskette ready. Then load **Vidtex** and call CompuServe as usual. Type "GO VID250" at the "!" prompt. Answer the questions and sit back--the system will download the current Commodore 64 version to your diskette automatically! - Frank Cherwin (in Fox Valley 64 Users Group)

2) Been on the Commodore Information Network lately? Be sure to GO CBM-310. This is the Programmers SIG and its databases are packed with some powerful utility programs. XA2 has many high level utility programs, XA3 contains disk programming and XA7 is loaded with telecommunications programs, including the new Xmodem program [see below]. Most of us are still using the Creative Corner (GO CBM-962) and love the music in its XA2. That database has really taken off in popularity; the amount of new music each week is astounding. -Mike Stout (in 10 SAVE:REM)

1650 AUTOMODEM PROBLEMS

Some people have been having difficulty making calls with the 1650 automodem. The problem is apparent false busy signals when using a redial-on-busy routine, and can affect other automodems as well. Actually, the problem lies not in the modem itself, but rather with the redial delay interval, a time which is established in the software (e.g., **Blitzterm**). If the redial delay is too short, the system may hang up (giving the appearance of a busy signal) before you can even ring the other party. Sometimes the phone lines are such that it takes a while for the connection to be made. The solution is to set a longer redial delay--to at least 10-15 seconds. Calls to long distance ports may require a delay of 35 seconds. I suggest, as a general rule, a delay of 20 seconds. -Paul Motise (in Rockville VIC/64 Newsletter)

SYSOPS CONVENTION, JULY 1985

Coast Bulletin Board is having a system operators convention in Fort Bragg, California in July 1985. Fort Bragg is the center of the world as far as the Pacific coastline is concerned. We are at the edge of the Redwoods. To the east are beautiful fir covered mountains and to the west is the roaring Pacific Ocean ... bordered by rough and rugged molten rocks ... centuries old and the skyline in both directions is some of the most beautiful in the world. The Skunk Railroad, an original steam train, leaves Fort Bragg daily for a 40 mile trek across the redwood forests ... through tunnels and around breathtaing curves bounded by salmon filled streams.

Make your plans early to attend the first annual system operators convention. There are two large convention halls with fancy restaurants and tons of touristy things to do. There will be seminars on running BBS and all aspects of computing. The cost of the 4 day seminar is \$375 per person. This includes your motel rooms and seminar tickets for 4 days and 3 nights, and tickets to the worlds largest Salmon Bar-B-Que. You must pay your own transportation. Coast Bulletin Board will be glad to assist. Stay tuned. -Bob Shannon's Electric Magazine sysops newsletter

XMODEM

We now have a new version of **Xmodem**, with the following features: 300/1200 baud, auto-dial and repeat, sequential file reader, and up/download. The best part is that it will let you download off **CompuServe**, using a protocol similar to B' Protocol--CP/M downloading protocol. Error-free and direct file transfer with a public domain program! And it seems to work just as fast as **Vidtex** using the B' Protocol. Now newcomers have an alternative to the \$40 **Vidtex**. -Mike Stout (in 10 SAVE-REM)

Printer Notes

BLUE CHIP PRINTER INTERFACE

You can buy the blue chip printer interface at Best Products for \$40 and if you open it up, you will find it says Cardco G inside. The G sells for as much as \$79. The difference is the Blue Chip does not have the dip switches, but they can be added.
-Jerry Carter (in CCC of Toledo Newsletter)

GEMINI PRINTHEADS

There is a problem with some of the earlier Gemini printheads, whose serial numbers start with 2100 or 300 through 305. They will not print descenders or possibly (part of) the first letter. If your printhead is one of these, send your name, address and printer serial number to Bob Quisenberry, 2932 Leawood Dr., Omaha NE 68123 and he will forward the list to Star. No phone calls please! -South Bay Com-64 Users Group

LASER PRINTERS

Laser printers were big at Comdex last Fall, most being based on Canon's PC series of copiers. Camera maker, Konica, brought a competitor, expected to cost less to buy and run. The big remaining need is for enough built-in RAM to do a full page of hi-res graphics at once, and some price competition. Both should be plentiful by this time next year. We'd love to have one, for printing the Midnite, but can't afford \$3,500, despite its being such a bargain price for laser printing. -JS

PRINTER

RIBBONS

If you have a printer that uses a ribbon which can be inverted when the upper half starts to wear out (printed material starts getting too light), the following tip will allow you to get more useful life out of the ribbon. Do not wait until the upper half of the ribbon has worn out to invert the ribbon. Doing so causes the ink in the bottom half of the ribbon to work its way to the top half so that when you finally invert the ribbon, the good bottom half will still print light because its ink supply has been depleted. A better way is to invert the ribbon on a regular schedule such as every two weeks or every month. -Al Harsch (in WCUG News)

Answer: USING ELITE WITH THE OKIDATA PRINTER

Robert Hayward wrote you in Midnite #20, p.2, about the problem he was having when he tried to print a letter in elite using a Commodore 64, 1541, Okidata M92 printer and Tymac's The Connection interface. I have exactly the same equipment and wordprocessor. I am using it to write this letter in elite. Therefore, the problem is probably not in the equipment. I suggest that he check the following items to make sure his system is properly set up.

- 1) Set mini-switch #1 to CLOSED position (transparent mode).
Set mini-switch #2 to OPEN position (line feed control).
- 2) Turn on all equipment. [Load the wordprocessor]
- 3) When asked "printer type (0-4)?", the correct response is 4.
When next asked "(R)S232 (C)ENTRONICS OR (S)ERIAL," respond with S.
- 4) Near the beginning of your letter, you should enter the following:
Press the F3 key and type l=29 <RETURN>
Press the F1 key; then press the "up arrow" key; and type l <RETURN>

I would be very happy to correspond with Mr. Hayward or anyone else that has a similar system. -Jeff Eklund, 702 Park Av. N.W., New Philadelphia OH 44663

1526 PRINTER UPGRADE

For approximately \$5 shipping, you can send your 1526 Rev. 05 version in for a brand new 1526 Rev. 07C version with two new ribbons. This is a good deal if you have been using yours for any length of time. This Rev. 07C is reported to make the printer compatible with more third party software. The revision 05 will supposedly not work with **Superbase 64** and a number of other programs. I would write for permission first and then send your printer with a letter of explanation to Commodore Business Machines, Attn: Customer Service, Dock 11, 1200 Wilson Dr., West Chester PA 19380. -Alan Bilger (in CCC of Toledo newsletter)

WHAT DID YOU CALL IT?

Not long ago, someone on National Public Radio started thinking about the strips of paper with the holes in it that you tear off the sides of tractor feed paper. The name contest winner was "perphery," because it was a good sounding previously unused word that crossed periphery with perforate. Somehow, however, that word has not caught on. But one of the runner-up words from the contest is being used by everyone who hears it. That word is CHIT. One secretary who entered the contest said the strips of paper with holes that you tear off already had a name. She knew it was chit, because her boss, a Puerto Rican man with a bit of an accent, used to tell her to "tear off that chit before you bring the paper in to me!" -reprinted from the S C CUBED, Sacramento CA, May 1984

Reader Notes

QUOTEABLE QUOTES

An ex-employee described Apple's management style as "MBM...Management By Mood".
-Computer+Software News

"The guys on the leading edge of technology get icicles in their beards, sea gulls in their faces, and arrows in their backs. When you're on the trailing edge, you're shielded from the turbulence, it's very warm, and there are a lot of other people in the same fix, eager to help." -Edgar Coudal (in Infoworld)

"History tells us that two formats don't live side by side as equals for more than three to four years." -Richard Thalheimer of "The Sharper Image" (in Infoworld)

"I was the only guy who was not marched out of there." -Sig Hartmann, to Computer+Software News, about the forced resignations of a dozen Tramiel supporters from Commodore last summer

"IBM compatibility is like pregnancy. You are or you are not." -Adam Osborne

"If I have to read instructions to use a product, it won't be a hot seller."
-Richard Thalheimer of "The Sharper Image" (in Infoworld)

"It should go down as one of the great ironies in history, that in the country that first brought the world machine intelligence--the emulation of human thinking by a machine--nearly half its citizens do not believe in the theory of evolution." -Edward Feigenbaum and Pamela McCorduck (in The Fifth Generation)

User Group Notes

National and Specialty Group News:

B-128 USER GROUP ANYONE?

Since running Gary Greenberg's B-128 User Group offer in Midnite #21, we've had the following people also offer to act as a central contact for B-128 Users. We suggest you contact the persons closest to you, share your own information, and then encourage them to work together with the other people listed here. Specialty User Groups need as many sources for organizing and disseminating information as they can get, from all regions of the country, without having to compete with each other! -ES

- 1) Gary Greenberg, 355-10M South End Av., New York NY 10280
- 2) Tom Pounds, 5112 Parkland Terrace #103, Rockville MD 20852
- 3) B-128 User's Group, c/o Marlin Schwanke, 432 North M Street, Apt. C, Lompoc CA 93436 (805/735-6931--voice after 5pm PST--or 905/736-291--modem 24 hrs.) Dues are \$20/year for a monthly newsletter, public domain library and B128 BBS.

IRELAND:

CLUB64, Dublin was established just before Christmas 1983 as a software user group for 64 users with disk drives. As a result of notices in various publications, 5 enquiries a day are arriving from all parts of the world. Many people are seeking "computer pen pals," others are interested in exchanging software [our members are requested to refrain from exchanging illegal copies of commercial software], and others are seeking advice. We are seeking sources of good public domain software, particularly for COMAL, Logo, machine code and utilities, but not games. We are also seeking material for our Newsletter, and suggestions on what other services should be made available to members. Your ideas would be very much appreciated. -W.J. Murphy, 85 Upper Drumcondra Rd., Dublin 9, Ireland

Update (see #21): MARCA

The second annual Commodore users fair is planned for the last weekend of July 1985 at the new Valley Forge (PA) convention complex. -Eight Squared

Update (see #21): UNITED STATES COMMODORE USER GROUP

I have some misgivings about your comments on USCUG. I've heard some strange things about the organization from sources I trust...most notably, the use of Command Performance's mailing list to solicit campaign contributions... I've seen a campaign letter sent to one of Command Performance's advertisers, and its implications for USCUG's vaunted "independence" from advertisers were vexing." -Andy Skelton

Local Group News:

CALIFORNIA

Thank you for a very informative magazine. I am a school principal at Leffingham Christian High School in Norwalk CA, and the computer consultant to the Association of Christian Schools International. As computer consultant I am constantly helping other Christian schools get set up in computers (naturally I suggest Commodores). Your publication is invaluable to me in selecting programs and additional hardware items, and in knowing what's new for the 64.

We also have a (Teacher's User's Group (TUG) of Southern California. We have a library of over 2,000 programs and are constantly sharing these with other Christian

schools throughout the area. We had a principal from Tucson AZ fly in yesterday and copy programs all day. -John Clark, Norwalk CA 90650

MICHIGAN

It had to happen--a commercial user group with its own building. For those whose needs aren't fully met by volunteer groups meeting once or twice a month, Slipped Disk Inc. in Madison Heights MI now offers a club-like atmosphere seven days a week, 12 hours a day. Membership costs \$50, and an article in the Detroit Free Press reports there were 270 members in October. The club features ten 64 systems, which members pay \$3-5 an hour to use and a library of public domain and commercial programs and periodicals. Its organizer, Jeffrey Moskow, feels the time for this concept has arrived, and plans to franchise his idea. Anyone interested in the club may call 313/583-9803.

PENNSYLVANIA

Eight Squared: I'll be most curious to see if my computer violence article in Midnite 21 draws any reaction. Actually, there are two separate issues which concern me. First, the question of violence is interesting on psychological and social levels. The parallels with TV and movie violence are clear cut. The other issue is a general consumerist concern. I'm astonished at how much junk is floating around in the personal computer market, and outraged by the way some of it's marketed. -Andy Skelton

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PRINTING HIGH RES PICTURES WITH DOODLE

If you own a copy of **Doodle!** (if you don't, you should), you can easily make any hi res picture into a **Doodle** file. Here is how it works:

- 1) Turn the computer on and type: POKE 44,96
- 2) Load the hi res picture by typing: LOAD"name of picture",8
- 3) Type: POKE 42,92
- 4) Now type the following line WITHOUT A LINE NUMBER:
FOR T=23552 TO 24552:POKE T,x:NEXT
x should be a number between 0 and 15 to represent the background color you want for your picture.
- 5) Finally save the hi res screen by typing: SAVE"DDname of picture",8
The name should begin with DD so **Doodle** will recognize it as a **Doodle** file.
-Bill McDannell (in SPUG Gazette)

1702 MONITOR BUG AND FIX

Under certain conditions, the Model 1702 will lose all color in the displayed image. This is due to a design change which, unfortunately, makes it slightly incompatible with the older 64s. The Model 1702 requires a pure chrominance signal for optimum operation. This is supplied at the center pin, or pin 8, on the current 64s. Pin 6 (which is adjacent to pin 3) and pin 7 (which is adjacent to pin 1) are not used at this time. The older versions of the 64 do not have the center pin (pin 8). In addition, the pure chrominance signal is not available at the rear video connector on the computer. The signal supplied at pin 4 is a composite video signal containing both color and brightness information. While the Model 1701 was designed to function with the composite signal, the Model 1702 uses separate chrominance and luminance signals.

A simple internal modification of the 64 will supply a pure chrominance signal at pin 4 of the video connector. A qualified service technician should be able to perform the operation. Refer to the second page of the Commodore 64 schematic in the Commodore 64 Programmer's Reference Guide. Locate resistor R10, the 120 ohm resistor connected to the emitter of transistor Q4 (PN2222). If this resistor is disconnected or removed from the computer circuit board, the signal to pin 4 on the video connector will be changed to pure chrominance. The resistor is located under the metal shield at the approximate center of the 64 circuit board. Note that the signal to the RF modulator will be affected as well, making the computer unusable with a color television. -Morton Kevelson (in Baron's MicroComputing Reports, for Commodore)

USING THE 1702 MONITOR WITH 5- VS. 8-PIN PLUGS

The other day I heard the 1702 monitor was being recalled, because it was burning out the VIC chip in the 64. What happens is that on light colored screens, the monitor overloads the color generator and causes (1) the monitor to reset the color and (2) after repeated cycles the VIC chip goes.

Commodore says officially: 'There is no problem with the 1702 monitor. Commodore DOES NOT suggest or recommend one plug the 5 pin cable into the back of a monitor. Plugging the 5-pin cable into the back of the monitor will cause the problems we have heard about.' -Club 64 Newsletter

Answer: VIDLINK

I just got my **Vidlink** in the mail and I am going to get it together with the LD700 Pioneer videodisk player. I saw a good demo done at the World of Commodore II in Toronto in December. A guy named Laurie Fountain of Commodore Canada had the same hookup there with a disk from Simion Fraiser University in British Columbia called **Heart and Circulation**. Laurie's people had done a short program to allow interaction with the disk and ask questions about the disk. If the wrong answer was given, the disk presented the information again.

We have "messed around" with this with a PET and Pioneer VP 1000 player. The results were less than wonderful. The **Vidlink** looks like the best thing at this time. Laurie offered a copy of their program for free if I sent a disk. It is on the way. I'll share with Dan Gaydosh if I get it from Canada. -Bob Bergevin, Clintonville NY 12924

Wanted: BAR and LINE GRAPH PROGRAM FOR THE 64

Q: Do you know of a graph (not graphics, but graph) program for the 64? I would like a program that would have printer output for both bar and line graphs. I did find a K-TEK software called **Comparative Analysis Graphs**, but it is a great disappointment. It has little flexibility, except for naming, and does not handle negative numbers. A friend has a program for an Atari 800 that enables labeling of both the X and Y axis, as well as titling and column naming. Any other software leads would be most appreciative. - Herbert A. Paul, 210 Oakwood Circle, Washington IL 61571

A: You could try **Chartpack 64** from Abacus Software, reviewed in Midnite #20. -JS

Wanted: GRAPHICS PACKAGE FOR THE 64

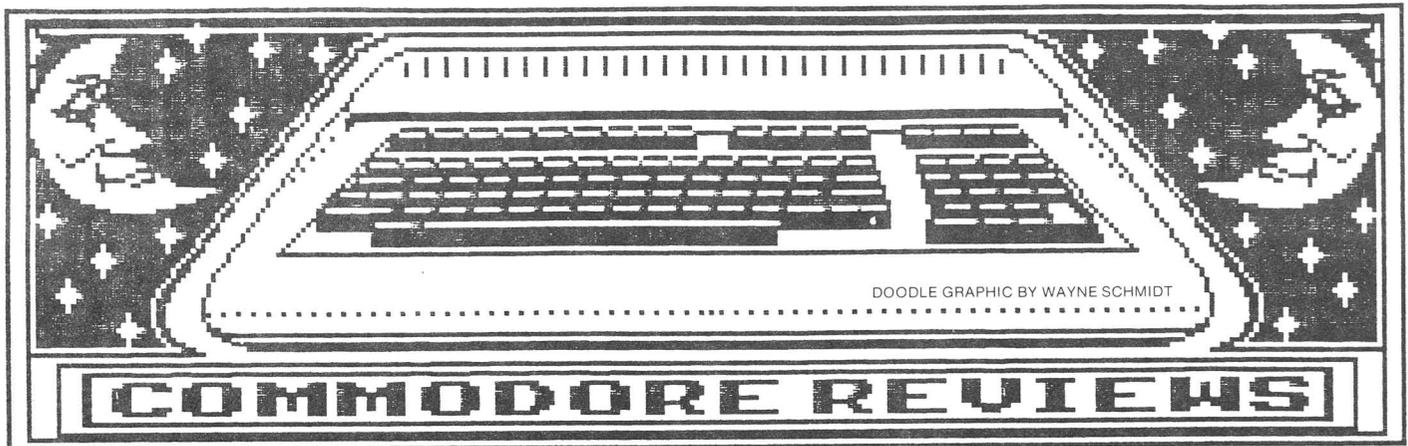
Q: I am interested in acquiring a high quality and versatile Graphics program that can handle Data Interchange Format for screen and printer display on a 64. I find the menu formatting capacity for **CalcResult Advanced** are excellent, but the display-printout capabilities are limited. Ideally, I would like the graphics display program to meet these criteria: 1) tables for numeric and text labels (preferably with horizontal scrolling for screen preview before printing), 2) histograms with more than 9 variable bar representations, 3) pie charts, 4) plots for plotter or printer output, preferably with more than one variable plotting capability, and 5) other formatting capacity configured for a StarMicronics Gemini 10x printer with Card/? interface. (Even more desirable is a print file adaptable for configuration with various printer/plotter/interface combinations). -Erich A. Vierthaler, 435 Cathedral of Learning, Pittsburgh PA 15260

A: I'm not aware of one for the 64 that will handle DIF format besides **CalcResult Advanced**, but you could check with the various Pittsburgh user groups (one contact is Joel Casar) and with MARCA (one contact is Mindy Skelton) as listed in Commodore or RUN magazines. -ES

Wanted: GRAPHICS PACKAGE FOR THE 8032

Q: I am using the CBM 8032 in the laboratory where I work. I am contemplating the purchase of a Hewlett-Packard 7475 plotter which can be attached directly to the 8032 via the IEEE bus. I would like to know if you are aware of any commercially available graphic software packages that support this particular plotter. Or would there be anything available in the TPUG library? -Donald MacNeil, 181 Old Forge Rd., Millington NJ 07946

A: Any ideas, readers? You'll have to contact TPUG direct to get an up-to-date list of their programs. Write them at 1921A Avenue Rd., Suite 1, Toronto ONT Canada M5M 4A1 -JS



Book Reviews

EASY INTERFACING PROJECTS FOR THE VIC 20, by Downey, Rindsberg and Isherwood, for VIC

It was refreshing to come across a VIC book that doesn't devote one third of its contents to unboxing a VIC, plugging it in and turning it on. Written for those who comprehend advanced solid state electronics, its strengths can be seen in what it tries not to be. It is neither a programming book, nor a tutorial, nor written for beginners. This much needed entry into the book market offers interesting and useful construction projects for experimenters.

Subject matter includes instructions for building a modem, a cassette interface and a speech synthesizer, to name a few. That the book was written by 3 different authors becomes evident as you read. Some projects are explained in a little more detail and are more easily understood than others, but all are explained adequately. Any reader would wish it contained 1-2 more projects (such as a keypad), but it is still one of the best electronics books I've seen in a long time. All computer books should be written as well as this one. There is very little redundant information. The book does not list suppliers for the electronic parts you'll require. You won't just find them at Radio Shack. Readers will find a few support programs for the projects. The real proof of the book's worth can only be assessed after the projects are completed. Of course, they can serve as the foundation for more advanced projects later on. -Al Cikas

EVERYTHING YOU CAN DO WITH YOUR COMMODORE 64 (AND HOW TO DO IT), by R.Peddicord, for 64. \$10 book from Alfred Pub. Co.

[This] book really sums itself up in the title and was obviously written by someone with a sense of humor. It contains almost everything you might want to know to begin using your computer. Starting with an explanation of what is in the box and how to connect it together and continuing through details of the VIC and SID chips, this book at least mentions it all. I was thrilled with some of the diagrams and text. The book covers an introduction to BASIC programming, use of the disk drive, graphics, music, educational software, word processing, data bases, spreadsheets, communications, other computer languages, peripherals and interfaces, the new Commodore computers and fast disk drives, and appendices with recommended readings and explanations of audio, video, and binary signals. The back cover states "Your Single Commodore 64 Resource!" No exaggeration here. A real bargain. -Joel Casar

THE HOME COMPUTER WARS, by Michael Tomczyk, for all Commodore computers.

\$10 paperback from Compute! Books, Box 5406, Greensboro, NC 27403. 1984. 301p.

I was prepared to dislike this book--based on Tomczyk's reputation among some Commodore friends, and the excess hype preceding it. Despite that, I found myself still reading 4 hours after my bedtime, and finished it the next day, despite my other work. It's an exceedingly readable inside view of one of my favorite subjects.

Although The Home Computer Wars is only one man's opinion of what happened at Commodore in recent years, it is a credible and very well written account of his viewpoint. Tomczyk covers his years at Commodore (1980-84) well, including his down times, and is discreet in discussing even his opponents. You can learn a lot about Commodore by reading this book, especially about the Tramiel "religion"--the corporate philosophy largely responsible for the company's success. You also learn Tomczyk's answers to two key questions: "Why did Jack Tramiel make products for the masses, not the classes?" (After suffering in a concentration camp, he wanted to help the poor.); and "Why did he go back into business after leaving Commodore?" (He was afraid the new Commodore couldn't fend off the 1985 Japanese MSX home computers.)

On the other hand, parts of the Tramiel religion are inadequately covered--what kept Commodore constantly in court, and cost them nearly every industry friend they had. Reading only Tomczyk's book, it is easy to conclude that Commodore headed straight down the tubes the day Tramiel left, which isn't the whole truth. Parts of the "religion" that Tomczyk avoided richly deserved to die, because they were utterly inconsistent with Commodore's long term best interests. It isn't clear yet whether Commodore will succeed as an ethical company, but it's time they tried.

Similarly, from reading Home Computer Wars, it appears the VIC was designed in Valley Forge, with Tomczyk its unofficial "father." Bill Seiler of Commodore's Santa Clara group, who is generally credited within Commodore as a key designer, is only mentioned in passing, as one who also developed a VIC prototype, after Valley Forge finished theirs. As Tomczyk points out, many claimants to that honor appeared later, but his lack of access to the Systems Engineering Department may have clouded his insight here. Overall, as a book to read for enjoyment, The Home Computer Wars is among the best. It is an excellent inside view of Commodore from one man's perspective. It is not, however, a complete or definitive company history. Highly recommended. -JS

HOW TO GET THE MOST OUT OF COMPUSERVE, by Bowen and Peyton, for the 64.

\$13 paperback from Bantam Books. 278p.

If you are serious about using Compuserve and avoiding bankruptcy, you should investigate this book. For the cost of 2 hours online, it can help you plan your Compuserve sessions most efficiently, by studying the book's illustrations of actual Compuserve screens for many popular features. The book takes you on tours of various parts of Compuserve, which you read about and then actually attempt. The authors present tips for navigating the service with the least frustration. Their excellent suggestion that you compose a personal menu to appear at sign-on is one I had overlooked in a year of using Compuserve. Information on the various SIGS is presented more clearly than in the Commodore manuals. The ring binding makes it easy to follow along online if you wish, and the index is complete enough to offer real help when you forget something. Written with patience and humor, it's one of the most used books in my computing library. -Jeff Lowenthal

THE TIME-LIFE STEP-BY-STEP GUIDE TO THE COMMODORE 64, for the 64.

\$13 hardback from Random House, NY. By Jim and Ellen Strasma and Loren Wright.

Illustration, color and boldness of print increases one's ability to read and understand the beginning of computer learning. Comparing this book with the Commodore 64 User's Guide, I find the Time Life Guide to be more exciting and challenging. Time Life is the basic foundation upon which one can build and eventually appreciate the more intricate and complicated Commodore 64 User's Guide. On a scale of one to 10, I would give the Time Life Guide a 10. -Russel Allen

Accounting and Finance Programs:

YOUR PERSONAL NET WORTH, \$80 diskette for the 64.

Home money manager from The Scarborough Systems, 25 N. Broadway, Tarrytown NY 10591. Protected.

This is a great program in many respects. It really is designed for personal home use. It will handle an extensive budget, balance the checkbook, keep track of tax items, credit card purchases and payments, personal property, collectibles, assets and liabilities -- and print out your total net worth for your own information or bank use. The manual is very well done, though it takes considerable practice to be able to handle the program smoothly. There are a couple of glaring errors, and one option (initialize tax records) is totally ignored. The oddest thing about this program is that you can only post entries to one diskette. The manual indicates that you should back up the entire data diskette after each session! What a tedious idea. I found that I can SAVE entries to a third diskette, prior to posting, and then load that information and SAVE to a second data diskette the next session -- alternating the two data diskettes. But the worst news is the protection scheme. It really batters the disk drive. I try to load only when the drive is cold. No backup is offered, though a replacement diskette can be had for \$5 with the return of the original. Not terribly satisfactory for a program handling such vital informaton. Scarborough evidently doesn't respond to letters. I'm not inclined to buy any more of its software -- nor to buy anything again without first seeing a review from an uninhibited user. -Jerry Smith

DATACOUNT SYSTEM, \$20 diskette for the 64.

Family finance package from K-Tek Software. 30 day media warranty, then \$5 replacement.

This program purports to be a "family finance system" and allows entry of deposits and checks along with date, payee, address, etc. It will scan records, calculate your balance (on request--no running total) and print records. Entries are color coded to differentiate deposits and checks.

Screen display of records wraps around for extra-long fields. Entry is slow, slow slow. If this is a typical example of "paperback software," we are in for a flood of hastily produced programs of limited value. Compared to the similarly priced **Electronic Checkbook** from Timeworks, I am reminded of the difference between a Vegematic and a Cuisinart. K-Tek also sells about 6 other programs for various computers, primarily through bookstores. Nothing about this one would cause me to even glance at them. Unfortunately, I bought mine at a Waldenbooks, where "software is not returnable." Caveat emptor! -Jeff Lowenthal

Data Bases and Mail Lists:

FANTASTIC FILER, by David M. Smith. \$30 diskette for the 64.

Simple data base distributed by Micro-W Dist., 1342B Route 23, Butler NJ 07405 (201/838-9027)

A fine data file with a maximum of 255 characters and 15 fields per record, 636 to 1749 records per file, 1 file per diskette. Menu driven with a good manual. After creating a record layout, it will format a diskette and load it in a minute and half, VERY FAST. Searches by record number or one preselected field. Very easy to learn and use. I like it very much, but disliked the screen colors and can't find a way to change them. -Bob Schuster

HOME ORGANIZER SERIES, diskettes for the 64.

Special databases from Batteries Included, 71 McCaul St., Toronto ONT Canada M5T 2X1

[EDITORS NOTE: These are non-programmable versions of **The Consultant** pre-set for different applications, like stamp collections.]

I have been so completely satisfied with **Paperclip** that I bought a load of their **Home Organizer** series, as well as **Spellpack**. Sorry to say, however, I am somewhat less than overwhelmed with these; I find them of limited utility and the trade-off between convenience and the lack of flexibility is far too heavy a penalty. Think I'll get **The Consultant** instead. -John & Charlotte, Puerto Santa Maria, (Cadiz) Spain

LISTMASTER DATABASE MANAGER, \$7 diskette for the 64.

Relational database from Master Software. Disk protected. PetSpeeded Basic. No warranty.

Maximum file size=1450 records, maximum record size=250 characters, maximum fields per record=12; field size=variable. Fields not calculable, although the number of record entries for a given field may be included in the report. Search levels are unlimited, including truncated searches. Sorts are quite fast, but only one field deep, a definite disadvantage. The documentation states that files can be backed up on a single drive system, but several attempts to do so failed, and the computer locked up twice. Files are stated to be transportable to word processors, but this also wasn't tested. The report routine outputs to the screen or printer. When setting up, printer options are CBM, Gemini or Other. If CBM is selected, the printer does not change to lower case; on the MPS-801, characters are sent in the upper case/graphics mode, and shifted characters are printed as graphics characters. If Gemini is selected, printing is correct. Reports can be displayed in several formats. Documentation lacks detail and uses poor examples. In spite of shortcomings, **Listmaster** is easy to use and has excellent display screens. Selection and sort functions are easy to use. -Ron Dale

Update (see #18): MAIL NOW!, \$40 diskette for the 64.

Mail list from Cardco, Inc., 313 Mathewson, Wichita KS 67214 (316/267-6525).

A month ago, I would have written a rather negative review of this program, but decided to see if the inadequate "preliminary" manual had been rewritten. It has, most of my objections have been addressed(!), and it is now a program I can use. The most serious lack in the original was a 5 digit limit to Zipcode field length. Now Canadian and longer U.S. codes can be entered, up to 10 characters. I still would like to see first and last name fields longer than 15 and 17 characters respectively. These limitations make it impossible to enter names with their titles or companies in one field, especially when you need the remark field. An additional optional line would solve the problem.

Mail Now! will merge with **Write Now!** to easily produce form letters. I'm using this program to maintain the membership list of the growing CACHE Commodore SIG. Printing the label format on standard paper provides a neat list of members and their addresses. Labels may be printed up to 3 across and in quantities from 1 to 250. -Jeff Lowenthal

Update (see #16,18): MAILPRO 80, diskette for the 8032.

Database from Pro-Line Software, 755 The Queensway East, Unit 8, Mississauga ONT Canada L4Y 4C5

MailPro 80 for the CBM 8032 and 8050 basically is an excellent, fast program. Too bad it cannot be recommended in its present state (at least for transferring other mailing lists, like **Zipper** to it). While transferring records in batches of 127 records, it slowed down after the third batch. Worse, while trying to "add" (link) records, **MailPro 80** never did after two batches. The total number of transferred records shows up on the count, but most cannot be recalled, edited or updated. Several of the linked labels appeared in duplicate, sometimes with scrambled field contents.

The manual ought to include many examples on searching and sorting possibilities, as well as several application examples, for the novice who has never set up a mailing

list or invoice. The examples are too provincially Canadian, some instructions are total gibberish, it needs an index, and one should be able to drop blank lines when printing labels. **MailPro 80** would be an excellent, fast program, if it worked and had an instructive manual. The excessive, lengthy chattering and rattling while ordering data during adding, updating, and printing may be hard on the head alignment. I'll wait until all the bugs are fixed, then will try again. -Reinhold Aman

Update (see #18,19): SUPERBASE 64, for the 64. Also version for **CBM 8032/8096 & B-128**. Database from Precision Software, 3003 Summer St., 4th floor, Stamford CT 06905 (203/326-8649)

UPDATE #1: resides in RAM; 100% machine language (32K is main program with 4K left open for user generated program routines, using 50 extended Basic commands in addition to 40 regular Basic commands); virtually crash/goof proof; no disk swapping for utilities, reporting, restructuring; backup program disk included to 127 fields deep; only database for the 64 that allows linking across separate files; both menu and command driven; built-in Help screens and sample application files that may be used, changed or deleted; fields may be edited at any time without restructuring the file; Program-Writer facility generates complex reports from user response to simple prompts; resident system utilities; superb documentation, including a 3-part tutorial, extensive reference and programming sections, all in a 'no-hands' ring binder. Whew! Over all, Superbase 64 gets my vote for being the best database/applications program on the market for the 64. -Darin Murphy (in TCUG's The Computerist)

UPDATE #2: Superbase is one of the best database programs on the marker, but has 2 problems that can lead to hours of frustration. First, the speed of output to the printer is very slow; the manual suggests loading your data into an array first and then output the array. Second, the manual doesn't go far enough to explain how to use **Superbase's** very powerful and versatile commands, either directly or in a program. -Doug Hayward (in CCC of Toledo Newsletter)

[ED: See Doug's helpful hints under Business Notes.]

Electronic Spreadsheets:

Update (see #1,20): MULTIPLAN, by Microsoft. \$99 diskette for the 64. Spreadsheet from HES, 150 N. Hill Dr., Brisbane CA 94005.

After using this program at work on a Digital Rainbow, I just had to have it at home. I picked it up and when I proceeded to send a file to my printer, I found it only printed in lower case. HES customer service said that I had an older version and for \$8.20 they would send me the new version. I understand that companies can't replace software with new versions every time an update is released, but they should replace at no charge whenever the purchase was just made. Now HES can have my old version back, because my retailer has a 90 day satisfaction guarantee. -Mike Stout

Statistical Packages:

STAT-64, cartridge for the 64.

Statistics package from Handic Software, Inc., Fellowship Business Center, 520 Fellowship Rd., B 206, Mt. Laurel NJ 08054 (609/663-0660).

This program is not desirable for most higher education applications. The graduate students who assisted me were not impressed with the **Stat-64** manual. We found a variety of errors in the sample programs. It was our opinion that many of the "stat" functions could be more easily utilized on most of the higher quality pocket calculators than with **Stat-64**. Our statistics professor did not feel the visual graphing functions were that desirable. -Custer Whiteside

Word Processors:

INSTA-WRITER, \$49 cartridge for the 64.

I used Insta-Writer for a year and it was quite satisfactory since almost everything I wrote was one page, rarely more. My files could be saved on tape while my drive was being repaired. However, Insta-Writer doesn't do much. It doesn't let you send any special commands to the printer, doesn't justify or double space. It did work immediately (no loading for two minutes like Easy Script) and was easy to learn. It did require that you sit and ask for each copy individually, since it would not print multiple copies. It sells for \$49, but a reasonable price would be \$19. I don't recommend it, unless its limitations are of no consequence to you. My ten-year old uses it for book reports, because it is so easy to use. -Rebecca Boren (in Input*Output)

Update (see #13,16,18): WRITE NOW!, cartridge for the 64 or VIC.

Word processor from Cardco, Inc., 313 Mathewson, Wichita KS 67214 (316/267-6525).

This program is everything you said it was--simple to use, with many features and the convenience of instant loading via cartridge! So far it meets all my needs as a professional journalist and amateur letter writer. Works fine with my CardPrint/G and Mannesman Tally 160, although I have had no occasion to try the more exotic printer features yet. The print option menu is particularly easy to use, and while I agree with your statement in The Best VIC/Commodore Software that it might well be used without the manual, taking advantage of its many features will require some study, as would any program with so many options. Its 80 columns in software feature is useful, though marginally readable on my 1702 monitor. I encountered a small problem with the 80 column display if I formatted and then reformatted a file-- Sometimes it would suddenly become double spaced with strange margins. Cardco told me there had been several upgrades, and cheerfully suggested I return it to them from a free replacement. I use it every day, and am pleased, both with the product and its manual, which is up to the usual Cardco standard--excellent. -Jeff Lowenthal

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EARLY HEROES OF THE BIBLE, by Gilbert & Ronald Beers et al. Double-sided diskette for the 64.

Bible lesson and quiz for 1 player from Baker Book House, Grand Rapids MI. Requires CBM disk. Joystick optional. No stated warranty.

Though nominally just another Bible drill, **Early Heroes of the Bible** is the most polished education program we've ever tested, thanks to a list of credits as long as those in a movie. In it you have a choice of 15 stories from Genesis 1-26 to read. The stories appear in large characters that even a third grader can read, with even larger titles. Interspersed throughout are hi-res drawings that are professional in quality and fun to view. The user can page forward or backward through the story at will, then answer 6 questions from 3 levels of difficulty, via the joystick or a keystroke, from a list of choices. When a question is missed, the relevant part of the story is re-shown, with the clue highlighted and the answer above, giving double reinforcement. If 5 questions are answered correctly, the hi-res drawing becomes animated as a reward, apparently swapping several screens to give a good illusion of motion. There is ample warning of what is going on, such as a clock sprite which appears when you must wait. Part of a series of 4 Bible study programs, **Early Heroes of the Bible** has just raised the standard by which all commercial teaching programs will henceforth be judged. Highly recommended. -JS

CHRISTMAS CAROLS, diskette for the 64.

\$15 Christmas music player from John Henry Software, Box 39021, Cincinnati OH 45239.

Are you finally tired of the legendary Commodore Christmas demo? How about some fresh material then? Christmas Carols is just what it appears to be, a series of Christmas tunes, both sacred and secular, accompanied by full-color hi-res drawings. At this price, it's an excellent buy. Recommended. -JS

SORT'EM 2, \$20 diskette for the 64.

Bible game for age 5 and up, from Smoky Mountain Software, 13 Catatoga Path, Brevard NC 28712 (704/885-2516). Unprotected. 90 day media warranty.

As in **Sort'Em 1**, reviewed last issue, you arrange several cartoon panels that tell a Bible story into correct order. This time the stories are Adam and Eve, Joseph's Life, and Moses and the burning bush. Apart from that, nothing has been changed; if you know how to use the one, then you also know the other. Compared to **Early Heroes of the Bible**, reviewed above, its programming is quite rough, but still usable, except that some of the lo-res graphics are hard to make out. -JS

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Computer Assisted Instruction—Preschool:

ALPHA BUILD, \$20 cartridge for the 64

Game for ages 3-7 from Fisher-Price. Joystick optional.

The object (according to my 3-1/2 year old son) is to acquire the proper letters, load them into trucks, and build a city of letters. Eight levels of play take your child from simple letter recognition to learning to spell many different words. The animation and graphics are excellent. "Perry the Penguin" dances across the screen to help the child select the letters needed to build the city. Most game control is via joystick. I must applaud Fisher-Price and recommend **Alpha Build** highly. -Bill Edwards (in Eight Squared)

Update (see #20): BIG BIRD'S SPECIAL DELIVERY, \$33 diskette for the 64.

Matching game for ages 3-6 from CBS Software, 41 Madison Av., New York NY 10010.

The youngest user can match objects. Cute game, but a parent would probably have to help. Some of the objects might be difficult for the child to identify on the screen. OK. -Rebecca Boren (in Input/Output)

DANCING BEAR, \$40 diskette for the 64.

Preschool music program for ages 3-5 from Koalaware, 3100 Patrick Henry Dr., Santa Clara CA 95050. Requires Koalapad.

Lots of appeal. The youngest child can load and enjoy the prewritten background, music, and props. An older child can program his own. A game is included called "Follow the Bear," in which the bear does a dance and child must select the sequence of movements from an array of body parts in different positions. One of the best programs on the market. The best. -Rebecca Boren (in Input/Output)

DUCKS AHOY!, \$30 diskette for the 64.

Preschool counting game for ages 3-8 years from CBS Software, 41 Madison Av., New York NY 10010.

Children keeps ducks afloat and avoid the boat-dunking hippos. Children practice counting skills and predicting outcomes, and are encouraged to think logically. Excellent graphics and music. Since it requires a joystick, it would be more appropriate for 5-8 years rather than the 3-6 years stated on the package. The best. -Rebecca Boren (in Input/Output)

ERNIE'S MAGIC SHAPES, \$33 diskette for the 64.

Shapes preschool matching game from CBS Software, 41 Madison Av., New York NY 10010.

Children practice matching shapes and colors and recognizing parts of a whole figure. Seven levels of difficulty. OK. -Rebecca Boren (in Input/Output)

MUPPET LEARNING KEYS, \$89 keyboard for the 64.

Typing/alphabet tutorial+keyboard for ages 3-6 from Koala Technologies Corporation, 3100 Patrick Henry Drive, Santa Clara CA 95052-8100.

See under Hardware Reviews.

PAINT-A-RHYME, \$40 diskette for the 64.

Preschool draw/color program for ages 3-6 from Koalaware. Requires Koalaware.

This main menu offers 9 choices, from drawing to music to loading and coloring a nursery rhyme. The program will magically color in the picture of the child can do it

himself. There is a lot to this program. The menu includes a "?" that will explain each of the choices. The best. -Rebecca Boren (in Input/Output)

PRESCHOOLER, diskette for the 64.

Preschool drill from Cymbal Software. Copy-protected with no backup diskette. 90 day media warranty plus \$2 if return registration card within 10 days of purchase.

REVIEW #1: If you were to take the cover [of this software, showing a very young child] at face value, you'd be missing a very well-designed for instruction in the 3 R's, suitable for children up to the third grade. **Preschooler** offers two major sections, Learning Letters and Learning Numbers, each with a choice of instructions or 10-item quiz. Each section takes the child through 3 levels of difficulty, from simple identification of letters or numbers, up through spelling many different words or performing a variety of additions. Each quiz question has a time limit. If the child gives a wrong answer, the correct one is displayed; correct answers are rewarded with a brief musical fanfare. At the end of the quiz, it shows the number of correct answers. This is drill and practice instruction with little animation. Thus, it may require some prompting to keep the very young child interested. But all things considered, I'd give **Preschooler** a B. -Bill Edwards (in Eight Squared)

REVIEW #2: The warranty terms are inadequate. The beginner level of Learning Letters asks the child to arrange letters in alphabetical order. Ironically, all instructions and screen prompts for the preliterate child are (you guessed it)...written! Moreover, the program cannot be operated independently by a young child. How many 4 year-olds can load a disk or select from written menus? I also object to the misleading packaging. The package cover says, "Double" your child's school grades in **Preschooler**." Cymbal carefully enclosed the word "Double" in quotation marks, and the reference to "school grades" means 'grades achieved within this program.' Frankly, **Preschooler** is a poor attempt to manipulate parents' genuine concerns about their children's educational development. I give it a "D." -Andy Skelton (in Eight Squared)

PLAYSCHOOL TAPES, diskettes or cassettes for **unexpanded VIC**.

Four preschool games for ages 2-6 from Kidbit Software. Copy protected. Keyboard-controlled.

GENERAL COMMENTS: Each game includes its own well written, complete instruction pamphlet. This learning tool has nice graphics. There are no time limits, and the games can be used by older children to maintain their skills. However, there are no "please wait" messages while the different program segments of the games are being loaded. The long delays (a minimum of twelve seconds) are annoying on diskette and downright aggravating when using cassettes. Even though the program segments are all self-loading, but with no screen messages, it is difficult to tell if all is going as it should. The cassettes and diskettes I examined were not protected from accidental erasure, something you'll want to check before turning the programs over to children. The diskette version auto-load did not work properly for me, but the game played fine if I called it up manually. I rate the package VERY GOOD! -Al Cikas

ALPHABEE lets children help a bee find his way to the beehive by successfully completing the 26 letters of the alphabet in correct sequence. Each right answer sends the bee deeper into the flower garden and closer to the hive. A sample keyboard is displayed at the bottom of the screen, with the correct row of keys highlighted in red to help find the proper key. There are different indications for wrong answers (wrong row or wrong key-right row), but there are no penalties for wrong answers.

SMALL WIZARD-CAPITAL WIZARD teaches kids to recognise lower case letters of the alphabet by responding with the upper case equivalent. Like **Alphabee**, the keyboard is displayed on the screen with the correct row highlighted. Two wizards wave their wands and turn each correct answer into a frog. Watch out for firecrackers conjured up by mistake! This is one of the best learning games I've seen.

WORMSICAL COUNT stress numbers with the counts limited by the user to 5 or 9. The graphics show a worm encountering groups of apples as he crawls through a flock of birds. Entering the correct amount of apples will get the worm past the birds to safety.

SAME - NOT SAME is the only game with a reward/penalty format. The emphasis is on recognizing shapes, and seven levels of play in three categories. The game is played with multicolor numbers, letters or VIC graphics. Players are asked which of four characters is different from the others, if any. If all are the same, the player presses the ZERO key. Each correct answer causes part of a rocket to be constructed in the lower right hand corner, while each wrong answer takes away the last assembled piece. After six correct responses the player is treated to a rocket launching, demonstrating excellent sound and graphics.

Computer Assisted Instruction—Elementary:

Update (see #19,21): ALPHABET CONSTRUCTION SET

My six-year-old found this frustrating because he could not control the lightpen well enough. SAM kept saying that he was not following the lines on the screen correctly. He finally told the computer to "shut up," which got a round of applause from the rest of us. The talking voice was very irritating. Fair. -Rebecca Boren (in Input/Output)

CREATURE CREATOR, \$40 diskette for the 64.

Mr. Potato-Head-type game for ages 4-10 from Designware in California (800/572-7767).

REVIEW #1: Similar to **Facemaker** in that user selects parts of the creature. Takes too long to load and accesses the diskette at every choice. Child will give up in frustration at the long waits. Better programming might have saved this one. Fair. -Rebecca Boren (in Input/Output)

REVIEW #2: **Creature Creator** is a 'gentle' menu-driven introduction to programming structure, but disguised as a game through the use of high-res graphics, animation, and sound effects. It is like a police Identikit for creating monsters. Using only 2 keys, and prompted by simple questions and commands, you can create a composite cartoon-like character, using 7 selections from each body area of heads, bodies, arms, and legs. You can then make the creature 'dance' by commanding it to wave, hop, stomp, grab, turn its head, or even roar. The Dance portion even allows you to combine a series of these commands into a program.

The Game board screen shows two monsters side-by-side. The computer will make its monster (on the left) go through a set of 'dancing' motions which you will try to duplicate by choosing the correct commands. A grid at the bottom of the screen records your commands which are easily edited. Multiple difficulty levels. **Creature Creator** is an engaging, colorful, and well-designed but overpriced educational program. It also suffers from too much copy-protection. It is sometimes necessary to re-load the program 2 or 3 times before it will run correctly. -The Kankakee Commodore Hackers

JIGSAW, diskette from Mindstretcher series for the 64.

Puzzle for ages 6-10 from Island Software, Box 300, Lake Grove NY 11755.

Child chooses a picture from a selection, including some masterpieces. After he has studied it for as long as he wants, the screen displays 24 numbered squares (parts of the puzzle). One piece of the puzzle is shown at a time and the child has to figure out which square it is. Wrong answers are used again, until all the pieces are in the right place. The computer tells how many tries the child took. The child tries to improve his score by getting fewer moves the next time. Other programs from the Mindstretcher Series are unimpressive. The best. -Rebecca Boren (in Input/Output)

Preview: JUST IMAGINE, diskette for the 64.

Picture story designer from Commodore, 1200 Wilson Dr., West Chester PA 19380

A few months ago I wrote how pleased I was with Spinnaker's **Kidwriter** program. I still am, but Commodore's demonstration of the yet unreleased **Just Imagine** at the Consumer Electronics Show proved just how fast things are progressing in this field. Perhaps it should be considered "vaporware" until it actually arrives in stores, but I want to be first in line when it does.

Not only will **Just Imagine** let a child write a story and illustrate it with his choice of various backgrounds and objects, it will also allow animation of one, along with a music track! As a bonus, while the program does its behind the scenes work, you are presented with a simple quiz game to pass the time.

Since this software was demonstrated about 50 feet away from the new Okimate color thermal transfer printer, I naturally asked if the creations could be transferred to hardcopy. The answer was, "We're working on it, and want to add that to the final release." If that is accomplished, I foresee an era of child published books that will make us very proud parents. Let's get this one out the door soon, Commodore! -Jeff Lowenthal

MASTER TYPE, \$40 diskette for the 64.

Typing tutorial/game for ages 10 and up from Lighting Software.

Teaches typing with arcade-style space game. Evaluates the user and suggests the next lesson. Good graphics, educationally sound except for too much reward for wrong answers. OK. -Rebecca Boren (in Input/Output)

MATH BLASTERS, \$50 diskettes (2) for the 64

Math drill from Davidson & Assoc. Requires joystick.

This is my favorite children's educational program, because it gives me such pleasure seeing my 7-year-old son working on pure mathematical drill for a minimum of an hour at a time, and anxious for more. The program provides as thorough drill as one would want, from counting for pre-schoolers, to addition, subtraction, multiplication, division, and even including decimals and fractions. The difficulty can be selected, with necessary skillwork provided at the outset. The computer addresses the player by name and flashes problems with correct answers (ignoring student input at first). In the next option, the student answers, and the computer corrects any errors. The student can then opt to go over missed problems until a little man runs across the screen and writes "100% right, Scott".

This drill is important, but the game itself is what is brilliant. My son thinks he is playing an arcade game and is determined to beat his high score from previous sessions. He can choose any problem areas and speed of play--although I cannot even answer the problems on anything other than the slowest speed. A problem appears below several cannons, the player guides a running man to the cannon balancing the correct answer, and shoots the cannon, blasting the man into the answer above. If right, the answer explodes in a puff of smoke; otherwise, the right answer lights up. The problem must be solved in the time it takes a seal to catch a ball on the tip of his nose. At the same time a balloon slowly descends; when it hits the nail at the bottom of the screen and pops, the game is over. However, you can run the man over to the balloon, hit the first button and throw the balloon back to the top to keep the drill going on almost indefinitely. Nothing can be more tedious than math memorization and drill, but it becomes pure fun this way. This is a well-conceived learning tool. If you want training in a specific area or set of problems, an easy-to-use programming tool allows you to enter whatever problems you want. -Marshall Kragen

MATH MILEAGE, \$30 diskette for the 64.

Math game for ages 6-10 from CBS Software, 41 Madison Av., New York NY 10010.

Child steers his car down the road taking left forks for tens, and right forks for ones. When he reaches the correct number, he is flagged for a win. The target numbers

were not very random and the game was not too exciting. Fair.--Rebecca Boren (in Input/Output)

MONKEY MATH, \$20 diskette for the 64.

Math drill for ages 6-10 from Artworks [x, 150 N. Main St., Fairport NY 14450?].

Drills math facts. As the numbers move across the screen, child picks the correct one just in time for the answer to drop through the factory and go out on the assembly line. Choice of addition, subtraction, multiplication, division or sequencing. Three levels of difficulty. --Rebecca Boren (in Input/Output)

ROCKY'S BOOTS, \$29 diskette for the 64.

from The Learning Company (TLC). Protected.

This is by far one of the best educational programs from TLC. Those initials also stand for Tender Loving Care and this is exactly what this program contains. The premise is to create electronic machines by wiring together various electric conductors and circuits. These machines, for the most part electronic boots, will then carry out assigned tasks. The program takes you through a complete tutorial to patiently teach the methods by which all objects work. It starts out moving something with the joystick and moves up to the most complicated tasks, using Boolean logic to solve the problems. You are learning to think logically, as well as learn the entire core of computer manufacture and construction. The various switches involved are AND, NOT, and OR switches. First you invent machines to solve fairly simple game problems and then solve very hard ones, while an alligator frequently stalks you to chew you up piece by piece. Yet you can make a machine that will beat him, too. Finally, you can invent your own games and machines.

This is the creation of what Seymour Papert, creator of LOGO, would call a microworld. The student is creating his own programming language, not unlike a very simple machine code, one to operate his own machines. Bugs are common as switches do not turn on other switches. A final creation may be admired and the learning that into it can be applied to other problems.

There are problems with the program, but they should not deter anyone from buying it. It must be used with a color TV or monitor, since the games call for interacting with similar objects with different colors, which don't look a lot different in black and white. Also, you can only save one partially complete game at the a time, so you lose the chance to save on diskette your created creations. Your only solace is to hand draw what you have done for later re-entry. Also, you are wiring things together, and then cutting those wires apart. There is some fear a child may do this in real life, although the program clearly explains this danger, and tells you it can only be done in the play world of the computer. My son is not quite 8 but can follow the program as well or better than his old man. --Marshall Kragen

SEVEN CITIES OF GOLD, by Bill Bunten. diskette for the 64.

Spanish exploration game for ages 8-adult from Electronic Arts, 2755 Campus Dr., San Mateo CA 94403. DOS-protected.

REVIEW #1: **Seven Cities** breaks new ground and is a real departure from the standard arcade and graphic adventure games. The game is a graphic/sound masterpiece, controlled with a single joystick. Because of the complexity of the game, the single button does a lot, but it becomes easy very quickly.

Seven Cities is based on the Spanish conquest of the new world. You sail west with 4 ships, 100 men, a years supply of food and trade goods. When you reach the new world, you leave your ships and explore the unknown land with a conination of men/food/trade goods. When you reach a city or village, you can attempt to trade with the natives or try to conquer them by force of arms. Both methods work, although trade seems to be preferable.

When satisfied with the gold you have accumulated (or land you have discovered), you head back to Europe. If you're lucky you will be given an audience at the court (I

haven't gotten in yet) and a title (Viceroy, etc.); and maybe a loan of more gold to further your explorations. You can then outfit another expedition and continue until you have explored all of North and South America, and discovered all the rivers, natives, gold, and much more.

My first time I spent almost 12 hours and discovered about 65% of the land, at the novice level. (There are 3 levels.) I have found it exciting and fun in a way that typical games cannot be. The best part is that you have to think and reason. There are few games that offer a true alternative to pure violence, and **seven Cities of Gold** has more to offer than any other game I have seen. -John Gerech (in TCUG's The Computerist, Tacoma WA)

REVIEW #2: **Seven Cities** is terrific. It is the best combination of education and fun since E.A.'s "MULE". My son is actually interested in history and geography because of Seven Cities--making the maps in the game beats any geography lessons I ever had in school. -Clark Luikart

REVIEW #3: You're a Spanish explorer sailing to North or South America. The object is to find gold in native cities and gold mines (if you can find one) while exploring the continent. You also learn where the different kinds of tribes live. One clue: the King won't give you any money if you kill off all the natives!" -Jamie Strasma

Update (see #19): **STORY MACHINE**, \$30-40 cartridge for the 64.

Text editor for ages 6-10 from Spinnaker, 215 First St., Cambridge MA 02142.

REVIEW #1: Similar, but not as good as **Kidwriter**. Child is limited to 53 words. Computer animates the story by moving the objects. OK.-Rebecca Boren (in Input/Output)

REVIEW #2: This is one program that just doesn't work. What disturbs me most is that every review I read swore it was the greatest educational tool since the invention of the teacher. The concept is beautiful. The child types a sentence and graphic characters appear to act out the sentence; by typing several sentences, that child can create a whole story to be acted out. What more could one ask to encourage grammar practice and creativity? The problem starts when using the vocabulary available--only 45 words, of which only 6 are verbs, and all limited to the present tense. Further, all of us know the beauty of Commodore graphics, sprites or even hi-res graphics. Yet, a child could probably produce the simple, stick-like figures in these stories, which do the same thing whether you tell them to speak or sing or other similar command. Even if these simple figures were done for computers with less graphics capability, competent programmers and salespeople would have redone that for Commodore. Finally, you can supposedly save stories to replay later for proud parents and friends, but my cartridge had a bug--it replayed them in postage stamp size. Looked fine through a magnifying glass, though. When I complained about these things, I was told program space had to be saved for graphics. Surely, not those graphics. Others told me the graphics are primitive to save room for vocabulary. For 45 words? It is poor programming for Spinnaker. -Marshall Kragen

WEBSTER, THE WORD GAME, diskette for the 64.

Spelling game for ages 6-10 from CBS Software, 41 Madison Av., New York NY 10010.

Pinpoint the missing letters before each word hits rock bottom. Not too exciting. Fair.-Rebecca Boren (in Input/Output)

WORD FLYER, diskette for the 64.

Vocabulary/reading tutorial from Electronic Arts, 2755 Campus Dr., San Mateo CA 94403. Requires joystick.

Lower levels teach alphabet, upper level teaches more complex pattern and word recognition, spelling, vocabulary and prereading skills. That is, if you can get the child to stick with it that long. OK.-Rebecca Boren (in Input/Output)

Computer Assisted Instruction—High School/Adult:

THE GAME SHOW, \$32 diskette for the **64**.
from Advanced Ideas. Protected.

This program provides a colorful way to test any subject, by setting up a game similar to the television show "Password." Visible on the screen is a moderator and two panel members, who provide clues to the right answer, above their heads in a cartoon bubble. Appropriate sound effects appear and lights flash depending on your answer. Each player gets a turn or if there is only one participant one panel member leaves. You can select several built-in quizzes, but the chance of hitting anything useful in your child's studies is slight. Most clues are geared for fun. What makes it useful is that you can prepare and store your own quizzes as sequential files. You can enter as many as five clues per question and as many questions as you want through on-screen friendly prompts. The clues may be only one line long each. We, for instance, use it for spelling words, giving definitions. However, there is no way to drill capitalization, because answers are displayed in only capital letters. I also tire of the repetitious display of lights and sounds after each answer, but it does seem to provide children with some suspense and a feeling of being part of a television show. I also found that since my 7-year-old cannot touch type, that it is hard for him to concentrate on the spelling of the word. We cured this by my typing the letters as he called them out. Overall, a good investment. -Marshall Kragen

Q-VERT, \$30 diskette for the **64** and **VIC**.

Typing tutor for Dvorak keyboard and mergeable subroutine for redefining the 64's keys, from Q.A.D. Systems, 342 East Schrock Road, Westerville OH 43081

If you want to compare the Dvorak keyboard to the standard QWERTY layout, Q-VERT is a good way to do it. The typing tutor is designed to teach you the keys, and has the best lesson design for that among several typing tutors I know. The tutor does not offer traditional speed tests. If you fall in love with the Dvorak layout, you can add a short subroutine from this disk to all your programs, or buy another program from Q.A.D. called **Q-vert Plus** which locks in key redefinition until you turn off the computer. [EDITOR'S NOTE: Or buy a Personalized Kernal ROM with Dvorak layout. See under Utility Reviews.] -Annette Hinshaw

Programming CAI:

STEP ONE, the Complete Computer Course, \$20 diskette for the **64**.

Basic programming tutorial from Whiz Kids Educational Computer Centres, Inc. Money back guarantee from the publisher if not satisfied.

This was given to me at CES, and I am impressed. In addition to a well thought out introduction to BASIC on the 64, it includes several public domain games and a simple word processor. The producer told me some user groups labeled it "too simple," but I consider that a virtue for beginners, when you can progress as fast as you wish. It comes with a well-done 100+p. manual, complete with a coupon to obtain support. The authors obviously developed this course at their Canadian computer school: subjects are divided into "modules" with quizzes and "challenges" following each, plus answers in the back. Modules include Introduction to the Computer; Your First Program; Screen Editing; The Goto Statement and a few other BASIC statements. Appendices discuss computer setup, loading a program and disk operations. Also included are several public domain games, including **Monopole**. All in all, a nice package at a fair price for any beginner or child. -Jeff Lowenthal

Furniture Reviews

O'SULLIVAN PRINTER STAND, \$75 stand for **most printers**.

Printer stand from O'Sullivan Industries, Inc., 19th & Gulf Sts., Lamar MO 64759.

After looking at many pictures in ads, I decided on one produced by O'Sullivan Industries. With printer stand prices ranging from \$155-400, the O'Sullivan at \$75 is an absolute bargain. The dimensions are 23-1/2" x 24" x 26-3/4." Not only is this unit fine in its wood appearance, it is extremely well made, sturdy and practical. Beneath the rear slotted top are two rear slotted shelves for paper feeding. The center shelf is adjustable throughout a 6" range. The enclosed back supports a paper catching shelf across its width.

I have made two minor modifications, the addition of casters (not included), and after adding two hinges to the bottom of the back shelf, removed the two long support screws to enable it to be lowered out of the way when not in use. -Howard Schwarzman

Game Reviews

Adventure Games:

HITCHHIKER'S GUIDE TO THE GALAXY, diskette for the **64**.

Science fiction/fantasy adventure from Infocom, 55 Wheeler St., Cambridge MA 02138

Based on the best-selling trilogy (of which the FOURTH part has just been released) by Douglas Adams, Infocom fans will not be disappointed by this long-awaited adventure. Steve Meretzky (the genius behind **Planetfall** and **Sorcerer**) collaborated closely with Adams on this game, and the two should probably be arrested as menaces to societal sanity! Three small matters mar an otherwise perfect rating. First, it is highly unlikely that anyone will get through the first 3-4 puzzles without help if they haven't read the instructions. Second, I feel the opening puzzles come too fast and are too difficult. Infocom games usually allow one to solve a couple of relatively simple puzzles at the beginning so you can begin enjoying it before you go crazy. In this game you are thrown into one mind-wracking puzzle after another from the very beginning. Third, the rating Infocom assigns this adventure is too low; **HHGTG** is rated as a "Standard" adventure, and I feel it should have been given an "Expert" rating. I have the feeling this game will "turn off" a lot of first-time adventure game players. On the plus side, Infocom has outdone themselves in the packaging. If you are an experienced adventurer, this one will really make you work! -Art Kimball

THE QUEST, \$35 diskette for the **64**.

Graphic adventure from Penguin Software.

If you are snowbound, this game might take your mind off your cabin fever, but that's about it. Your task is to stop the vicious dragon from devouring any more villages. There are a number of puzzles along the way, but only one of them will contribute anything to the solution of the problem! All the rest are red herrings and will gain you nothing after you solve them. (At least one problem has NO solution, which is totally frustrating.) Once you have figured out the solution, it becomes apparent that the whole game can be done in about 10 moves. Hardly worth the price or the effort. -Art Kimball

TRANSYLVANIA, diskette for the 64.

Graphic adventure from Penguin Software.

Transylvania has been out since 1982, but was only recently released for the 64. After my experience with **The Quest**, I was a little suspicious of Penguin adventures. After finishing **Transylvania** I am encouraged and confused at the same time. My complaint with **The Quest** was the lack of substance, even though the game was a lot of fun to map out, with nearly 200 locations. **Transylvania**, on the other hand, is a good, solid adventure game with a lot of intriguing puzzles to give a lot of satisfaction to the adventurer, but the effect is spoiled by the overuse of an old adventure writing trick. When you begin mapping this game, you are led to believe it has a vast area to explore. You soon realize, however, that there are only about 50 rooms. This is covered up by the fact that if you exit the way you came in most of the rooms, you end up in another place. This device can be used to good effect in adventures as long as it isn't overdone, but it doesn't make any sense when you are walking around in the forest of Transylvania. It is confusing and irritating and lends nothing to the enjoyment of the game. With a little more effort, this too could have been a really good game, but I still rate it a lot higher than **The Quest** for enjoyment. This one probably is worth buying, but be prepared for some frustration in map making. -Art Kimball

ULTIMA III:EXODUS, by Lord British. \$60 diskettes (2) and map for the 64.

Dungeons and dragons-like fantasy adventure from Sierra On-Line, Sierron On-Line Building, Coarsegold CA 93614 (209/683-6858).

In this third level of the most famous of all graphic arcade games, you command a group of 4 adventurers, each of which can be more or less any fantasy creature you like. They wander a world which seems prettier and more complex than Ultima II's. Jamie likes it immensely, and other reviewers have praised it as the very best (most complex in its features) adventure game ever developed, but I don't like it, despite its technical brilliance. The combination of another game devoted primarily to fighting, and the image of Satan on the package cover makes it one I would not buy or use. Nonetheless, those who enjoy such games will like it better than anything else yet developed, and buy it in droves.-JS

Arcade Games:

COMBAT LEADER, for the 64.

"Rapid-fire" war arcade game from SSI, 883 Stierlin Rd., Bldg. A-200, Mountain View CA 94943-1983

After a great music and graphic intro you get a scrolling map of the battle area. You command a 5-tank platoon, telling them (singly or as a group) where to go, where to look for the enemy, and where to shoot. The enemy only shows on the map if one of your tanks is properly positioned. The object of the novice game is to destroy the enemy before he gets you, which can be played after a minimum of instruction. In more advanced levels, you control troop carriers holding 16 2-man infantry teams armed with machine gun, mortars, rifles, etc. After some experience, you can build your own game, changing the terrain and choosing different forces and parameters. You can also choose different tanks and troop carriers, from WWII or from today. Want to pit the Army's new MI Abrams tank against Russia's T-70? Try it and see who wins! Seriously, this is an excellent game. It can be played right out of the box by someone who's never played a war game before, but can be modified to provide a serious challenge. SSI succeeds admirably in creating authentic war game simulations. -Bill Holt (in WIPUG Newsletter)

SONAR SEARCH, \$30 diskette or cassette for the 64.

"Kill the gooks" arcade from Signal Computer Consultants, Box 18222, Pittsburgh PA 15236 (412/655-7727). \$5 for manual only.

Sonar Search places you at the helm of 3 destroyers in search of enemy submarines.

You guide your destroyers by assigning them compass headings and speeds. The number of subs you encounter depends on the level of play. Success at **Sonar Search** depends on navigational skill. Use the main screen to avoid running aground or being sunk, review the sightings screen to spot submarines, use the close-up screen to set depth charges, and listen to the tell-tale "ping" of your sonar to localize and sub and fire your depth charges. Victory is achieved through skill full navigation and a good ear. The game is keyboard controlled and includes a keyboard overlay with your command options. The game offers varying degrees of difficulty, good graphics, and pleasant sound effects. I recommend it for those who enjoy a chase and are tired of shooting at vast arrays of sprites. **Sonar Search** demands intelligence and planning, not eye-hand coordination. -Larry Wieder (in Eight Squared)

STAR WARS, for the 64.

Shoot-em-up arcade from Parker Brothers.

There are 3 well-animated sequences. You are Luke Skywalker in the final assault on the Death Star. First you battle TIE fighters in space, avoiding their fire which damages your shields. Next you skim the surface of the satellite, avoiding and shooting at the laser towers. Finally, if you have any shields left, you fly down the trench, avoiding catwalks (?) and laser fire to drop a torpedo down the reactor port. This is a very difficult game for me, despite the fact that I've seen the movie 50 times! I usually get blown away by TIE fighters in the first animated sequence. Very good game, but very difficult. -Bill Hilt (in WIPUG Newsletter)

Strategy and Simulation Games:

BRIDGEPRO, \$35 diskette for the 64.

Bridge simulation for 1-2 players from Computer Management Corp., 2424 Exbourne Ct., Walnut Creek CA 94596.

BridgePro plays just like the card game. The computer shuffles, deals, scores (Contract Bridge scoring), bids 3 hands and plays 2-3 hands. You play the south hand, but are never the dummy, and play both hands when your side takes the bid. All instructions are on the diskette, [and] the manual [gives] a very short list of Bridge rules. Playing options include: solo (lets you repeat hands), two player (each person plays different random hands that are scored separately), two player duplicate (one player leaves the room while the other plays his hand), resume prior game, and demonstration. The computer asks if you want to receive the best hand. The program can make the following bids: preempt, short club, take our double, penalty double, overcall and blackwood. Other helpful features include help in bidding and counting points (pointing out oversights), start-over option, automatic finish, save score option and change screen color option. The suits are chosen by the function keys. The program also will not allow illegal bids to be made.

The game is easy to learn and provides many hours of fun. I found the bidding very instructive. By using randomly dealt hands, the game will never bore you. The playing of the hands is excellent (the computer usually makes its bids with few overtricks). Also helpful is the replaying of the hand. I would bid and play a hand, then replay, using the help bidding feature to see how the computer would have bid.

There are a number of things I found lacking: The graphics leave something to be desired. It is hard to tell the suit of the card being played since only the suit symbols on the graphic keys are used and the suits are not colored. Also, there is no sound. [When using] the help feature, I wanted suggested bids, but instead, the computer makes the bid. I also cannot replay the hand, using the east or west hands. The protection scheme causes the disk drive to go through a chattering bad sector search twice. [Still,] it does accomplish what it advertises. It is an excellent tool to learn Bridge and is super as the other 3 players when I can't find anyone to play Bridge. -Curt McCullers (in WCUG News)

KNIGHTS OF THE DESERT, for the 64.

WW II North African war simulation from SSI, 883 Stierlin Rd., Bldg. A-200, Mountain View CA 94943-1983

Knights of the Desert recreates the North African Campaign of WWII. The German and British commanders take turns moving large units across Egypt and Libya, trying to control crucial cities and locations. The computer portrays the map and keeps track of who is where, and where the supply lines are. When enemy forces meet, the computer considers troop strength, morale, and level of supply, to calculate the winner and how much damage each force sustained. Strategy and tactics are up to you, but there is a long review of the historical battles. You can play against the computer or another person. As a "thinking" game, it will take several hours to play, even in the shorter scenarios, but is well worth the time. This, by the way, is one of their "easier" games--no way am I ready for the expert level. -Bill Holt (in WIPUG Newsletter)

MYCHESS 2, \$35 diskette for the 64.

Chess game from Datamost, 20660 Nordhoff St., Chatsworth CA 91311-6152 (213/709-1202, but do not order direct). DOS protected.

Although powerful chess programs abound these days, **Mychess** may be both the most powerful of all, and a helpful learning tool for beginners. Our tester was Bill Burt, a 2000 rated human, who declared **Mychess** the best computer chess he'd ever played. In fact, he kept getting into trouble by assuming it would buy the same sucker plays most other chess programs do. He ended up giving up on his first game 2 pawns down, and reduced **Mychess's** skill setting from 4 to 1 thereafter--without noticeable deterioration in the game's playing skill. Except for that first game, he managed to win, but not quickly or easily. His last game, took 107 moves, and left only 2 kings and a promoted pawn on the board. Bill considers **Mychess** an honest 1500 player, and 1-200 points superior to programs advertised as playing at the 1800 level (like **Chess Challenger 7**).

For the newer user, **Mychess** features the ability to change the board from top to any of 4 side views, a hard copy option, save & reload game options, a set up problem mode, a demo mode, hints, a help screen, and a graphic display of where each chosen piece may move as moves are entered. It also beeps when it moves, which helps on the higher levels. If you tire of waiting for it to move, you may press RETURN to force it to move anyway. Then, if you don't like the results of the move, you may take back moves. All in all, **Mychess** is a singularly powerful, yet easy to use program, with all the amenities one might want. Highly recommended. -JS

PQ -- THE PARTY QUIZ GAME, diskettes (2) for the 64 (& Atari).

Trivial pursuit-type board game for 1-4 players from Suncom, 650 E. Anthony Tr., Northbrook IL 60062. New question diskettes will be available.

The trivia craze has finally used the home computer as an excellent quizmaster. If you watch TV game shows and wish you were the contestant, this could become your favorite. Unlike other trivia games where you must use the keyboard, PQ uses 4 separate controls with 4 possible responses on each control--its strongest feature. The faster the response the more points awarded. With the handicap option, one player is locked out for several seconds, to allow more competitiveness. The two diskettes - a program disk and a question disk--are formatted for the 64 on one side and Atari on the other. Each question disk has over 2500 questions. PQ is very good about not repeating questions; only one was duplicated in the 3 games I played.

My only negative comment is there is no penalty for wrong answers. If you press any button when the question is shown, there is a least a 25% chance of being correct. Pirates also will not like this program, because without the controls plugged in, the program disk will not load. The program is well written and addictive. -Jim Cychler

Hardware Reviews

Computers:

Update (see #15): SX-64, \$700 microcomputer+1541 disk drive.
64K serial bus computer+software ROM from Commodore, 1200 Wilson Dr., West Chester PA 19380

It seems there are at least 2 ROM versions in the SX-64. A colleague has had 3 SX-64's, the latest of which will not work with the CP/M cartridge (and therefore not with Nevada COBOL and Nevada FORTRAN either). -Al Harsch (in WCUC News)

Update (see #21): PLUS/4, \$300 microcomputer for 1541/4040 serial bus disk drives.
64K serial bus computer+software ROM from Commodore, 1200 Wilson Dr., West Chester PA 19380

UPDATE: On the positive side, the two accompanying manuals are excellent. They are clearly written in real English (not computerese) and amply illustrated. Each contain both tutorials and reference sections. The indices appear to be complete. The programs also appear to be well-designed, easy to learn and easy to use, with ample reference screens. However, these positives are negated by the severe limitations of the programs. I had time only for the word-processor and the spreadsheet, but I assume the data manager and graphics programs have similar limitations.

The Word-Processor: 1) The memory available for text is limited to only 99 lines. 2) Text entry uses a 77-column line with horizontal scrolling, meaning an entire line is never visible at one time. 3) There is no word-wrap on entry. The final word of each line is cut at the 77th column wherever it happens to fall. 4) There is no on-screen formatting or pre-print [video output] review. Together, these limitations make the word-processor unacceptable as a replacement for the 64's several excellent word processing programs. Editing is terribly difficult when words are awkwardly broken and only part of a line is visible. The program could not be used for serious word-processing.

The Spread Sheet: 1) The sheet is limited to 50 rows of 17 columns each -- too few for any but the simplest of spreadsheet applications. 2) Each cell has a fixed limitation of only 11 characters. Neither expansion nor contraction is allowed. 3) Formatting for entering cell data is limited to the floating decimal (two decimal places to the right) for money entries, or else using an absolute value function for rounding to whole numbers. 4) The limitations on the preprogrammed "functions," is strangely limited; it handles exponentiation, but cannot take roots. Four of the six trigonometric functions are included, but none for statistical manipulation of data.

While the limitations of the spreadsheet are not quite as crippling as those of the word processor, few businesses would find it sufficiently useful. One wonders for what market segment Commodore targeted the Plus/4. Computer hackers and avid hobby programmers will find the Plus/4 Basic a tremendous improvement over the primitive 64 dialect. However, if they have already invested in Basic update programs, why should they transfer to the Plus/4? Those interested in home management applications will certainly find the 64 programs more useful than those in the Plus/4. The additional ease of access will hardly compensate. Who else is left? New buyers? Not until more--and better--Plus/4 software is available. -Charles M. Proctor, Jr. (The Program)

Disk Drives and Accessories:

CONCORDE C-321-P DISK DRIVE, around \$300-350 disk drive for the **64** or **VIC**.
1541-compatible disk storage device from Concorde?

With its built-in parallel interface, all metal enclosure for radio frequency interference (RFI) shielding, separate power supply and latch door closure, it's an intriguing piece of equipment. The Concorde plugs into the program slot at the right hand rear of the 64 and provides a connector for your program cartridge. It also comes with a demo diskette. A program that loads on the 1541 in 90 seconds, takes 26 seconds on the 321, but [the drive] does have some incompatibilities. After running a program and hitting the RUN/STOP key with the RESTORE key, the Concorde locks up and will not allow the 64 to access the drive anymore. You must turn the power off and on again to reset the unit. I especially like the latch door. The only way to change device numbers is with software. The Concorde would make an excellent second drive. -Byron Johnson (in The Slipped Disk Club)

1541 FLASH, ROM for the **64** and the **1541**.

Speed-up ROM from Skyles Electric Works, 231-E S. Whisman Rd., Mountain View CA 94041.

All normal load and save commands operate at the fast speed unless instructions are issued to return to slow speed. Some specific load times are: The Manager=2:02 vs.1:10; Practicalc=:22 vs.:09; Frogger=:55 vs.:20; Doodle=1:20 vs.:35; Summer Games=:55 vs.:21. I've tested approximately 20 commercial software packages and only one could not load. No new commands are necessary to run the **1541 Flash**, but there are quick load commands and a mini-wedge available. Installation requires removing the cover and removing and re-installing ROMs in both the 64 and the 1541. In some early 64s, some soldering is required. The computerist seeking increased drive speed and willing to tackle the installation with care will be rewarded with a wonderfully transformed disk drive. -Greg Simpson (in SPUG Gazette)

Expansion Memory Boards:

Update (see #14,15): CARDCO CB-5, \$70 motherboard for the **64**.

5-slot motherboard from Cardco, 313 Mathewson, Wichita KS 67214. Lifetime full warranty.

The CardCo **CB-5** expander does not work with all cartridges (i.e., the board does not work with **Turtle Graphics**). Cardco confirmed the deficiency and to date has not complied with my request to supplement their exceptionally poor manual with a circuit diagram. -Harry Metz

Modems:

MITEY MO, automodem for the **64**.

Automodem, software, cables, manual and function template from USI International.

As I called around looking for an automodem, I was switched to one that was brand-new and supposedly much better, with more features and a 3-year warranty! For the future modem buyers out there, HALT...STOP...BEWARE! You know when you buy the 1650 automodem that it comes with a dumb terminal program. You know that if you want to upload and download, you have to buy a better terminal program. You know you should have VIDTEX to properly use Compuserve. So who cares about the terminal program packaged with the **Mitey Mo**? You'd better care...because that's all you'll be able to use with it! The **Mitey Mo** terminal software does not support uploading and downloading. I am angry that a manufacturer would design a modem without an originate/answer switch, that depends on its own exclusive software to tell it what mode it's in and what to do. -Nancy Goodman (in Input/Output)

Printers and Accessories:

COMREX COMRITER CR11, for all **Commodore computers**.

Daisy wheel printer from Comrex. Requires Centronics Parallel or RS-232C serial interface. Bidirectional and logic-seeking. Optional tractor feed and sheet feeder.

There are at least 20 type styles available. Spacing can vary from 10-15 characters/inch, plus proportional spacing, and 3-6 lines/inch vertically. Maximum paper width is 13-1/2" with 11" print width. Easy to remove and insert, the daisy wheel has 96 characters in a convenient cassette. Single-strike carbon film, multistrike carbon film, and fabric ribbons are available. A short red ribbon can print red without removing the black ribbon. The correctable film ribbon and correction tape are not necessary when printing from a computer. Carriage return speed is 1-1/4 seconds and the paper feed rate is 2"/second. Overall, **ComRiter** prints 13 characters/second. I have not had any machine error or breakdown. The **ComRiter** has a 5K memory buffer you can clear. Switches and LED indicators in a front panel select power, alarm, copy, line feed, pitch, lines per inch, top of form and select. 16 dip switches on the back establish language, page length, auto line feed and skipover plus RS232 data length, parity and baud rate. -Everett Best (in CUGSL Newsletter)

MACINKER, \$58-90 re-inker for **fabric printer ribbons**.

Re-inking device from Computer Friends, 6415 S.W. Canyon Cr., Suite #10, Portland OR 97221 (503/297-2391). Extra ink costs \$3 (2 oz.), \$18.50 (pint) or \$75.70 (gallon).

The first shock in my brief computer career came when I had to buy a ribbon for my Mannesmann-Tally 160L printer. The second shock came when I found how often I would have to buy them. Enter a monthly ad for MacInker.

There are different models for various printers. Upon its arrival, I was somewhat dismayed at its simple, even flimsy looking design--a tiny motor mounted under a piece of molded plastic plus two small ink wells, wrapped with fabric pads which transfer the ink to your ribbon. The motor drives a small post which fits into your ribbon cartridge and pulls the ribbon around the inking pads. The instructions are written with humor and understanding, and the seller suggests calling if you have problems; they answered my questions with courtesy.

It does its job well. I have re-inked four ribbons two to three times each, saving at least the cost of **MacInker** already. Once you get over your initial tendency to over-ink, you will find the performance of re-inked ribbons is fine. The supplied ink is claimed not to damage matrix print heads. All in all, if you do a lot of printing and a model is available for your printer, **MacInker** is highly recommended. (This company also sells inked cartridges and reloads for many popular printers.) -Jeff Lowenthal

OKIMATE 10 PRINTER for all **computers**.

Color thermal printer from Okidata.

REVIEW #1: As demonstrated in a recent computer store it had many defects. The color print would not take on ordinary paper (only thermal paper worked). Also an attempt to reproduce a high resolution picture resulted in failure. All the colors printed incorrectly. The printout of hi-res takes about 10 minutes and the printer does not take friction feed paper. -Harry Metz

REVIEW #2: The printer uses thermal transfer technology. This means there is no way to reuse a ribbon. One ribbon is good for 4 hi-res screen dumps [and] retails for \$8; that makes the cost per print-out \$2. The speed of the Okimate is somewhere around 16 cps. What you have is a dot matrix printer that operates every bit as fast as a low end daisywheel printer. The print head is 7x7, the printer does NOT have descenders, and ribbons are as hard to get as the printer. -Bill McDannell (in SPUG Gazette)

Graphics and Sound Devices:

ANIMATION STATION, about \$60 for the 64.

Graphics tablet from Suncom, 650 E. Anthony Tr., Northbrooke Il 60062. Connects to joystick port 1.

Physically, this feature-filled graphics tablet with built-in stand is larger than the Koala, has a grid printed on the drawing surface, a "do" and an "undo" button on both sides, and a switch at the lower right hand corner for emulating a game paddle. Drawing can be done with the finger tip or with the accompanying stylus. An added thoughtful touch is the built-in storage compartment for the easy-to-misplace stylus.

Making pictures or designs with the **Animation Station** is easily accomplished, using with the 18 various options. The new options are what set this apart from other programs. The TEXT mode allows you to intersperse text with your graphics and gives you 4 type styles. WINDOW is a cut and paste routine. With SHAPES you are offered a series of pre-drawn animals, plants, body parts, vehicles, etc. The COLOR option lets you use all 16 colors, and you can combine any 2 to form various shaded textures. If you draw a line you don't like or a color is the wrong shade, push "undo" and your last action disappears. After you complete your graphic screen, you can save to disk, or the PRINT option supports several popular printers and interfaces. Koala software can be used immediately, because of its 100% compatibility. My family thoroughly enjoys the **Animation Station** and its ease of use and flexibility make it ideal for young children and adults alike. -Greg Simpson (in SPUG Gazette)

CHIRPEE VOICE COMMAND MODULE, \$180 voice command module for the 64.

Voice synthesizer from ENG Manufacturing, 4304 W. Saturn Way, Chandler AZ 85224 (602/961-0165). 90-day parts and labor factory warranty.

I found the **Chirpee Voice Command Module** frustrating. In fact, I could not get it to work well enough to review it. The major problem is that it is not ready for the market. The documentation (of which I had two versions) was confusing. The built-in microphone was so sensitive that it was impossible to get it quiet enough in the house to test it. At any price, it is not recommended. -Rebecca Boren (in Input*Output)

MUPPET LEARNING KEYS, \$89 keyboard for the 64.

Alphabet tutorial+keyboard for ages 3-6 from Koala Technologies Corp., 3100 Patrick Henry Dr., Santa Clara CA 95052-8100.

This package consists of a sturdy, well built, child-oriented keyboard that plugs into a joystick port plus 3 programs. The keyboard features the alphabet, the numbers from 0 to 9, a paint box with 8 colors, and some special keys like help, oops, eraser, stop, go, etc. When any letter key is pressed in the first program, a picture corresponding to it appears on the screen. When go is pressed, the picture dances around and makes an appropriate noise; Z is for zipper, M is for monkey, E is for elephant, etc. If a number key is pressed, that many copies of the current picture appear on the screen, while the color keys change the picture colors. This program can show very young children that the screen will change as a direct result of their 'hacking' around on the keyboard (although they probably have an inkling of tis already...). Older children may learn the meaning of the letter symbols as they see the pictures that correspond to them. Our 1 year old is fascinated with the whole show, but won't comment on its appropriateness as a learning tool. The other 2 programs are of little interest to a 1-year old, but seem pretty decent. One shows a picture from the first program, and waits until the child presses the corresponding key, while the third program shows a certain number of pictures and awaits the pressing of the proper number key.

My biggest complaints are the dreadful waits while the programs load, and the worthless help function (easily pressed by mistake). If possible, I suggest you keep the keyboard hidden and the TV turned off while the program loads, since the keyboard must be attached and no buttons touched during the load. Seeing the waving muppet

characters and the pretty keyboard while unable to touch it for several minutes while the programs finish loading may be frustrating for some small children. Highly recommended, especially if Koala releases information on how to incorporate it into your own programs (hint, hint). -Jeffrey Klopping

PRO-KEYBOARD, \$399 keyboard for the 64.

Professional keyboard from Waveform Corp., 1912 Bonita Way, Berkeley CA 94704 (415/841-9866).

This is a truly professional keyboard that interfaces with the Commodore 64. The keyboard is a standard 3-octave piano keyboard, offering monophonic and polyphonic sound. Some very interesting effects were demonstrated. **Musicalc** is the software that runs the keyboard. -Rebecca Boren (in Input*Output)

Other:

OSCAR, \$50-90 data bar and diskette for 64.

Data [bar] entry system plus 6 programs and Data Bar magazine from ???

Data Bar magazine will be issued monthly and contains about 30-40 data bar entry programs. That's the good news!

Our librarian, Bob, had the dubious honor of putting the data bar through a workout. Some three hours later, he had succeeded in entering only 3 lines of text. After 8 hours, the Slipped Disk library now has, count 'em, one data bar entry program.

There definitely is a trick to how to move the bar over the code, but even after mastering this, it still can take several tries to get the beep that lets you know the code has been accepted. After approximately every 3 or 4 lines of code, you must pause and let the scanner "digest" the code. If one can ever get to the point of overcoming the 6 or 7 passes per line of code, it would definitely be a worthwhile acquisition for most families. -The Slipped Disk Club

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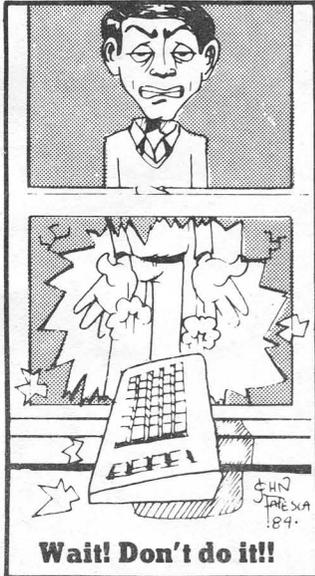


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Home Programs:

THE HYPNOTIST, \$90 diskette and biofeedback device for the 64.

Self-help program for behavior modification or stress control through biofeedback, from Psycom Software International, 2118 Forest Lake Dr., Cincinnati OH 45244

The Hypnotist is a little corny in its approach to hypnotising you, but it is surprisingly effective. Hypnosis is a good tool for things like losing weight, quitting smoking, and memorizing facts. **The Hypnotist** includes a heartbeat monitor which plugs into the joystick port and lets the computer know when you relax. You choose suggestions to poke into your subconscious mind. The computer strobes them across the screen while you are in a hypnotic trance. If you know enough about yourself to write effective suggestions, this program can help you bolster your will power, develop a positive self-image, and memorize the Gettysburg Address. I found the heart monitor helpful in learning to relax. The documentation is sketchy, but this is otherwise a good self-help program. One warning: be careful about using the negative reinforcement option and the computer's words. We tried it to cut down on eating. **The Hypnotist** worked fine. Wouldn't you eat less if you thought of bugs every time you saw food? -Annette Hinshaw

THE LEAN MACHINE, by Bryan Bergeron, diskette for the 64.

Diet program from Home Health Software, P.O. Box 57935, New Orleans LA 70157

The Lean Machine does not lay out a proper meal schedule for you to follow, but it does tell you if what you are eating is a proper balance of calories, protein, fat, saturated fat, carbohydrates, calcium, phosphorus, iron, potassium, vitamin A, thiamine, riboflavin, niacin, vitamin C, cholesterol, and sodium. The program even figures what your daily requirements should be for each of the variables depending on your weight, bone structure and physical activity level. Over 600 common foods are already entered in data files, with room for another 200 food items. There are many screens: one shows the breakdown for any food item you want displayed, another shows the percentage of the daily requirements for your personal profile you have met, and a third plots your monthly weight by day. Another option allows you to see the different names given to the food items in the data files. If you want to go on a weight loss program, the program will calculate new daily requirements to meet a certain goal you establish. The only thing this package will not do is send you a bill for services rendered. The software seems to be very easy to learn, even though there is a lot of flexibility built into the programs. But go through the 21-page manual before diving into the programs. -Bill and Caron Brouillet

KNOW YOUR BODY, by Bryan Bergeron, diskette for the 64.

Female cyclical body monitor program from Home Health Software, P.O. Box 57935, New Orleans LA 70157

I recommend this program for women who wish to conceive a child or wish to stay away from conceiving a child. [As an unmarried student], I was only able to use the Menstrual Analysis and Cycle Prediction Files, which kept track of my dates and the days between my menstrual periods. The Cycle Prediction does exactly what it says: predicts the start of your next menstrual cycle by using the Menstrual File. -Sandy Brouillet

Language Reviews

Assemblers:

IEA INSTANT EDITOR ASSEMBLER, \$20 diskette for the 64.

Assembler from Robin's Software, Box 20220, Bloomington MN 55420 (612/944-8654).

All data in your source code MUST be in Hex format. All labels must start with a colon (:) [and] are assumed to be 4 hex digits long. I consider this a major oversight [because] it forces you to waste an extra byte for zero page labels or to use the actual address. Worse yet, it prevents labels from being used in indirect addressing mode. If you are just starting to program in machine language, the instructions may not be detailed enough. There are also 3 pages of utilities primarily for sprites. There is little information about how to pass data into these routines. Most use several registers but nothing is said about what to put into which register. Bad points: IEA is not compatible with DOS wedge; and labels are all assumed absolute (2 byte) addresses and cannot be used as a number--they always refer to an address to be loaded.

Good points: It is FAST (it will assemble 17K of source code in about 4-8 seconds; inexpensive, and easy to use. Source code can be edited while the assembler is in memory, assembled, changed, reassembled, etc. You can also have the monitor and/or walk program in memory while you assemble. I highly recommend the IEA Assembler to all interested in machine language programming. -Jim Borden (in Eight Squared)

Compilers:

Update (see #11,13): PETSPEED, versions for the 64 or CBM/PET.?

Basic compiler from Oxford Computer Systems, Hensington Rd., Woodstock Oxford, OX7 1JR England (ph:0993/812700)

We in North America are the only ones on the planet who cannot enjoy using Petspeed. It seems the English company that developed Petspeed is still distributing it throughout the rest of the world (inside a Commodore box, no less!). The disadvantages of Petspeed are insignificantly minor. For one, dimensioned string variables must be dimensioned with numbers, not letter variables. Occasionally a mathematical argument must be simplified. No machine language subroutines may be used. The Petspeed program itself is very cleverly dongle-protected, but compiled programs will run and copy just like before, with no dongle required. I got my program out of Australia for about \$110 U.S. + lots of postage and had no problems with U.S. Customs getting it in. -Gary Huff (in SPUG Gazette)

COMAL:

COMAL (VERSION 2.01), \$102-\$132 cartridge for the 64.

Available in U.S. from COMAL Users Group, U.S.A., Ltd., 5501 Groveland Terrace, Madison WI 53716. \$101.95 is cartridge only. Deluxe package includes cartridge, 2 demo diskettes, 467p. 2nd ed. COMAL Handbook, and 64-p. Cartridge Graphics and Sound.

When I ordered the cartridge package in September, I was pleasantly surprised to get it the same month it was promised for delivery! Included with the cartridge was a 12p. "Preliminary Notes" on special features. By no means did it explain everything, but it did keep me busy until the Handbook arrived a few days later. Cartridge Graphics and Sound arrived 2 weeks later.

The cartridge contains 4 EPROMS with 64K of code and enough bank-switching

circuitry for it to take up only 16K of the 64's address space. Contrary to Len Lindsay's reports, there is no empty ROM socket for application programs that would automatically boot when the system was powered on. Later versions will use ROMs and have a slightly different opening screen; perhaps they will have the auto-boot-ROM-socket feature....

COMAL 2.0 adds many features compared to the disk-based 0.14 COMAL. The system boots up with a "jingling" sound, just like the CBM 8032, and about 30K bytes free (compared to less than 10K on 0.14). Like 0.14, there are special graphics, turtle, and sprite commands, but to use them, you must first invoke a USE GRAPHICS, USE TURTLE, or USE SPRITES command. These are called "packages"--sets of non-official COMAL commands that apply to specific machine features. Other packages include SYSTEM, DANSK (Danish error messages), PADDLE, JOYSTICK, FONT, ENGLISH, LIGHTPEN, and SOUND. Of particular significance are FONT and SOUND. 0.14 doesn't support 64 sound any better than BASIC--all POKES! The SOUND package commands allow full, convenient control of all SID chip features. FONT allows user-defined characters, a powerful 64 feature, not supported at all by 0.14.

One very powerful feature is that both the sprite and sound systems can be programmed to run on interrupts. For sound, you can play 3-voice music in the background, while the program does practically anything else, until the program ends; special commands control when the different voices start and stop. The sprites can also continue in the background, complete with programmed pauses, collision detection, and such. To achieve the same power in BASIC, you must use a special machine-language program or utility.

Much has been added to make this COMAL version match the official COMAL standard, such as LOOP...EXIT...ENDLOOP, PRINT AT, PRINT USING, INPUT AT, and a TRAP/HANDLER system for controlled handling of errors. The powerful PROCEDURE is even more powerful in 2.01: PROC's can be nested; they can have string names (therefore returning strings as results); they can be CLOSED except for certain selected IMPORT variables (0.14 allows CLOSED only, without the IMPORT option); and most importantly, with EXTERNAL you can call a procedure, complete with parameters, from the disk, execute it, and then discard it. A good application of this would be to have a powerful sort routine on disk, and call the procedure from applications, using an array in the parameter list. The array passed in the parameter list would get sorted, while eliminating the lines of the sort routine. You can also improve the sort routine w/o changing it in all the programs that use it.

The operating environment is more convenient, as well. The AUTO command is more intelligent, allowing you to cursor-up to a previous line, make a change, and continue from that point. Also, if the AUTO sequence causes you to start overwriting previously programmed lines, the system warns you by printing the line number in reverse-field. RENUM will allow you to renumber the remainder of a program, though it isn't as powerful as POWER's RENUM, which lets you renumber any part. The LIST command lets you name a procedure or a function, instead of guessing what the actual line numbers might be.

My overall impression is very favorable. The COMAL cartridge makes programming considerably easier, and allows many things that are impossible in BASIC. The price is very reasonable for the additional power, but is still more than half the current cost of a 64, and not likely to drop. Software developers are not likely to write much for COMAL-cartridge systems, unless someone develops a compiler or run-time package that allows COMAL-cartridge programs to run without the cartridge. If I knew there would be a market for my COMAL-cartridge-based programs, I would gladly plunge into it. Meanwhile, I'll confine my programming to programs for my own use, and those I donate to COMAL Today and user groups. If you are not sure whether you want to make such a large investment, you might want to get the 0.14 version first. -Loren Wright

Magazine Reviews

Company Update (see #20): NORTHWEST USERS GUIDE, for all Commodore computers.

Monthly newsletter from 3808 S.E. Licynta Ct., Milwaukie OR 97222 (503/654-5603)

CORRECTION: The Northwest Users Guide is not a users group newsletter or publication. Granted, most of our writers and staff members (myself included) are members--and in many cases, leaders--of various users groups, we are an independent and commercial publishing venture. We will be changing the name, probably with the November [1984] issue, to help both better establish our own identity separate from the user groups, as well as to remove the restricting regional implications of the name. Also, while John Jones is one of our regular (and most knowledgeable) writers, he is not involved in either the operation or production of The Guide except as a contributing writer. We do appreciate the recognition, especially from a publication that I respect as much as The Gazette. -Randy Chase, publisher and editor

RE-RUN DISK, for 64 or VIC.

Half-yearly disk magazine from RUN/CW Communications Group, 80 Pine St., Peterborough NH 03458.

This disk contains the best of a half-year's worth of program from RUN magazine. Some of the programs for the 64 are:

Canyons of Zelaz: This is like Lunar Lander. You have to land in a canyon. It's hard to maneuver, and frustrating for children under 7 years old.

Symbol Code: This is a computer version of Master mind. You have to figure out a pattern of 4 symbols. When you guess, you are told how many are correct, and how many are in the correct place. Not for children under 7.

Kingdom: I love it! This is a very interesting game, and makes you want to play more and more. It's an adventure-strategy game in which you try to keep your kingdom together. You distribute bushels of grain. If there's not enough, the peasants can steal from the warehouse. Rats can also eat the grain. You can be either at war or at peace. It is challenging in a way.

In addition, there are other programs in the disk, including a database, a music program, and a sprite program. -Meredith Jones Frummer (age 10) as discussed with Tom Trocco on "Small Things Considered" radio program

Modem Reviews

Terminal Programs:

SPEEDTERM III, by Gary Schroeder, for the 64.

Terminal program from Astral Image, 812 B St., San Rafael CA 94901.

This terminal software has many nice features such as: menu-driven, up/download, easy DOS control, smooth scroll and on-line dump to printer. The automatic dial and redial with the names of 20 BBS's on a menu to choose from really adds a lot to the program. But when using this program on-line, I find that certain keys frequently don't print the correct letter, and I spent a lot of time retyping while connected. If this one bug could be fixed the program would definitely be a good buy. Until fixed, not recommended. -Mike Stout

Bulletin Boards, Telecommunications Services, etc.:

PLAYNET 200, \$30-50 connect charge+\$6/month+\$2/hour for all Commodore computers.

Telecommunications service from Playnet, 200 Jordan Rd., Suite 180, Troy NY 12180 (800/752-9638)

REVIEW #1: A new telecommunications service for Commodore users only, **Playnet** offers on-line games such as Backgammon, Chess, Checkers, Reversi, Sea Strike and many others, where you can challenge another subscriber to a match. Excellent sound and color combined with the ability to send messages back and forth to each other make this service unique. But the best part of **Playnet** is its E-Mail and conference features. Check into a public or private room and meet some interesting users from around the country. The only problem is that you must use Playnet software and the on-line loads take a few minutes, but the low charge makes up for that. You can subscribe for \$30 (that includes the Playnet software) until January 1985, then it goes up on a graduated scale to \$50 after April, 1985. A bulletin board, monthly newsletter and more are planned for this innovative service. Also, many U.S. cities can call toll-free through GTE's Telenet system. Give **Playnet** a call for your free demo pack and receive 90 minutes free connect time to help you decide. Recommended. -Mike Stout

REVIEW #2: About a week ago, I logged onto **Playnet** for the first time. WOW! My spouse almost literally had to pry me off the computer several hours later when he needed access to the Commodore. I had been having such a good time "talking" to the PlayNuts (as they call themselves) that I had lost all track of time. Something I find especially appealing for first-time users of telecommunications is that no terminal software is required to log on the **Playnet**. Everything you need is included on the System Disk, along with a book of clear documentation, and a disk containing game graphics. Game graphics are loaded directly into your computer, not only allowing for superior graphics, but all you transmit is your move in a game. -Mindy Skelton (in Eight Squared)

REVIEW #3: **Playnet** is set up like an electronic "house." You enter it through the reception room, where you will most likely find a "party" in progress. You can join the party or explore other rooms. Other rooms may contain bulletin boards, info or you may designate a room for a game (current ones consist mostly of old classics). Room names can be anything you want, but unless you invite someone to meet you there, you'll find yourself alone. You challenge someone to a game by selecting the game menu and following the prompts. The system will then issue your challenge to the person(s) you specified. Upon acceptance of your challenge, all parties insert their game disks, and the system will load, run and mediate the game.

Games are played on a full color screen complete with sound effects. Another exciting feature is the ability to "talk" to other subscribers, even if you are involved in a game. There is a definite screen flicker during data transmission. If you attempt to play a game in a room with too much alternate activity, the system could overload, and not allow either player to move. Your subscription includes all custom software required by the system, your account number, a private password, and complete documentation. -Bill Miller (in Eight Squared)

Science Reviews

CIRCUIT ANALYSIS, \$30, & **CIRCUIT DESIGN**, \$20, both diskettes for the 64.

Electronics design utilities from Nth Digit Solutions, 3243 Arlington Avenue, No. 195, Riverside CA 92506

These two programs are for people who already know enough electronics to design and redesign circuits. You enter the circuit for analysis, and get voltage and current transfer ratios, power gain, and input impedance. The design program helps you choose component values for series and parallel circuits. Its strong point is designing filters for phase and resonance. Both programs took a little getting used to, but aren't hard once you see how to input the data. They save hours of calculating things like the reciprocals of square roots. Recommended for anyone who does enough electronics design to use up \$50 worth of his time. -Annette Hinshaw

Sports Reviews

Company Update (see #18): LEAGUE BOWL.

Harry Briley of Briley Software reports the correct price for League Bowl 64 is \$175, not \$145, and that \$15 more buys free upgrades for 1 year. Otherwise, only bug fixes are free for a year. The locker assignment feature is only in the Apple version, and as for being limited to 8-1/2 by 11 printouts, he reports leagues Xerox them for players rather than posting them on a bulletin board. -JS

Utility Reviews

Disk Aids:

DISKMAKER V1.1, disk copier for the 64.

\$50 from Basix, 3463 State St., Suite 15415, Santa Barbara CA 93105 (805/687-1541x84 order or 805/682-4000x13 technical). Requires 1541 disk. Printer must be disconnected. DOS-protected. 30 day media warranty "at our sole option."

One of our user group members brought this over for review today, saying he'd bought it through the mail and couldn't get it work. Naturally, he was frantic at wasting \$50; and amazed that any company that advertises with full page spreads in Compute! would sell him a useless product. (I stifled the urge to suggest his money would have been better spent subscribing to Midnite.) After reading the user license and so-called warranties, I feel sure his money is gone, but suggested he try to return it anyway, and tell Compute! if that fails. Why? This sort of incident shouldn't be happening any more. The 64 is maturing enough that reputable products are now widely available, from dealers who do give a refund when necessary. There's no more excuse for buying a costly unreviewed product from an unknown company, ad or no ad.

Diskmaker 1.1 does work, but not always easily. It has 3 options: the omnipresent **Four Minute Copy**, an apparent Electronic Arts product copier, and a powerful but painful Masterkey option. The "State of the [Electronic?] Arts" option worked on most programs we were unable to copy with the 3 copy programs reviewed last issue, but failed to back up one of the 3 copy programs, even using Masterkey. Actually, Masterkey is more of a pain than a help. It requires intimate knowledge of the protection used, of a type only pirates are likely to pass around. At the same time, it appears to work no better than **Mr. Nibble** (see separate review), which requires little or no user input. Theoretically, the manual could provide the needed information, but rarely have I seen a manual which provided less useful information per page. Although professionally packaged, and second only to **Mr. Nibble** in copying prowess among the programs we've tested, **Diskmaker** is hard to use when needed most, and has the flimsiest warranty I've seen recently. I see no reason to buy it instead of **Mr. Nibble**. Not recommended. -JS

Update (see #21): 1541 EXPRESS, for the 64.

Disk speed-up ROM from RTC, 10610 Bayview, Richmond Hill ONT Canada L4C 3N8

After hooking the **1541 Express** to my 64, I found nothing worked at all. So I called the company twice and on the last call was promised a new one. So here I sit waiting, two months later, owing \$12 in long distance phone calls and the same results--nothing. I hope RTC doesn't handle all its consumers this way. -Mike Stout

1541 DISK DRIVE ALIGNMENT, by Tom Simstad. \$40 diskette for the 1541.

Disk drive repair program from CSM Software, Crown Point IN

REVIEW #1: At last, a way to cure ailing disk drives yourself! Anyone with average mechanical ability, a small and a larger screwdriver, a feeler gauge, and some glue can realign a disk drive in about an hour--less time if skilled in this sort of work. If the drive is so out of line that it will not load the program, then a second drive is needed. Also included are instructions to set correct operating speed and to set the stepper motor. The manual is for electronic novices, easy to follow, with diagrams, and no technical language. Another great feature is the trouble shooter list for use when the program does not seem to work. An excellent program, highly recommended by our users group, soSUG. -Elizabeth Kaspar

REVIEW #2: It is very good and well supported. It came with full and excellent instructions that enabled me to align and pin drives, but don't try it if screwdrivers make you nervous. One problem: The first diskettes they sent me were so tight in their jackets that one diskette would not even turn in the drive. They quickly sent new copies, and I am happy. -C.T. Christensen (in Fox Valley 64 Users Group)

KWIK-LOAD/KWIK-COPY, \$20 diskette (2 programs) for the 1541 disk drive.

Disk utility from Datamost, 8943 Fullbright Av., Chatsworth CA 91311 (213/709-1202, but do not order direct).

REVIEW #1: This program features a fast backup, some DOS utilities and a cute program to display disk drive speed. The improvement in **Comal** and **Paperclip** are quite dramatic, but **Kwik-Load!** fails if one program loading another program includes the "0:" in the program name, as **Flex-File** does. **Kwik-Load** takes about 10 seconds to load, which eats up a bit of its advantage. The backup program is much faster than **1541 Backup** and may be worth the price alone. My biggest complaints are the arrogant, unfriendly programmer [I called about the "0:" problem] and the false statements on the box. I could detect no improvement whatsoever in saving programs and the loading portion is not menu driven. Very highly recommended. -Jeffrey Klopping

REVIEW #2: The **Kwik-Load!** program replaces the 64's standard Kernal LOAD routine, making programs load about 3 times faster than normal. COMAL will now load in 20 seconds, instead of 1 minute. KL has worked with about 90% of the programs I have tried so far, but not with programs (such as **Easyscript**) that do not use the Kernal Load routine. KL's memory location may also conflict with some programs.

The second program, **Kwik-Copy**, provides many useful disk utilities. It can format

diskettes in 10 seconds, and quickly select and copy individual files, or copy a full disk in under 5 minutes. The disk directory can be displayed in alphabetical order, or sorted and resaved on disk, making it much easier to find programs. Other features are the ability to view and modify disk sectors in both ASCII and hex (useful for removing unscratchable files, such as those with a comma in their name), an easier way to scratch and rename files, and the ability to test your drive speed. **Kwik-Load!** does not correct all the 1541 drive faults, but does make it much easier to live with them. At only \$20, every 1541 owner should have it. -Bob Bohn (in BNCUG Peeks & Pokes)

REVIEW #3: Kwik-Load speeds up the loading of programs and data from the 1541 by about 300%. **Kwik-Load** itself loads in about 6 seconds and sits in memory around 52480. The DOS wedge will not work with **Kwik-Load**. It contains a disk track/sector editor, a drive speed checker, fast copy (one or two drives), and several other goodies. The track and sector editor is one of the best of its type. The 1541 drive speed check is the best I've seen! The copy portion is a disappointment, and the 2-drive copy program is plagued by bugs. It will not work with a hardwired device 9 or with the older ROM 1541 (white case). -Bob Dodson (in Input*Output)

REVIEW #4: We finally had our race between **Kwikload**, a software program and the **1541 Express**, a hardware add-on. Neither is totally transparent. There are several popular programs which neither will load. Whenever both worked, **Kwikload** was always about twice as fast in the initial program load. **1541 Express** was clearly more versatile in that it speeded up all disk access, including data files. Of course the **Express** is 5 times as fast in spending your money. We recommend both products. -Fox Valley Commodore Users Group

MR. NIBBLE, \$50 postpaid diskette for the **64**.

Disk duplicator from Full Circle Software, Box 1373, Dayton OH 45401 (513/223-2102). Requires one 1541 disk drive. 120 day free replacement warranty. DOS-protected; 1 spare available for \$10 extra.

Well, this is it--state of the art disk copying at the start of 1985. Unlike other copiers we've tested, **Mr. Nibble** isn't bothered by even the latest DOS protection tricks, including added tracks, half tracks, and errors on top of errors. It copied every previously uncopyable diskette we tried. Besides that, it is easier to use than most competing products. Just press a key or two, swap the diskettes when asked (it takes about 5 two-way diskette swaps), and wait several minutes. The diskette also includes a quick format routine, but takes long enough to load that this would only help if you're doing more than one.

The only negative about the package is that it can't copy itself. As I've noted before, this seems morally inconsistent, and ultimately futile, but not an immediate concern to buyers since a spare copy is available at a reduced price, and the diskette is guaranteed. If you need a way to make a legitimate archival copy of a program that is not intended to be copyable, **Mr. Nibble** is the best way to do it that I've seen yet. Highly recommended. -JS

PERSONALIZED KERNAL, custom Kernal ROM for the **64**.

\$25 from G.C. Systems, 250 Quintard Av., Suite 96, Chula Vista CA 92011-4924. 619/420-5887. May require soldering. One year replacement warranty.

Last issue, I wished for a better Kernal ROM, if it could plug into the original socket. A sharp-eyed reader referred me to G.C. Systems for just what I've wanted for 2 years. For what a Kernal ROM would cost, you can now get much more. With the **Personalized Kernal**, you choose the default colors and messages which appear when your computer is switched on, in your choice of the 3 official Kernals, the SX64 Kernal, or one that defaults to your choice of disk units instead of the cassette. For example, our 64 now signs on as:

Jim & Ellen Strasna's C-64
64K RAM (Days) 38911 Bytes (Midnite)

Those willing to give up the cassette port can also add 2 other excellent

features--DOS 5.1 and Un-new. Both remain out of the way until needed. Once activated by pressing 1-2 keys, the Wedge works just as usual except that it fails to grab file names from disk directory listings. Fortunately, the old way (spelling the name without quotes) still works. Un-new recovers Basic programs after typing NEW or a software RESET. I left out one other option, a Dvorak keyboard, because it requires moving keytops. Moving keytops takes only a paperclip, but most 64's will require desoldering and soldering irons to replace the soldered-in Kernal ROM with a socket. If you'd rather not mess with your machine, G.C. Systems will do the ROM for \$15, the Keyboard for \$10, and the Ocean switch (see below) for \$5, all plus shipping.

My primary worry in changing Kernals was that a very few programs don't work after the change. To avoid this, G.C. Systems also offers the **Prom Ocean** for \$50, a higher-capacity Kernal chip with a mechanical switch between your personalized Kernal and a nearly stock Kernal 3 (only the colors, sign-on message, and default device are changed). The Ocean works well, even allowing you to switch between Kernals while the machine is on. For those with other needs, G.C. Systems also offers custom Greek, Math, and Spanish character ROMs, and even an occasional custom Basic ROM. (Amaze your friends by changing "Loading" to "Erasing", or halt prying eyes by changing the "List" command to "Lust"!)

Without a doubt, G.C. Systems' Personalized Kernal is my favorite product yet for the Commodore 64, and one I use every day. Forget blue on blue. Forget OPEN 15,8,15. Forget LOAD"\$",8. The Personalized Kernal could be the best \$25 you'll ever spend on your 64. Highly recommended. -JS

Graphic and Sound Aids:

CADPIC (Combination of PAINTPIC & PRINTAPIC), \$80 diskette for the 64.

Graphics and print utility from Kiwisoft Programs, 18003-L Skypark South, Irvine CA 92714.

The Paintpic portion of **Cadpic** has the common features of "crayon" graphics programs plus some special abilities, such as setting perspective points and drawing arcs. You can mix text with graphics, with one letter size. Paintpic includes block save, copy, and rotate, and the instructions for merging Paintpic pictures with other programs. Can read data saved from MicronEye digital camera images, enhance it, and convert to print via Printapic.

Printapic has several "knacky" features, but is very slow. It converts color pictures to 16 shades of grey, but can take over an hour to print a picture, and several hours to produce a complete tapestry pattern. You can use it to print MicronEye and KoalaPad pictures. **Cadpic** is much better for practical applications like technical drawing and interior design than programs which mostly make pretty pictures. Recommended. -Annette Hinshaw

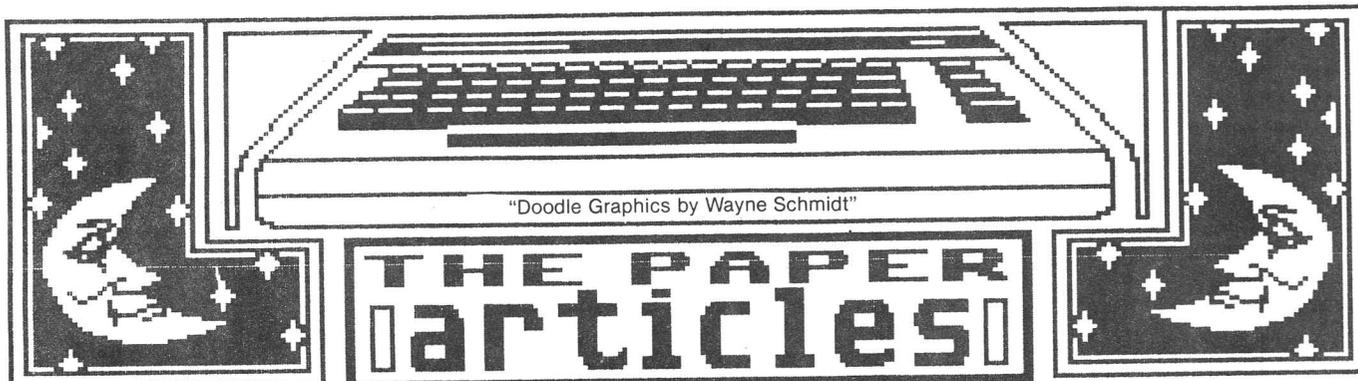
Printer aids:

KOALA PRINTER, for the 64.

Printer utility from Koala Technologies Corp., 3100 Patrick Henry Dr., Santa Clara CA 95050. Requires KoalaPad and dot matrix printer.

One of the criticisms of an otherwise fine product, the **Koala Pad**, is that it does not easily dump its pictures to a printer. Now the **Koalaprinter** does an excellent job of printing anything you can draw on the **Koala Pad**. The **Koalaprinter** supports most of the commonly used dot-matrix printers used with the 64. Includes on that list are the MPS-801, 1526, Gemini 10x and 15x, Okidata, C.Itoh and Epson printers.

The program operates from a menu of icons that allow you to call up pictures, change shading patterns (as per color), view the picture and print. The Print command allows you to select your printer and positive or negative print. Each print takes about 7 minutes on the MPS-801. -Random Access



Feature Article:
MIDNITE MUSINGS

AN OPEN LETTER TO USERS OF USER GROUPS

by R. Dale Connely
Librarian for the Joplin MO CUG

User Groups are non-profit organizations created and subsistant of its members. The officers are generally not paid for their services; they enjoy a labor of love. User Groups serve locally (with the noted exception of TPUG and USCUG and specialized groups like ATUG), and benefit is largely limited to members who show up at meetings. We expect one-on-one phone calls from some members, like the handicapped, who cannot attend most meetings. But even a small group of a 25 members can generate enough individual problems to totally tie up the officers' evenings. If you can't save your problems until the next meeting, suggest the group have more frequent meetings. At a "Bugout" session, someone else may have already solved the same problem!

Problems caused by an overenthusiastic member are secondary, however, to those caused by inquisitive NONmembers. When their name, address, and phone number are printed in numerous magazines, officers expect to be contacted for information about the Group. But should inquiries include requests for returning long distance phone calls, or buying the stamp for the reply letter, or long, involved discussions of hardware or software troubles? When contacting an officer, please be courteous. Don't 'put the byte' on him; let him suggest the proper time and place to discuss your problem. When I am called to the phone to answer questions involving technical problems better left to a Bugout session, even though I may be in the middle of supper or a brisk game of Trivia Pursuit, I find it very difficult to short-cut an answer. I actually had some friends suggest I change my phone number or find a night when there wouldn't be interruptions. To give information about the Group takes about two minutes, including an invitation to attend the next meeting, but 30-40 minute discussions about disk drive repairs or requests for pirate copies of software shouldn't be 'part of my job'.

Another frequent problem is requests for extensive information or membership from people obviously closer to other user groups. Why would someone from Utah want to join the Joplin Group? We are a local group for local people, and postage greatly increases operation costs. I suggest such people join TPUG; they specialize in remote members. We do exchange newsletters with Groups all across the nation. After two years, we have adopted the following guidelines: We will not return phone calls unless the caller requests a collect call. We will not respond to mailed requests unless a SASE is included. Anyone joining the Group which requires use of the mails will have postage surcharged. Members of the Armed Forces residing nearby, may be given special consideration. -Reprinted from the Joplin (MO) Commodore Users' Group Newsletter

TERMINAL ILLNESS

by Gary L. Vogel

SUMMARY: Extended computer use can create some real problems, such as neck, shoulder, and eye strain. This article will give you some pointers on how to relieve some symptoms of Terminal Illness.

Some common visual complaints experienced by computer users include headache, blurred near and distance vision, burning eyes, eyestrain and eyefatigue, flickering sensations, and even double vision at times. Neck, shoulder, and back discomfort are also common and result from maintaining a fixed posture for long periods of time. If you find yourself experiencing some of these symptoms try the following:

1) Use a comfortable, adjustable chair. The center of the monitor should be about 20 degrees below the viewer's straight ahead seeing position. The screen should be 15-20" away from the user's eyes and should be parallel with the plane of the face. Choose a chair that provides good back support.

2) Reference material you are typing from (such as a program from a computer magazine) should be as close to the monitor screen as possible. The screen and reference material should be equal distance from the eyes. This arrangement will avoid having to frequently change the focusing level of the eyes. Improper placement of reference material is a common cause of eyestrain and eyefatigue while using a computer.

3) Lighting and glare control can also make a big difference. Although lighting needs vary with individuals, the screen brightness should be 3 to 4 times brighter than general room lighting.

4) The screen characters should be 10x brighter than the background. If you prefer dark characters, choose black as the character color. However, bright characters on a dark background tend to create less eyestrain. The 64 makes this easy since you can choose any combination of screen and character color that is most comfortable for your vision. My preference -- white letters on a black background.

5) Try to minimize reflected glare on the monitor from windows, doors and lighting. Do not sit facing an unshaded window or bright light source.

6) Take frequent breaks to give the eyes and muscles a rest. If you will be using the computer for a long period, plan to take a 10-15 minute scheduled break every hour. Remember, a five hour session of **Zork** can be just as taxing as a five hour session of programming.

7) If you are using a TV as a monitor, investing in a good quality computer monitor may help. Since monitors have a higher resolution screen, characters are better defined and more sharp; the letters don't have blurred edges.

8) If you have symptoms of eye or muscle strain after using your computer, trying some of these suggestions can make a big difference. If your problems continue, seek the proper professional care. There are a lot of cures available for Terminal Illness!
-Reprinted from The Gateway Gazette

The attack/decay and sustain/release (ADSR) features of the Commodore 64 SID chip requires 2 registers (memory locations) for each of three voices.

ATTACK.

The so-called attack of a sound wave is the rate at which sound rises up to its maximum volume. It varies from 1 to 15 and is controlled as follows:

- Voice 1 - reg. 54277 high nybble
- Voice 2 - reg. 54284 high nybble
- Voice 3 - reg. 54291 high nybble

The "high nybble" is the upper 4 bits of an 8-bit register. This nybble is always from 16 (lowest setting) to 240 (highest setting).

DECAY.

The decay of a sound wave is the rate at which sound drops from its highest volume level back to a sustained level. It varies from 0 to 15 and is controlled as follows:

- Voice 1 - reg. 54277 low nybble
- Voice 2 - reg. 54284 low nybble
- Voice 3 - reg. 54291 low nybble

The "low nybble" is the lower 4 bits of an 8-bit register. This nybble is always from 1 (lowest setting) to 15 (highest setting).

SUSTAIN.

The sustain is that portion of a sound wave which is extended at some specific level with time. Like the "sustain pedal" of a piano, a long sustain number allows a note to be sustained or prolonged. It varies from 0 to 15 and is controlled as follows:

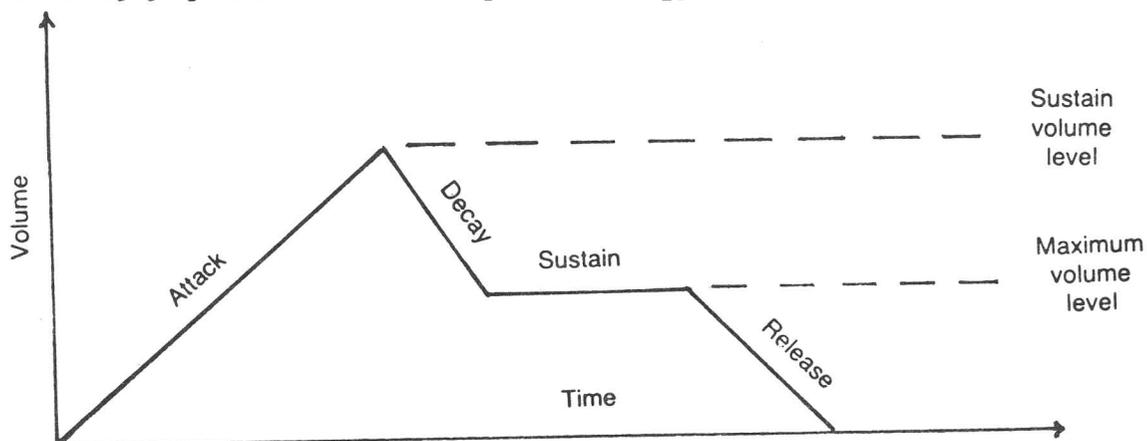
- Voice 1 - reg. 54278 high nybble
- Voice 2 - reg. 54285 high nybble
- Voice 3 - reg. 54292 high nybble

RELEASE.

The release is the rate at which the note is allowed to fall back to zero. It is the opposite of the attack. It varies from 0 to 15 and is controlled as follows:

- Voice 1 - reg. 54278 low nybble
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- Voice 3 - reg. 54292 low nybble

The following graph shows these four parts of a typical sound wave:



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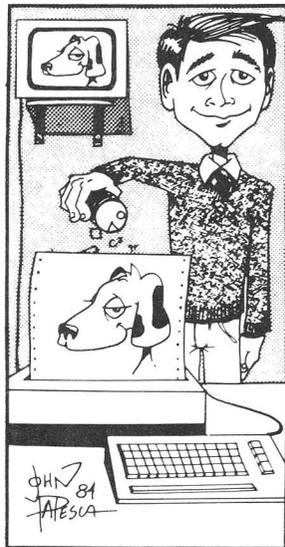
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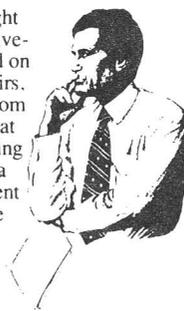
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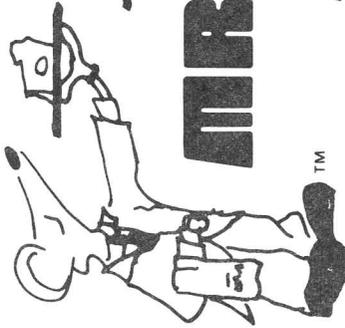
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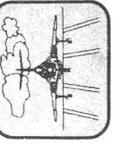
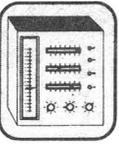
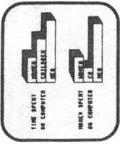
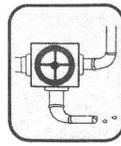
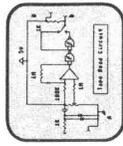
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RESOURCES:

Here are the addresses of some user group newsletters quoted in recent issues. Many thanks for the great job they are doing in their local areas and for keeping us informed about their work!

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Commodore Computer Club of Toledo Newsletter, 734 Donna Dr, Temperance MI 48182
Commodore 64 Users Group Newsletter, c/o Clearfield UT
Commodore Users Group of St. Louis, c/o Richard Schumacher, Box 6653, St. Louis MO 63125
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Hardcopy, c/o CHUG, John Walker, 8738 Wildforest, Houston TX 77088
Infoworld, 375 Cochituate Rd., Framingham MA 01701 (magazine)
Fox Valley Users Group Newsletter, P.O. Box 28, North Aurora IL 60542
Joplin [MO] Commodore Computer User's Group Newsletter,
c/o Dale Connely, 422 Florida Av., Joplin MO 64801
Mid-Missouri Commodore Club Newsletter,
c/o Jim Whitacre, 780 E. Park Lane, Columbia MO 65201
Mountain Computer Society Data Loops, P.O. Box 1154, Sandy UT 84091
NorthWest Users Guide, 3808 S.E. Licyntra Ct., Milwaukie OR 97222
NYCig, c/o NYACC, Box 106, Church St. Station, New York NY 10008
Peeks and Pokes, BCUg, Bloomington IL
SPUG Gazette, SPUG Computer Club, c/o Bill Eardley, 3116 Concord, Springfield IL 62704
SuperPET Gazette, c/o Dick Barnes, Editor, Box 411, Hatteras NC 29743
The Use*Letter, South Bay CUG, c/o Craig Whittler, 17306 Ermanita #3, Torrance CA 90504
SFVUCUG Users Port, c/o Tom Lynch, 21208 Nashville, Chatsworth CA 91311
WCUC News, Westmoreland [PA] Computer Users Club, Commodore Section,
c/o Don Miller, 3021 Ben Venue Dr., Greensburg PA 15601
Western Illinois PUG Newsletter, Quincy IL

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