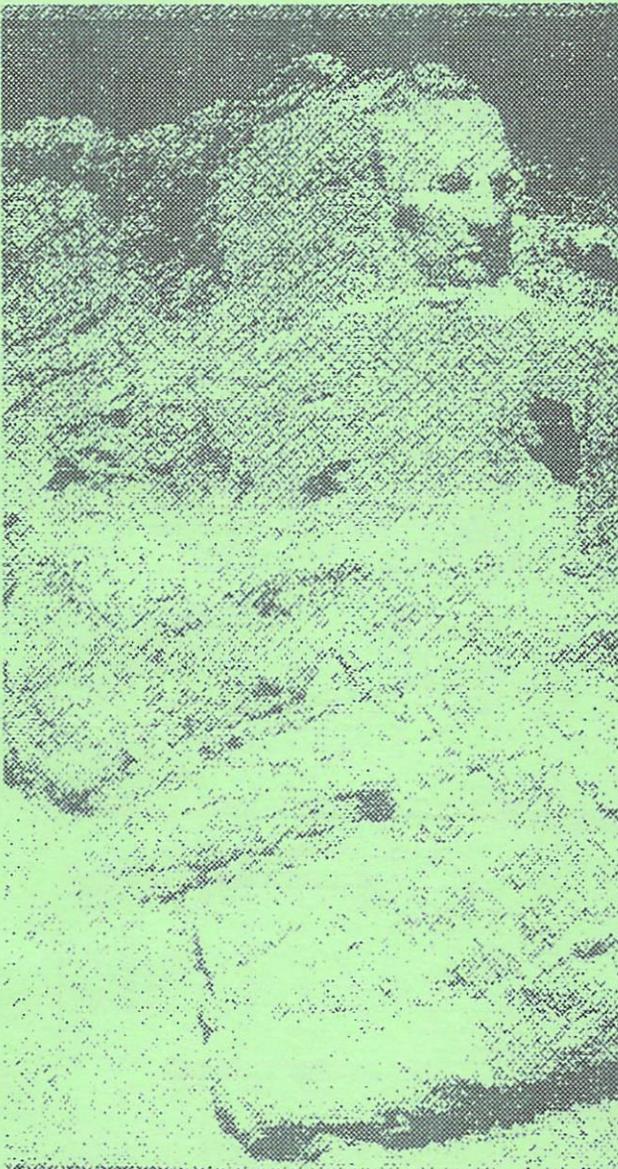


# CPU

ISSUE 5 1998  
\$4.50

The Magazine For Commodore 64/128 8-bit Enthusiasts



**Our Super  
Special  
GEOS Issue!**

**Wheels 64**

A First Look At This  
Fantastic GEOS  
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**CYBERSPACE  
COWBOY**

*-Catching The WAVE!*

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# C O N T E N T S

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# From The Back Room...

## EDITORIAL

Well this was going to be a summer issue, but several things have happened to prevent that. First off my second job for the past 11 years came to an end. My friend/employer came down with cancer and had to shut down the business. So I applied to the Burlington Northern Santa Fe Railroad and got hired on as a Machinist. That meant relocating to Douglas Wyoming and going to school in Alliance Nebraska for the past several months. So I was gone from home 5 days out of every week. This only left the weekends to get things done.

So here we are a week from Christmas and I am still putting the finishing touches on this issue. Wheels 128 is stripping now and CW 24 should be mailing. You will find an e-mail address for us at AOL, please disregard this address as it is no longer valid. Our Delphi address is still good however.

This issue is a special one indeed. It is CPU's first ever all GEOS issue (almost). I hope that not too many readers will be disappointed, as I know that not all Commodore users use GEOS. We here at CPU felt that this would be appropriate as this magazine is published 100% on a Commodore system using GEOS and Geopublish.

In this issue you will find an interview with Maurice Randall author of geoFAX, geoSHELL, and the new GEOS upgrade (patch) Wheels 64 and a multitude of other smaller programs and patches. It has come to my attention that the Loadstar Letter has also published an interview with Mr. Randall. I haven't seen it so hopefully there wont be too much repetition here. Also there is a review of the previously mentioned Wheels and the Cyberspace Cowboy takes a look at the WAVE demo also by Maurice Randall.

Also CPU Magazine is proud to announce that beginning with this issue we have added the long time legendary Commodore guru Jim Butterfield to our writing staff! We are sure our readers will respond favorably to the addition of Mr. Butterfield. Look for other well known writers from the Commodore community to visit these pages in the future. Another announcement that I have to make is in regards to pricing and subscription changes.

Effective immediately a 6 issue CPU subscription is \$20 US, \$24 Can/Mex, and \$30 EC/For. Back issues and sample issues are now a flat \$4.50 each. Effective with the #6 1998 issue CPU Magazine will become a bi-monthly publication. That's 6 issues per year for the mathematical illiterate. Classified advertising is \$10 for 150 words including spaces. Advertising rates are as follows and are in effect now. \$40 full page, \$30 half page and \$20 quarter page. No one eighth page size Ads are available due to the 75% format of CPU. One thing I forgot to mention, we still offer User group and bulk discount subscriptions when 10 or more people subscribe. The magazines are bundled together and mailed to one address. User group/Bulk discount rate: \$18 per person.

Have a great Holiday season and we'll see you in 60 days!

-Tom

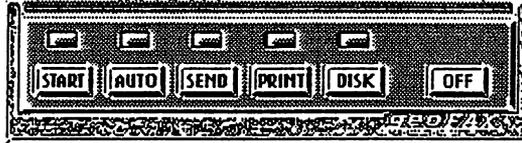
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# CPU Revu: Wheels 64

by Remmington Steele

Available from Creative Micro Designs and Maurice Randall.

I had been away from the online community for about a year or so due to circumstances beyond my control. As a consequence I was way behind the times and did not have any insight into the events that had transpired within that period. When I finally did manage to return to the ranks of the online well informed I learned that Maurice Randall was working on what was tentatively called Project G.

Project G? It sounded interesting. And knowing Maurice it had to be GEOS related. Sure enough upon further investigation I discovered that Project G was indeed not only GEOS related but rather an upgrade to the current GEOS operating system, GEOS 3.0 if you will. Soon Maurice announced the official name of the new upgrade, Wheels 64 was born and Maurice began to accept advance orders for Wheels. I promptly sent him a check.

I found out later that I was number 11 on the waiting list. Wheels was supposed to release in late February but did not make it until sometime in May. But that was alright, you know good things come to those who wait. And believe me when I tell you that Wheels was well worth the wait! Let me tell you up front that the current version of Wheels that is shipping is not 100% complete. Maurice decided that instead of making us wait any longer for the product that he would ship it with some of the features not yet implemented

disabled. Does this mean that Wheels is crippleware? Quite the contrary!

Whats missing? Before I tell you I want you to know that Maurice has included with every Wheels package a letter explaining what features are disabled and what new ones will be included in the next release of the Wheels software. By the way the next release will be free to all registered Wheels owners....so there is no reason to wait for the next release, you will get it automatically.

Here is a list of some of the features that should be in the next release of the Wheels operating system:

- \* Ability to access printer driver from any drive or path (boot) partition.
- \* Screensaver.
- \* Horizontal scrolling in the Dashboard windows.
- \* Auto clock setting from any available RTC during bootup.
- \* Info box in the Dashboard for displaying disk and file info.
- \* The Dashboard ashtray for temporarily discarding files that can later be retrieved.
- \* Printer icon on the Dashboard for dropping files to be printed.

- \* A drive swapping function in the Toolbox.
- \* A utility for changing the system colors and background patterns that are used by the Dashboard, Toolbox, and MakeSysDisk as well as any other new application that wants to take on the same appearance.
- \* Ability to drop a drive icon onto to a partition window to perform a whole disk copy.
- \* Printer drivers for Canon bubblejet and other printers.
- \* possible MS-DOS disk capability.

Although it sounds like alot is missing from the system wait till you see what Wheels can do! Before Wheels came along GEOS was cumbersome and didnt work well with CMD devices....especially native partitions. Now those are problems of the past. Gone are the configure files and disk drivers of yesterday. The new Toolbox takes care of all the devices connected to your system, up to four.

Wheels allows the user to navigate between four drives with ease. Not only that it also allows navigation between partitions and varying drive emulation partitions. Wheels excells in making system management a breeze. You'll navigate around your system with an ease never thought possible on a Commodore 64.

The desktop or I should say the dashboard as it is called is very versatile. The windows that the files are displayed

on are resizable and relocatable anywhere on the screen. The files may be displayed as icons or in text descriptors. In icon mode you get just the file name under each file as in the old familiar desktop. For those who like more info and are used to using Gateway or geoShell the text display gives you file name, size, type, and date. A maximum of 16 windows representing drives, partitions and subdirectories maybe open at any given time, however only 1 window maybe active at any time.

For geoShell user's Wheels comes with some new commands allowing geoShell user's to take advantage of Wheels enhanced features.

*The twelve new commands are:*

**chdisk** - allows changing disk types on the FD drives.

**chpart** - change partitions.

**DESKTOP** - exit back to the Dashboard.

**erase** - erase a disk directory.

**format** - format any disk, partition or ramdisk used in Wheels.

**makedir** - create subdirectories in native partitions and ramdisks.

**ncopy** - whole disk copier.

**nswap** - use in place of the swap command.

**parentdir** - move to the parent directory.

**rootdir** - move to the root directory.

**subdir** - move in to a subdirectory.

**validate** - validate a disk, partition or ramdisk.

When used with Creative Micro Designs Super CPU Wheels running at 20mhz is an awesome sight to behold. Wheels breathes new life into a venerable computer platform. Computing is

## Wheels 64:

enjoyable again....but it always was on our beloved Commodores.

In order to use Wheels the following *minimum* hardware is required:

**Commodore 64 or 128 in 64 mode**  
**Commodore 1541 disk drive**  
**Commodore 1700 REU ( 128k model )**  
**Color monitor ( recommended )**

Wheels was designed to run at peak efficiency on a power system. The above is not an ideal setup, but will get you going. Wheels is an upgrade to GEOS 2.0 therefore you will need an original GEOS boot disk in order to use Wheels. Once installed you will never need your original GEOS disk again. Wheels has many unique and enhanced features, if you are an avid GEOS user you need Wheels. It is money well spent and the post purchase support is second to none!

Wheels may be ordered from the following sources:

**Maurice Randall**  
**%Click Here Software Co.**  
**P.O. Box 606**  
**Charlotte, MI. 48813-0606**  
**USA**

**Creative Micro Designs**  
**P.O. Box 646**  
**East Longmeadow, MA. 01028**  
**1-800-638-3263**

Price is \$36.00 plus shipping and handling from both sources.

## Catching The WAVE!

The WAVE is terminal software that runs under the GEOS 128 environment and is currently available as a preliminary demo release. It is authored by GEOS programmer extraordinaire Maurice Randall. The demo maybe downloaded from BBS's and online services such as Delphi. The WAVE comes with a 14 page document file that you can print out.

To run the WAVE you will need a Commodore 128 with 64k video ram. Commodore 128D's came equipped this way. If you have a flat 128 then you will need to upgrade the video ram as they came with only 16k of vdc ram. You will also need GEOS 128 v2.0 running in 80 column mode, and a Swiftlink or compatible cartridge and dont forget the high speed modem.

When running from the Desktop you will be presented with a title screen which contains several icons. Only one of these work in this demo release. It is called the **Beachcomber ASCII Terminal**. With this terminal you can log onto any online system or BBS that supports ASCII. It will have to be done manually as the phone directory is not included in this release. Uploading and downloading as well as the capture buffer are also non-functioning.

So what good is it you ask? Well it is just a demo, a demo of what is to come and what is possible under the GEOS environment. Maurice Randall has indicated that the release version of the WAVE will require Wheels 128 in order to run. Also a graphical Web Browser will be made available as an add on module to the WAVE. The WAVE will or currently support full color menus, mouse support, file transfers, zmodem protocol, buffer capture, telephone directories, various terminal emulations, script languages and a host of other powerful features. A 64 version of the WAVE is also planned.

CYBERSPACE COWBOY

# Story Time

## The Gondwanaland Frontiers:

---

### Transfiguration

Thor stood in the middle of the great cavern holding the box with the gold-inlaid purple cloth, starting to open it he thought to himself "What am I doing? My closest friend has died and I care only for what treasures await me. Curse myself." He stopped, turned and walked out of the cave, he gathered all that remained of Fingers and put them in a leather pouch, with the slim hope that someday he may be able to be restored. Uncertain if Fingers would ever return to the world of the living Thor began to craft a placard. Thor worked that night carving an inscription into a flat, rounded stone, it read, "A truer friend was never had than Fingers, a nuisance to some, an amusement to others, may his memory always linger. Died the sixth day of Naladan the year of the Divulgent". "All mourning must end!", he said aloud to himself as the gold fever returned to consume him.

Thor focused on his newly acquired wealth. Looking at the mound of treasure he remembered the small wooden box. Picking up the purple enclosed box he had a strange chill go through him. "Just this cursed time of year", he thought to himself. Thor unwrapped the box and opened it. Ivory cards were inside, "hmm, what be these?" Thor pulled one out of the end. The card had designs on one side and on the other there was a star. "Odin's eye! This is a deck of many things!"

Reaching yet again for his tome of magic he looked up the deck of many things, there was a description of each card. Thor read the description for the star, "The star grants the possessor an increase of any attribute desired." Thor looked at the card, "I wish to increase my strength," he said silently. Suddenly the dwarf went into spasms, dropping the card and

breaking it. Excruciating pain permeated his body, it seemed as if he would explode. His muscles were throbbing. The pain ceased and he stood, looking at his arms he noticed they were more muscle-bound. "It works!! I must draw yet another!" Thor drew one from the middle, a sun, before he could look in the tome a pair of winged boots appeared beside him. "Eh, what be these?" He picked up the boots and turned to his tome of magic, written in common tongue was "Winged Boots; allow wearer to fly two hours every day, for every twelve hours of uninterrupted non-use the boots regain one hour of use." Putting the boots on, he looked at Cyrothraxus' corpse. Cyrothraxus' icy white skin gave Thor an idea; "That cold resistant dragonskin would make some incredible armor", he thought to himself.

Putting the deck of many things aside, he undertook the laborious task of skinning the great Wyrm. Though small for a dragon Cyrothraxus was large for his kind. It took Thor a good days work to skin the dragon, through which he endured the beginning stages of the dead dragons rotting corpse. He then fashioned and fitted the scales into armor. When he was done he started a fire, for night was near. Interested in his Deck of Many Things, Thor started to read about the individual cards. "The Void; The consciousness of the person drawing this card is transported to another plane." Thor thought about this briefly, then continued reading, "Throne; drawer is given a small keep and is liked by all", "Comet; the next foe encountered by the drawer is easily defeated." Thor put the book away as weariness overtook him and he fell asleep. Thor slept uneasily as he dreamt of his rocky homeland Cúntar.

**NEXT ISSUE:  
TRANSFIGURATION Part 2**

# NEWSWORTHY

## Information of Interest to Commodore Users

### The Internet for Commodore C64/128 Users 3rd Edition: No Sneezing Allowed

TIFCU, or "The Internet for Commodore Users" as readers have dubbed the book, is nothing to be sneezed at. Encouraged by strong international sales VideoCam Services has updated the manual and published a third edition. The book, officially titled: "The Internet for Commodore C64/128 Users" has been expanded with an additional chapter covering TCP/IP Connections. With recent hardware and software released for the Commodore computer, it's only a matter of time before TCP/IP software is available. The additional chapter explains the terminology and explores basic issues. When the software is available, readers will be ready to make use of it. As well, graphics used throughout the book have been updated and revised.

Topics covered by The Internet for Commodore C64/128 Users 3rd Edition includes:

- \* Hardware Basics
- \* Term & Modem Basics
- \* Internet Providers
- \* Signing Up
- \* UNIX Shell Basics
- \* Email
- \* Text Editors
- \* Newsgroups
- \* Telnet, Ping, Finger
- \* FTP and Archie
- \* World Wide Web
- \* Gopher
- \* Internet Relay Chat
- \* Advanced Email Topics
- \* Your Environment
- \* Dealing With Files
- \* TCP/IP Connections
- \* Glossary
- \* C= Key Equivalents
- \* Products Source List
- \* Internet Resource List

Other updates or additions include:

- \* Desterm v3
- \* Dialogue 128
- \* New unzip software
- \* File transfer problems
- \* Commodore Mailing lists
- \* Web based Email
- \* IRC channels
- \* Web Browsing
- \* Commodore FTP sites
- \* GoDot (graphics manipulation)
- \* CMD's SuperCPUs
- \* CMD's RAM Expansion Units
- \* Commodore resources

Ordering and Contact Information:

Shipping will begin on Tuesday, 28 July, 1998. The Internet for Commodore C64/128 Users, 3rd Edition by Gaelyne R. Gasson Published by VideoCam Services ISBN: 0-9585837-0-6

Price per book:	Aust	USA	Canadian	DM
	\$36.95	\$29.95	\$39.80	\$41.59
Shipping per book:				
Intl Express	\$15.00	\$12.00	\$16.20	\$17.00
Airmail	\$11.50	\$ 9.00	\$12.50	\$15.00
Economy Airmail	\$ 9.00	\$ 7.00	\$10.00	\$11.25
Within Australia	\$ 5.00	n/a	n/a	n/a

VideoCam Services offers "The Internet for Commodore C64/128 Users" to bookstores, distributors and user groups at a discounted cost. To qualify for bulk pricing, five (5) or more books must be ordered and shipped to the same postal address.

Bulk Price per book:	Aust	USA	CDN	DM
	\$24.00	\$18.95	\$22.00	\$26.60
Shipping per book:				
Economy Airmail	\$ 6.50	\$ 5.00	\$ 6.00	\$ 7.20

Orders can be accepted via phone, fax, postal mail, Email or the World Wide Web. VideoCam Services accepts personal cheques, Visa, MasterCard, Bankcard and American Express. Web orders can be placed at: <http://videocam.net.au/tifcu/bookord.html>

The Internet for Commodore C64/128 Users is also available from Loadstar in the US (1-800-831-2694). Order Item #900920. The price is \$35US including shipping anywhere in the US.

VideoCam Services  
90 Hilliers Rd  
Reynella, SA 5161  
Australia

**Phone:** +61 (08) 8322-2716 **FAX:** +61 (08) 8387-5810 **Email:** [videocam@videocam.net.au](mailto:videocam@videocam.net.au)  
**Web:** <http://videocam.net.au>

### **CPU Magazine to go Bi-Monthly**

Effective with the #6 1998 issue CPU Magazine will appear in a bi-monthly format. Also effective immediately are the following subscription rate changes: 6 issues (1yr) \$20 US addresses, \$24 Canadian/Mexican addresses, \$30 Foreign addresses. Sample and Back issues: \$4.50

### **Jim Butterfield joins CPU**

Veteran Commodore guru Jim Butterfield joins the CPU writing staff with his column debut in this issue.

### **J&F Publishing**

Fender Tucker announced that Loadstar 128 will NOT be discontinued. Great news to be sure!

### **SuperCPU 128 Ships**

The 128 version of this device finally makes it to market! CMD announced that all pre-orders have been filled. So if you have been waiting for the SCPU 128 now is your time to get one. CPU will feature a review of the SCPU 128 in issue #6.

### **Click Here Software**

Wheels 64 ships and CHS also announces that Wheels 128 will be ready in October of this year and that the next revision of Wheels 64 will follow possibly in November. Maurice Randall also has indicated that the WAVE be the next project to be finished and it will require Wheels to run.

### **Living Proof Ltd. aka Rick Kane**

Announced that he is working on an upgrade to both Ipaint and Iport. Rick also indicated that there will be Super CPU support enhancements to both of these unique software packages.

C::

# MAIL CALL

*Letters from our Readers*



Dear Sir,

IT WAS A REAL PLEASANT SURPRISE TO RECEIVE MY ISSUE OF CPU. I HAD WRITTEN IT OFF AS A BAD INVESTMENT ALONG WITH THE OTHER MAGAZINES THAT HAD GONE UNDER. I AM VERY SORRY TO HEAR OF ALL THE TROUBLES YOU HAD AND READILY SEE WHY THE MAGAZINE WAS DISCONTINUED. I AM JUST PLEASED THAT YOU WERE ABLE TO CONTINUE ONCE AGAIN. PLEASE CONTINUE MY SUBSCRIPTION. PERSONALLY I PREFER THE LARGER FORMAT OF THE MAGAZINE. WITH ADVANCING YEARS MY EYESIGHT ISN'T WHAT IT USED TO BE AND FIND THE LARGER PRINT EASIER TO READ. BUT WHATEVER FORMAT I'LL KEEP READING IT. I FOUND THIS ISSUE INTERESTING AND AM LOOKING FORWARD TO THE NEXT ISSUE.

BEST WISHES,  
RUSSELL REDMAN

*Thankyou Russell for the letter. CPU will remain in the 75% format for the time being as this is the least expensive way of publishing CPU. We will use a larger point size font starting with this issue so that should make CPU easier to read.*

-Tom

CPU Editor,

I opened a manila envelope that I had received in the mail about two weeks ago, and lo and behold to my utter amazement there was a new issue of CPU Magazine. I was totally flabbergasted! After long ago having written off the money for the subscription as having gone the way of other monies laid out for magazines or products that seem to simply disappear off the face of the earth, for one reason or the other; I was totally amazed to hear from you again.

Thanks for restoring my faith in humanity. I enjoy reading your magazine very much and intend to subscribe to CPU as long as you want to publish it. By the way issue #4 looked pretty damn good for being produced on a C-128.

Good luck and best wishes!

Sincerely,  
Dennis Krall

PS: Looking forward to more issues!!!

Dennis,

*It does my heart good to know that we have restored your faith in humanity! Thanks for the vote of confidence that you have given us, it is not to go unrewarded. Starting with next issue CPU is going bi-monthly and we are striving to bring onboard more writers and to get more programs published. And FYI all issues of CPU are published using a C-128. This issue is Laser printed using Adobe Postscript and PS Processor by Jim Collette. I hope you enjoy it!*

-Tom

Dear Sir,

I was surprised to see a new issue of CPU ... welcome back! Continue my subscription and the "full format" is fine. May 9, 1998 I attended "EXPO 98" by the Lansing Area Commodore Club and saw a demonstration of "Wheels" by Maurice Randall.....it beats "Windows 95"!

-J. Masters

*Its true, alot of people were surprised to see us return. As for Wheels check out our review of this totally awesome upgrade to the GEOS 64 system. We here at CPU believe that Wheels is the new standard for Commodore users. I'll tell you what, Wheels on a Commodore system that is equipt with a Ramlink and SuperCPU cannot be beat. Wheels has breathed new life into our computers!*

-Tom

Dear Sirs,

George Buffum died Dec. 14, 1997. You do not need to send anymore literature to him. We do have his computer and many extra parts if anyone is interested. Contact Robert Buffum at 4456 S. Washington St., Englewood, Colorado, 80110. Telephone number is 303-789-1265.

Thankyou very much.  
His sister in law,  
Georgia Buffum

*We are very sorry to hear of George's passing. We have provided the address and phone number so that our readers that are interested in obtaining the computer equipment may do so.*

-Tom

# Jim's C=orner

## with Jim Butterfield

### In Defense of "Classic" Computers --Jim Butterfield

A recent thread in one of the internet newsgroups got my dander up a little. It shouldn't have. People laying out a few thousand dollars for a new computer are often convinced that anything more than two years old must be useless. So when I saw a suggestion that nobody could do anything useful on an old computer, I just had to butt in. The term "retrocomputing" was used; it may be a good one if it's not used as a put-down.

I'd better say up front that leading edge computers can do splendid things. They have great capability in the areas of computer power, storage, and communications. My objective was not to put down the new machines, but to defend those of us who still enjoy the traditional 8-bit machines. I hate it when people hint, "You must be using an 8-bit machine because you're too poor to get something more modern". Wrong, wrong, wrong.

Of course, in defending the classic machines, I did slip in a few items where the newer technology is uncomfortable, clumsy, and even occasionally counter-productive.

Here's what I said, with more detail added. A previous poster had said: "What exactly are the joys of

retrocomputing?" So I dived in along the following lines:

1. Speed, convenience, and versatility. 8-bit machines such as those sold by Commodore, Apple, or Atari are ready to go within a second or so of power up. A quick calculation or data reference can be obtained before the newer generation machine is halfway through its boot sequence.

On a Commodore 8-bit machines, you can just type PRINT 3.8 \* 4.7 and get the answer right away. It sometimes seems a step backward to find that, on newer machines, you have to load a calculator before you can do this sort of

thing.

*"So when I saw a suggestion that nobody could do anything useful on an old computer, I just had to butt in."*

I have some affection for the accuracy of 8-bit machines, too. Numbers are calculated to about 10 digits of accuracy (and typically displayed as

8-digits). You can do your income tax calculations quite nicely in Commodore Basic, unless your income is in the millions. But when you switch to big machine Basic, you'll find that you need to take special precautions or your accuracy drops to about 7 digits (with 6 displayed). I don't want to get too technical on you, but the reason for this is that Commodore Basic holds floating point numbers in five bytes of storage; the bigger machine Basics have a fixation on "long words", and will try to cram the same numbers into four bytes, unless you carefully explain to them that you need more.

2. An environment that is generally viewed as being more creative. On these classic machines, you were encouraged to write your own programs.

The newer generation wants you to go out and buy Visual something, and/or register as a developer; even then, there's quite a hurdle before a user can learn to make anything happen on the machine.

8-biters still love to write their own stuff, or modify programs that were previously written. They swap programs and swap notes. They have fun, a commodity that seems to be less common on the newer machines.

Hey, the machine says "READY". Makes a lot more sense to me than the cryptic "C:>" or a bunch of little pictures. Bring in a program, and you can usually LIST it. If you feel adventurous, you can try changing something and see what happens.

You can program a PC using @basic; but that's an MS/DOS thing; and with the Windows juggernaut in full operation, it seems weak. For programming on the leading edge, you must buy a language system (Visual this-or-that); and, to do anything advance, you should also register as a developer. Much less fun than just diving in.

3. A stable environment. On a "classic" machine, you're not going to worry too much about needing to upgrade every year or two. Or, for that matter, learning how to use the newest upgrade. On the other hand, you might need to keep spare parts for your old machine, just in case.

It's true, of course, that there are enhancements still coming for the classic Commodores. But we all share the joy of having the same machine to swear at. And there are few social distinctions. In the PC world, you can run across status-symbol arguments: "I have a Pentium II with 32 megs, and you're still limping along on a 486 with 8 megs and no CD-ROM drive!" I'm sometimes tempted to say, "If you're so rich, why aren't you smart?" I usually respond in a laid-back fashion: "Gosh, I guess you can type so much faster on your Pentium than I can on my 64!"

I also see a number of "upgrade bumps" in the newer technology machines. "I tried to replace my 1G hard drive (it's full .. gosh, I don't know what all that stuff is). Anyway, I put in an 8 gigabyte unit, and it's not behaving right ...". Or try this one: "I just bought a new 24X CDRom drive, but it seems to be incompatible with my sound card, and I'm getting messages that there's an 'interrupt conflict', whatever that is". It doesn't sound as if these people are having any fun at all.

4. A system that doesn't crash inexplicably from time to time, and won't call for "reinstallation" when it does.

Users of classic Commodore machines don't have to worry about viruses. It's interesting to see how users of the bigger machines are often paranoid about viruses. Maybe they are just a good excuse to explain away system crashes.

In fairness, many users of new technology machines never have crashes. Most often, these are people

who have a fixed set of applications (word processing, spread sheet) and don't need to "meddle" with their system. Others seem to have systems that fall down every couple of months, and call for system reinstallation when they do. They keep their boot disks in plain view.

Sometimes it's a great relief to have you're operating system in ROM. A quick touch of a push-button or a switch, and you're back in business.

5. A lively and interested user community. You might be amazed to see the intercommunications of the various group members.

They probably would be. We're a curious and committed lot. And we snoop and investigate our machines, and try out new things. In contrast, new technology groups seem to spend most of their time discussing what to buy, or calling for help because their system has crashed again.

6. Economy.

Secondary to some of us, important to others. But it's seldom the dominating factor.

Afterthoughts:

My main message is this: don't let the newest-and-greatest crowd give you an inferiority complex. Your classic computer is perfectly respectable; anyone who knocks it just doesn't understand what it's all about.

You should be enjoying your computer, whatever it is. I'm dismayed

when I see users who do not enjoy their machines, but who view it as a hostile device. As I said at the end of my newsgroup posting: There's room for all of us, and for a wide variety of platforms.

C=

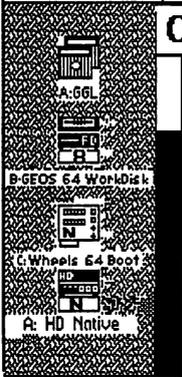
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## C: geoHELP



## Crash Repair

by Maurice Randall

There's nothing more aggravating than to be in the middle of a project and your machine suddenly decides to take a 'BRK'. That pun was intended. The BRK (pronounced break) instruction is a machine language instruction recognized by our 6502 series processors. When you're computing along and the processor in your computer encounters this BRK instruction bad things can happen. The worst that can happen is you might lose all the work you just performed.

Let's say you're working on a geoWrite document and all of a sudden a dialogue box pops up with that awful message "System error

at" along with some other information that is meaningless to most people. The only time you'll see this dialogue box is when the BRK instruction is encountered. In a properly written GEOS program, this shouldn't happen. We need to reboot the machine now and fix this problem. So why did it happen while using geoWrite, or any other program that you might normally use in GEOS?

There's two possible answers. Either something is wrong with your copy of geoWrite, or something is wrong in some part of the GEOS operating system. Maybe geoWrite just performed an operation that called upon the offending routine within the operating system. The good news is you probably only lost the new changes you made to the page you were working on. When you change pages in a geoWrite document, the current page is updated to the disk before beginning the new page. So, you haven't lost the

entire document fortunately. If this seems to happen with other programs and not just geoWrite, then you might want to suspect the operating system. How do we fix this so it doesn't happen again?

Before we can determine the repair, we have to take a look at our setup. As you know by now, we can have many different setups in terms of the computer and all the equipment attached to it. Let's hope the problem is simple. Maybe we've just got a bad copy of geoWrite. That's easy enough to fix, just get a disk that holds a good copy of geoWrite and recopy it to the disk or CMD partition that was holding the copy we were working with. If the problem lies in the operating system, the fix is going to be a little tougher, maybe. If you're using RBOOT to always get back into GEOS because you have a battery backed ram system, then maybe this is the time to reboot freshly from disk. The portion of the operating system stored in the

ram will be replaced when you do this and the problem will be fixed. However, if the problem is actually on your boot disk, then it isn't going to go away at all. You'll have to keep this in mind if you still have the crashing problem.

Always try to think of all the possible things that might be the source of the trouble. What have you done differently that might be giving you these problems? It always worked so nice before, but keeps failing now. Did you add something to your system? Did you run a program recently that you haven't used in a long time? Maybe you recently used a program and every time you use it you start having problems. Think of what the cause might be. Sometimes it's obvious, but most of the time you have to really think about it. Usually it's real simple to fix once you know the cause of your trouble. When you get to the point where you just can't seem to find the source of your problem, try eliminating a few things. Maybe you've just got a corrupted disk with files being overwritten by other

files. This can really goof things up. If there's nothing on the disk important, or if you've already got good backups of everything on the disk, then just reformat it and refill the disk with the files you want.

### FINDING BAD FILES

How do we tell if we have corrupted and overlapping files? Many times validating will reveal this. Try validating the disk from within GEOS. If the validate routines find a bad file, you'll get some sort of an error report and the validating will stop. The disk is not fixed at this point, you're just being warned that it has a serious problem. If validating fails, you might actually be better off than if the validating succeeds. I know that doesn't sound right, but sometimes validating can get all the block allocation corrected but still leave a bad file with errors in it on the disk. Validating can't fix everything. But if validating fails, at least we can now fix it ourselves.

This might take

awhile, but if you want to fix it you gotta do it. Begin by filecopying every file to another disk. If any of the files fail to copy, then you can suspect that file to be part of your problem. You'll have to delete the bad file at this point. Try filecopying the remainder of the files now. Once this is done, you've at least saved the files that could be saved, so far. We still don't know if every file we just copied is ok or not. We need to find the bad files and get rid of them. If you've already deleted one or more bad files that couldn't be copied, do the validate again. If validating succeeds, then we've found all the bad files that we could with filecopying and validating. These two operations are capable of finding certain errors, but not all errors.

If validating still fails, it's time to start deleting suspect files. Start by deleting an application that you can easily replace such as geoWrite. Now validate again. Keep on deleting a file and validating until the validate is successful. At that point, the last file you deleted was definitely

bad. But here's another problem. What if you had two or more bad files and the other bad file was already deleted when you finally deleted the second bad one and got a good validate? You may have deleted a bad file without knowing it was bad. In any case, we know of at least one bad file that was previously filecopied to another disk. You can delete that file from that disk or try other means of repairing it if it's an important data file. If it's just geoWrite, get rid of it since you have a good copy somewhere, right? Keeping frequent backups of your important work is mandatory. Don't get caught with 8 hours of wasted work. It's very frustrating to have to go back and redo everything from scratch.

#### FINDING AN OS PROBLEM

If your corruption is within your operating system, you may or may not have big troubles. If you've been booting up GEOS from your original GEOS System disk, shame on you! Creative Micro

Designs has a nice utility called "geoMakeBoot" that makes boot disks for you. The added advantage of this utility is you can create boot disks for your 1581 or FD drive or even your RamLink or HD. No GEOS user should be without this.

If your original system disk is bad and fails to boot, you know for sure the disk is bad. But it might boot up ok and then give you troubles after bootup. In this case a little detective work is needed. Get your backup system disk and boot from that. If your problems go away, you know you have a bad boot disk and from now on you'll have to use your backup system disk. Now you better order geoMakeBoot for sure before you ruin your backup disk. You have to be able to boot up GEOS in order to use geoMakeBoot. Order it now before it's too late!

If you are one of the smart ones and have been using boot disks that you made with geoMakeBoot, try booting from another disk and see if you still have problems. However, if this disk is a copy of

your problem disk, then you might still have trouble. In that case, get your original GEOS disk out and make a new boot disk with geoMakeBoot. Then test again. Hopefully you've fixed the problem. If booting from new boot disks gets you nowhere, maybe the problem is somewhere else.

#### FINDING BAD HARDWARE

Finding a problem with your hardware can sometimes be a challenge. Just like we did when we suspected a bad file, let's start suspecting bad hardware and get rid of it. Is your RamLink giving you trouble? Disable it and boot up from a floppy or the HD and see if the problems go away. If you normally boot from your RamLink, read the previous portions of this article and redo your RamLink partition. Keep a backup of your RamLink partition in case you have to restore it. This is the easiest way to fix the problem. CMD's MCOPY program (outside of GEOS) can copy a whole disk to your RamLink partition.

When you know you have a working boot partition on your RamLink, make a backup of that partition with MCOPY to a floppy disk or to a partition on your hard drive. You won't be able to boot from that copy, but you'll be able to recopy it back to the RamLink partition if the need ever arises. Here again, I'm stressing backup, backup!

It's so much easier to make a whole disk backup of the partition than it is to recreate it from scratch. You might forget how you did it the first time and will just be in for a lot of work and frustration.

Disk copying is simple. Creating from scratch is a pain. This isn't saying that your RamLink is a source of trouble, but there are things happening that might not be readily obvious. Let's say you just added a SuperCPU to your system. When you disable the SuperCPU and run a program from your RamLink, you might be in for trouble. Did you install that jumper wire? You better do it to be safe. The SuperCPU can control the RamLink without

the jumper wire since the RamLink is mostly controlled entirely from the SuperCPU. But when you disable the SuperCPU, you're now relying on all the signals to the RamLink to pass back and forth through the SuperCPU. Some critical signals may be a little bit weaker than they should be. I don't know all the technicalities of this, but without that jumper wire, you might corrupt portions of your RamLink while using it with the SuperCPU disabled. What will get corrupted? Your files of course.

You'll discover the bad ones when you try using them. And it might all be because you used the RamLink one time without the SuperCPU being enabled. Do it right and it'll work for you. Printer interfaces can be trouble. But usually they just lock up the serial bus. Your computer will seem to just stop instead of actually crashing. But unplug the thing anyway while you're trying to figure out where your problem is. A drive can be a source of trouble. The drive itself might not be

a problem but maybe the software that controls the drive is. This would be the disk driver. Disable or turn off one drive at a time until your problems go away.

If all of a sudden your troubles disappear when one of your drives is out of the system, then you can figure out why that drive gives you trouble. If you suspect the disk driver, then you might have a bad copy of Configure on your boot disk. Delete Configure and filecopy a good copy in it's place. When you delete a file that is suspected to be bad, like Configure, it's a good idea to validate the disk before you put a new copy on it. Remember the discussion with overlapping files? Delete Configure then validate to fix the file that might be overlapping Configure and then reinstall a new copy of Configure. If you don't, you just might add to your troubles somewhere else without realizing it right away. This can happen with any bad file. Always delete the bad file, validate, and THEN put a new copy of the file back on the disk. It's ok to recopy over a good file,

but not a bad one. You never know what problems you might be creating for yourself.

## SUMMING UP

In reality, this article just barely scratches the surface on locating problems. This is a very challenging subject at times and can really make your life miserable. It's nice when we don't have any problems at all, but anything can happen and it always happens at the wrong time. If you can figure out your troubles on your own, then you'll feel proud of yourself. Remember certain things. Your system always worked before, so why is it giving you troubles now? Figure it out, there's a solution somewhere. Don't just keep on using a system that's giving you a problem. Fix it. What have you done recently that might be the problem.

It'll be obvious when you figure it out. If you get completely lost, don't give up. Someone nearby may have had similar problems. Perhaps you can find an online source to post a message of help. Maybe

you belong to a local user group and someone in the group might be able to help. The best thing about this is when you finally do fix your problem, you might have enough knowledge to help the next guy. Your own experience can really be a benefit to others. Share that knowledge, that's what this computing business is all about.

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## **CPUviews**

**Software For The Discerning GEOS User.**

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Bo's Excellent Archiving Program or geoBEAP for short is the name of a GEOS utility that comes on Loadstar #145. Bo Zimmerman is the programs author. He has a few other GEOS titles available on various Loadstars. GeoBEAP is a unique little piece of software that fills a niche or gap in the Commodore community.

The Commodore 64 is

still a very popular computer with literally thousands of files and programs available for it. Well PC users that cut their teeth on the Commodore 64 still enjoy all those programs by using an emulator on their PC's. These emulators use whole 1541 disk images and as a consequence most, if not all C64 programs available are archived in this way to make them compatible with the emulator software. The problem for us C64 users is that we had no way of using these .D64 files....until now that is.

Thats right, geoBEAP allows Commodore 64 users to unarchive these .D64 files onto 1541 disks. As the name implies geoBEAP runs under GEOS. You will need GEOS 2.0 for C64. GeoBEAP has some major design flaws in that it will not run under GEOS 128 2.0 nor does it seem to function properly under any of the alternative desktops. This includes Wheels 64. geoBEAP will not work under Wheels. The author Bo Zimmerman has stated that he has no plans to make any of his GEOS titles Wheels compatible. This is too bad and seems very close minded. Wheels 64 is a major upgrade to GEOS and is fast becoming the new standard.

By not supporting the new standard it seems that few people will use his software. And I must say it

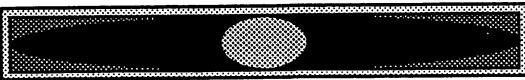
*Continued on Page 17*

# CPU INTERVIEW

## A CHAT WITH MAURICE RANDALL

CPU requested the following interview with Mr. Maurice Randall before we had learned that the Loadstar Letter had already published one of their own. CPU has not seen Loadstar's interview, so it is hoped that there will be sufficient difference as to keep this particular one interesting. For those of you in our readership that do not know who Maurice Randall is, the following dialogue should help introduce you to this unique person and his unique programs. Read on and enjoy!

-Ed.



**CPU:** Was Commodore your first computer?

**MR:** Yes, in January of 1983, I bought a VIC-20 from the local Meijer's store in Lansing, Michigan. Back then you could find Commodore computers just about anywhere, especially the VIC. The 64 wasn't booming just yet. I paid \$149 for that VIC. I had a portable color TV that I could use it with and it actually made a very nice display. After studying it a little, I realized I didn't know much about it. I

also found out that any of the example programs I typed in would be gone the next time I turned the machine on! The next day, I went back to the store and bought a Commodore Datasette to store stuff on.

**CPU:** What got you interested in programming?

**MR:** It was that VIC-20 that got me interested. It had BASIC built in and I learned how to write programs in BASIC. I think the first software package I bought was a BASIC training program that came with a manual

and a programming course on several cassette tapes. These weren't audio tapes, they went right into the Datasette and contained example programs that you followed during the course. Now, whenever I needed the VIC to do something, I could create a BASIC program for it.

**CPU:** Did you have formal training in ml programming or are self taught?

**MR:** I've never had any formal training in anything that I do. I've always been a self learner. If I couldn't figure something out for myself, I'd find a book or a magazine that I could study on the subject. The book I first used to learn ML on was an Abacus book called "The Machine Language Book of the Commodore 64". And believe it or not, my first experiments were on paper! I would actually write the code out and visualize what was happening in my head. Of course, this was just small stuff, but it helped me to learn. But I never really did much ML programming with that VIC, mostly just BASIC. It wasn't until I got a 64 that I got into ML.

**CPU:** When did you get interested in GEOS?

**MR:** In the summer of '88, I bought my first 64. Yes, I used that VIC-20 for over 5 years until I got the 64. Actually, it was in June of '88 that I bought a 1541-II disk drive first. Man was that fast! Any of you that think a stock 1541 is slow, just get used to using a tape drive for 5 years and then get your first 1541, you'll be amazed. Here I was, accustomed to loading and saving programs on tape. You turn on the VIC and load a program from tape and 10 or 15 minutes later, you're ready to go. The 1541 was outstanding by comparison. Now I was hooked. A month later, I was looking at a brand new 64C in the stores. I couldn't resist and bought one. And guess what? It cost me \$149 just like the VIC did. Imagine all the people that paid \$595 for the 64 when it first came out. GEOS V1.3 came with the new 64C

and so I tried it out. But I wasn't very happy with it. It just didn't seem like anything I wanted to mess with. I didn't see the point in it. Keep in mind, this high-speed 1541 I had was the only storage device that was compatible with GEOS. I quickly got tired of all the disk swapping when loading an application. I just brushed it off and went back to what I was doing. Shortly after buying the 64, I began work on an invoicing program that I could use in my business. I was also buying Loadstar off the newsstand. I thought it would be a good program to submit. Sure enough, they liked it and published it in Loadstar #66. I later took it and upgraded it and called it "Invoice Writer II", and offered it for sale commercially. It wasn't a big seller, but it showed me that there were some people out there that might be interested in the software that I create. I still use it myself and occasionally I get a request for it. Heck, it's only \$10. I've never changed the price of it. It's actually a shareware program, but registering gets you a disk along with a printed manual. Getting back to an earlier discussion, Invoice Writer was my first major experience with ML programming. The bulk of the program is written in BASIC. Some of it just wasn't fast enough in BASIC, so I wrote about 4K of it in ML. I bought my first assembler program from a local store to write the ML portion of the program. It was "Assembler 64" by Abacus.

**CPU:** What compelled you to start programming in GEOS?

**MR:** Probably the same reason I wrote software for the VIC. I started to take an interest in GEOS itself after I bought a 1581 and a 1700 REU. I had upgraded the 1700 to 512K and found that GEOS really wasn't all that bad once you got some decent hardware to handle the increased overhead of the OS. I don't recommend anyone with a single 1541 to even think about trying GEOS. It's the quickest way to hate GEOS! Anyway, I was on Q-Link at the time and I frequented the GEOS arena, reading messages from other people. I had a Star NX-1000C printer that worked nicely in GEOS, but I noticed that

many people were using 60 dpi printers in GEOS. The Star printer I had could do 60 dpi by emulating a 1525 printer or it could do 80 dpi and higher by emulating an Epson printer. The problem with a 60 dpi printer was that you couldn't print as many dots wide on a page as you could with an 80 dpi printer. GEOS printing was based on 80 dpi horizontally. A GeoPaint image was 640 dots wide. Since a 60 dpi printer could only print 480 dots wide, you always lost the right hand side of your GeoPaint image. This was fine if you wanted to print out your own images. You just don't put any data on the right side when creating the image. However, people were downloading GeoPaint files from QLink that others were creating and they couldn't print the right side of the page. And the first 480 dots that did print always appeared stretched out. So, I figured, why not take these 640 dots that get sent to the printer driver and scale them down to 480 dots? I figured it could be done and so I went and bought GeoProgrammer from a local software store. (It sure was nice to be able to go into a local store and find GEOS software on the shelf.) I learned how to do a little bit of GEOS programming and ended up with my very first GEOS creation. It was a printer driver called "1525-80dpi". I was able to test the driver on my Star printer in its 1525 mode. I surprised myself seeing this actually working and was amazed that it only took me 3 days to create that printer driver. I was hooked on GEOS. That driver received a good many downloads from QLink. I think it's even still popular today.

**CPU:** One question that I must ask as I have been waiting patiently for years now; will Finally! ever see the light of day?

**MR:** That's something I've learned to be quiet about. We might still see this happen eventually, but I can't say for sure. I've been working on what might be a small portion of Finally! which is a program called "PostPrint". This is now available from Dale Sidebottom and an enhanced version is now in the works and is actually being tested now. We can use it to send JPEG images to a Level 2 PostScript

printer. It has a preview mode for placing the JPEGs onto the page. This works great along with GeoPublish. The only thing is that you have to run the paper through twice. Once for the JPEGs and once for GeoPublish. But it works great. Dale and I both have the new Sony Mavica camera that saves its images on its own built-in disk drive as JPEG files. Using Little Red Reader and an FD-2000 and the image is now on a Commodore disk. From there we can print the images with PostPrint. As for Finally!, just keep in mind that it's all the little stuff like PostPrint that eventually end up as a much larger and more advanced program. Someday.

**CPU:** About 2 years ago you indicated that you had a demo of Finally! if so, can you release it for public consumption?

**MR:** The demo never got finished and I don't plan to do it right away. I don't think it would be a good idea at this point, at least not until the software gets closer to a usable state.

**CPU:** I don't want to put you on the spot, we all know that you have a family, a full time job and write and program for CMD, after you finish Wheels 128 and possibly Finally! what are your long term goals for the GEOS/Wheels operating system?

**MR:** Well, to start with, I've taken GeoProgrammer and completely revamped it. I want to make a programming package that can help encourage other programmers and potential programmers to get interested in writing software to run in Wheels. Plus I intend to continue working on The Wave. This will be made available for free downloading as it evolves.

**CPU:** As the worlds premiere GEOS programmer you have taken upon yourself quite a burden, what can we Commodore users do to keep you continuing to produce world class software for our computers?

**MR:** Don't give up. Stay hooked on these Commodore computers. I know the glitz and glamour of all the Windows craze attracts

many people to other platforms. But don't let that stop you from using your Commodore. There's room for these old machines yet.

**CPU:** What advice would you give to those that are interested in GEOS programming?

**MR:** Get GeoProgrammer as well as any and all the ML programming books you can find. Study these books and learn machine language. It's the best way to write GEOS and Wheels software. CMD still offers the two most needed publications for GEOS programming also. These are "The GEOS Programmer's Reference Manual" and "The Hitchhiker's Guide To GEOS". Get both of them. And then when you're ready to write software for Wheels, I should have my programming package ready to go.

**CPU:** Ok, we're starting to wind down here; Wheels is an excellent upgrade to the GEOS operating system. It seems to be a natural progression of the OS, a maturing of sorts, certainly you had planned this way?

**MR:** There really was no planning of Wheels at all. It just happened. And it developed as I went. Everyday I would see something else that I wanted to add. It really fell together nicely. Almost everything I do is with the seat of my pants. Somehow, my projects always work out.

**CPU:** On the subject of Wheels, can you give us a hint at when you expect to have the full blown version available?

**MR:** As far as a full-blown version, the current one is complete enough. But Wheels 128 will be ready late in October and the next release of the 64 version will be ready shortly afterwards. Naturally, some of what goes into Wheels 128 will trickle down to the next release for the 64. And with enough interest, I'll keep on developing the software for many years to come. How about a version specifically for the SuperCPU? That could be a very powerful package that would really open the door for many new applications that were never before possible.

☺

# CyberSpace Cowboy:

What makes the ol' Cowboy hanker for the WAVE is the fact that I wont have to exit the Wheels/GEOS environment just to get online. And with a graphical Web Browser in the works I can catch the WAVE and surf the Internet right into the 21st Century.

-CC

## CPUviews: geoBEAP

is very annoying to have to bootup GEOS from the 1541 just to use geoBEAP. You could make a boot disk using geoMakeBoot from CMD on your hard drive or Ramlink. You will need a 1541 or 1571 disk drive to write to. GeoBEAP requires two drives to function.

Jeff Jones on Loadstar said that he couldnt get geoBEAP to recognize his FD-2000. He plugged in an REU and configured it and geoBEAP worked. I had this problem also. My system is a 128D and when I ran geoBEAP a dialogue box would come up saying that geoBEAP requires a two drive setup. But I had a two drive setup! The 1571 and the FD-2000 running as a 1581.

GeoBEAP just wouldnt run properly. So I copied configure 2.1r to the boot disk and configured GEOS to recognize my Ramlink as drive C. So with three drives on the system I double clicked the geoBEAP icon and sure enough I got source and destination directories, even on the FD. I dont think it has anything to do with geoBEAP not recognizing the FD, geoBEAP seems to actually need three drives to work but only two are used.

Once you get past geoBEAP's flaws and shortcomings you'll be happy to know that it does work. And it works well. I have dearchived numerous .D64 images back into

there individual files without any problems. GeoBEAP also lets you create .D64 files for uploading and or sharing with your PC friends. GeoBEAP also offers its own native archive format known as .BEP. One other thing worth mentioning, you must have a preformatted disk to use with geoBEAP as it does not format during the unarchiving process.

As a C64 user you are bound to come across .D64 files on the Web. Now you can download these and use them on your Commodore thanks to geoBEAP. it fills a gap, albeit annoyingly. Hopefully Bo will see fit in the future to update this potentially great little program. GeoBEAP is available on Loadstar issue #145 from J&F Publishing as a back issue for \$7.95. Along with geoBEAP is numerous other goodies. Call 1-800-831-2694 for ordering.

**Editors Note:** *Bo Zimmerman has indicated on Delphi recently that he will make geoBEAP Wheels and GEOS 128 compatible. He also indicated that Loadstar will acqtre this upgrade as geoBEAP belongs to them. This is good news. In the mean time a program called GeoConvert-98 on Delphi in the GEOS Library supports UUencoding and .D64 files and runs under GEOS 64 and 128.*

## geoSHELL

geoShell is a command line interface or CLI for those of you who do not know what geoShell is. Of course it runs under GEOS either 64 or 128, 40 or 80 columns. geoShell allows the user to navigate around their system with a speed never thought possible before.

DOS commands are typed in and executed upon hitting the return key. Files can be copied, renamed, deleted, scratched or whatever DOS allows. The function keys can be programmed to

perform various tasks and keys can be assigned functions for single key stroke commands.

The geoShell screen colors can be manipulated to suit the user's taste, and preferences saved and recalled upon boot up. A file called *getShell* placed on every drive and in every partition gives the ability to have the geoShell files on only one drive.

geoShell boasts well over 100 commands a dozen of which are new and specific to the Wheels operating system. geoShell is currently at version 2.2, and a 3.0 version has been hinted at by Maurice Randall geoShell's creator. geoShell comes with a professionally well written manual that explains its usage and commands in precise detail.

*geoShell is available from:*

**Maurice Randall**  
**P.O. Box 606**  
**Charlotte, MI. 48813**  
**1-517-543-5202**

**Creative Micro Designs**  
**P.O. Box 646**  
**East Longmeadow, MA. 01028**  
**1-800-638-3263**

geoSHELL sells for \$24.95 plus shipping and handling.

## **geoFAX**

The first and thus far only way to send and receive faxes with a Commodore 64 or 128 computer. geoFAX is compatible with GEOS 64 and GEOS 128 v2.0 as well as Wheels 64 and

128. geoFAX is currently at version 2.1 which fixes a few problems that v2.0 had such as:

- \* Auto answer failed to answer more than one call.
- \* Tone/pulse did not save as default.
- \* Filecopier failer.
- \* Slight performance improvement.
- \* Hardware flow control now supported.
- \* Handshaking sequences improved.
- \* Timing improvements made for the SuperCPU running in Wheels.
- \* Stop key now halts an outgoing geoFAX document.
- \* Many other improvements.

geoFAX comes with well written documentation on disk ready to be printed out. Print it out and assemble the manual yourself. The thing that I like about geoFAX above all else is that you can use your FAX machine as a full page graphic scanner. With a 64 greyscale FAX machine you can scan into your Commodore some highly detailed images. These images are saved as FAX images but can be converted to Geopaint documents for your own use. geoFAX even includes printer drivers to allow you to printout the unconverted FAX document if you so desire. There is also a screen driver that will print the image directly to the monitor screen.

geoFAX is a must have to all GEOS/Wheels owners who are into importing graphics and into faxing them to others! geoFAX can be purchased from Maurice Randall or Creative Micro Designs for the sum of \$39.95 plus shipping and handling.

## **NewTools 2**

NewTools 2 is a graphic and text manipulation accessory that allows the user to alter geopaint images. Basically NewTools 2 is a toolbox extension. Because it is a desk accessory it can be run from any application but is programmed specifically for geopaint or geocanvas. Running it in anything other than geopaint or geocanvas can and most likely will lockup your computer.

NewTools 2 will work on both the C64 and C128, 40 and 80 columns. NewTools 2 allows you to create arches, arcs and to shift selected regions up, down, left, right. To slant at 45<sup>0</sup> angles, to slant from different directions, to shape into arrow points and a plethora of other options. Some unique and interesting effects can be achieved with NewTools 2 that cannot otherwise be accomplished short of pixel editing in zoom mode.

NewTools 2 is by David B. Ferguson & Quincey Softworks who no longer supports the software. However Creative Micro Designs sells NewTools 2 on a disk with two other Quincey Softworks titles, DweeziLabel 128 and Big Stamp. The disk is called Dweezils Greatest Hits and it sells for \$30.00 plus shipping and handling.

## **BigStamp**

BigStamp is another one of those wonderful Dave Ferguson GEOS programs. In essence BigStamp allows the user to capture printshop sized areas of your geopaint graphics.

The captured images then become stamps and can be placed anywhere in the document in any combination in any pattern. Your imagination is your only limit.

The program allows the user to save their stamps in an album for future usage. One could stamp a border around a geopaint image to spruce it up for example.

BigStamp will run under both GEOS 64 and 128, 40 and 80 columns. It is also Wheels compatible. BigStamp is available on the Dweezils Greatest Hits disk from Creative Micro Designs.

## **DweeziLabel 28**

DweeziLabel is the answer to the GEOS users question; Is there not a decent labeling program for GEOS?

DweeziLabel allows the GEOS user to create text as well as graphic labels or a combination of both. Labels maybe printed on any kind of printer...even a Laser printer.

DweeziLabel supports mailing lists and different label formats and sizes. You can print one large 8.5x11 inch label or a page full of three across by ten down.

DweeziLabel is very flexible, I have even used it to create business cards. The program comes with thirteen pages of on disk documentation that completely describes DweeziLabels features and how to use them.

There is a C64 version as well as the C128 version of DweezilLabel. It is available from Creative Micro Designs on the Dweezils Greatest Hits disk.

## geoCANVAS

geoCanvas by Nate Fiedler is the geopaint substitute. At first sold as commercial software Nate released both geoCANVAS 64 and geoCANVAS 128 3.0 to the public domain. Nate is no longer supporting the software or the Commodore platform for that matter.

geoCanvas is quality software. It requires an REU or RamLink DACC partition to function. It supports full color...even the 128 version in 80 columns!

geoCanvas gives the user the ability to have up to three documents opened on screen at a time with one window active. This allows you to switch back and forth with just a click of the mouse button.

geoCanvas comes with some great utilities like ScrapCan. ScrapCan lets you clip entire geopaint screens into a photo scrap. FontCan lets import and edit fonts and PaintCan will convert geopaint documents to geoCanvas documents.

Other features include resizable windows, mega fonts for text, external upgradeable tools, full screen view, horizontal and vertical scroll and multiple resolutions.

geoCanvas is the must have replacement for geopaint if you are

serious about designing graphics in the GEOS environment. And the price is right...it is free! geoCanvas is available online or at a favorite BBS near you.

## C= Gazette HiLites

Commodore Gazette HiLites is a new Features column devoted to giving our readers that do not subscribe to the Commodore Gazette monthly disk a chance to see what they are missing. The Commodore Gazette is not affiliated with the now defunct Computes Gazette in any way. The monthly two disk subscription is put out by a dedicated young man by the name of Christopher Ryan.

The menu system is reminiscent of Loadstar and very user friendly. The 1541/71 or single 1581 formatted disks are crammed full of public domain software, graphics, SID files and articles.

The current issue as of this writing is Vol. 4/No.3/Issue 39 December 1998. Each issue contains Commodore Gazette files \* Kennys Corner \* Centsible Software List \* Utility Tunnel \* Education Center \* Games Galore \* Graphic Gallery \* Sounds of SID \* Home/Business \* Commodore Bundle \* Jim Green Public Domain Programs.

The Commodore Bundle section contains programs for the C-128, VIC20 and the +4/C16 computers. C-128: Astro Biorythm, IRA. VIC20: Samurai, Scramble. +4/C16: Pacer Man, Pothole Jumper.

Due to space constraints we can not list all of issue 39's features. Future **HiLites** columns will contain a complete overview of the two most current issues of Commodore Gazette.



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## Loadstar #165 Contents

### Star Copier '98

Thanks to Bob Markland, our handy file copier is fixed!

### Fission

This mouse-driven card solitaire is also one of Maurice's best.

### Mansion

Using Cameron Kaiser's WORLD MAKER system, John invites you into the Charles Mansion, where no good deed goes unpunished.

### Puzzle Page #165

Number-teasers, word-puzzles and brain-stumpers a-plenty! Plus, Knees' monograph on mystery mores.

### Legal Beagle III

Generate some more legal documents which you can customize for your own use.

### A Night On The Town

Take a musical trip from the quaint eateries of the outer city into the heart of darkness we call "updown".

### Room - 4k Contest Winner

A small demo that gives you a glimpse of what the world of DOOM is like.

### Twin Terrors

For one or two players, this exciting game offers 99 levels of jumping and shooting.

### Gershwin Jukebox

Eight memorable tunes by George Gershwin, including Rhapsody in Blue (in three movements), the three Preludes, and Swanee, made famous by Al Jolson.

### Quicksmith Music

31 songs by musicologist Dave, all converted into the QUICKSMITH format by Lee Novak.

### Clip Joint #2

A GeoPaint document chock full of attractive images just ripe for clipping.

### Geos Disk Tools

Ten tools for the Geos environment that will make your navigation faster and easier. All are well explained by our Geos Man About Town.

### Discovery

Your editor confronts another crisis, mourns a prolific C-64er, describes a new product, and introduces a Euro company.

### Jeff's Soapbox

Jeff mediates (or aggravates?) the battle of the operating systems.

## LOADSTAR LETTER #54

Bill Gates Attacked  
By Professional Pie

Wheels/GeoFAX  
Sweepstakes

Commodore 16-bit software on Loadstar  
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An Interview With  
Maurice Randall

## LOADSTAR

The Commodore Software Subscriptions

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By Lee Novak, Editor

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