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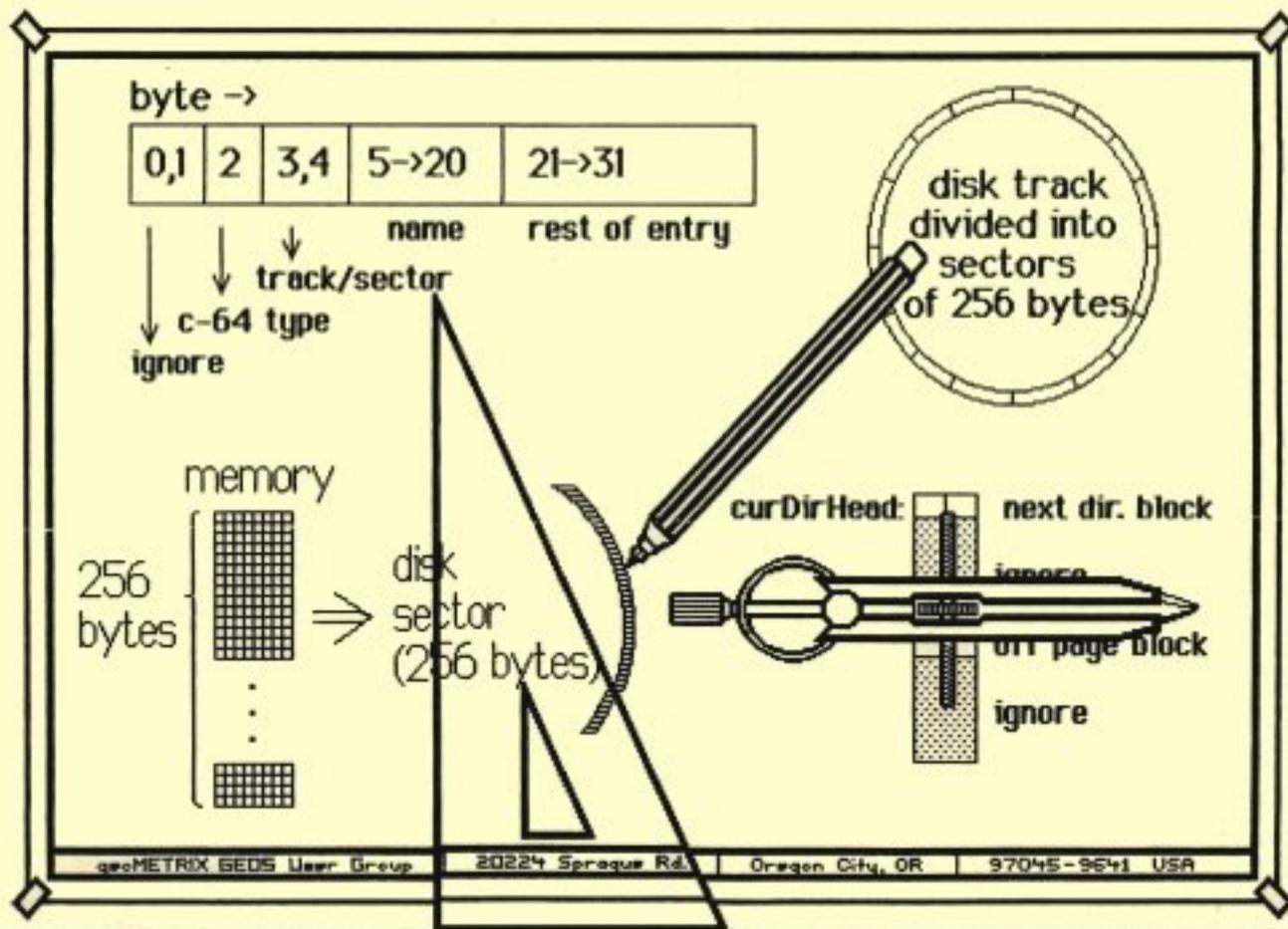
geoMETRIX

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**Some
Of What
Can Be Found
Inside**

**GEOS Directories
and a
NEW Language**

**A NEW
GEOS Group**



geoMETRIX GEOS User Group | 20224 Sprague Rd. | Oregon City, OR | 97045-9641 USA

Ken Nakatsu

**GEOS Upgrades,
Manuals & Prices**

**Win GREAT Prizes
in our Contest.
See Page 22**

THE FINE PRINT

geoJOURNAL

The **geoJOURNAL** is the newsletter of **geoMETRIX GEOS Users Group**. The **geoJOURNAL** is published approximately every 2 months and sent to all current members, subscribers and to various user groups through the Newsletter Exchange Program.

The **geoJOURNAL** is published and printed by **geoMETRIX GEOS Users Group**, on a **Commodore 128** computer, 2 **1581**, **Super Snapshot v5.22**, **M3** mouse, **1764** (512K) REU and a **1670** (1200 baud) modem using **GEOS v2.0**, **GeoPUBLISH v1.0(b)**, **GeoPAINT v2.0**, **GeoWRITE v2.1**, as well as many other fine **GEOS** products. **geoJOURNAL** is printed on a **Panasonic KX-P1091i** printer using an **MW-350** printer interface and an **Epson FX-80 DS** printer driver.

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geoMETRIX GEOS Users Group

geoMETRIX is a Portland-based, international **GEOS** user group.

MEETINGS

geoMETRIX GEOS Users Group meets on the 3rd Sunday of every month from 4:00 pm to 8:00 pm. Meetings are held at **Pietros Pizza**, 12222 S.E. Stark, Portland, Oregon. Come on in and visit us.

MEMBERSHIP

Membership in **geoMETRIX GEOS Users Group** is open to anyone that is interested in the use of **GEOS**. As a member you get a 6 issue subscription to the **geoJOURNAL**, access to the **BBS ENTERPRISE**, special 'Members Only' offers and access to the **geoMETRIX** Public Domain Library Collection.

YEARLY DUES

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LIBRARY

The **geoMETRIX** library is available for all members at each meeting or by mail. To help with the costs involved we must ask for \$10.00 in U.S. and Canada. \$20.00 in other areas. (U.S. funds only) All programs in the library are carefully screened to make sure all programs released to our members are in the **PUBLIC DOMAIN**. If for some reason a program is found not to be in the **PUBLIC DOMAIN**, please let us know, we will remove it immediately and notify the membership. If no copyright notices, names or dates are listed we disclaim all liability if later found to be copyrighted. If you have and **PUBLIC DOMAIN** **GEOS** programs, please consider adding them to our library for others to enjoy.

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Upcoming geoMETRIX Meetings

July 21, 1991
August 18, 1991
September 15, 1991

Portland geoMETRIX Meetings are held on the 3rd Sunday of every month at Pietro's Pizza on S.E. 122nd & Stark. 4:00pm-8:00pm

DISCLAIMER

geoJOURNAL on occasion publishes information relating to hardware enhancements, projects & techniques, and software patches.

Because of possible differences in quality and conditions of materials and workmanship as well as with various hardware and software configurations, geoJOURNAL & geoMETRIX GEOS Users Group disclaim any and all responsibility for the safe and proper functioning of reader-built projects or programs run based upon or from information published in our publication.

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EDITOR'S NOTES

Summer time is here. During this time not many are using their computers or are spending less time at the keyboard. I too find it hard to stay with my 128 to keep up with correspondence or weekend searches of Q-Link and other boards for GEOS information and new software for the geoJOURNAL. But for a good cause, I'll spend any amount of time at the computer. So here you have geoJOURNAL issue eleven.

I would like to point out a change we have had to make on the 'FINE PRINT' page. (Inside front cover) The change is in our policy of reproducing and using the geoJOURNAL and has come around because of a group that decided to take advantage of the old wording. Please note that the geoJOURNAL is a copyrighted publication and therefore cannot be reproduced, electronically stored, run, sold or distributed by others without the written permission of geoMETRIX GEOS Users Group. It is copyright infringement and theft when we have not given our OK. If you would like to use something from the geoJOURNAL, just jot us a note requesting what it is that you'd like to use and in what way and we'll get right back to you. The user groups that receive the geoJOURNAL through the Newsletter Exchange Program will receive along with this issue, a letter of permission outlining this policy and what you may do. We are more than happy to see the geoJOURNAL spread further across the world but only for the right uses and when proper permission is given.

This brings me to a topic that has been very common on Q-Link lately, and that is Shareware. Most of the programs we have coming out today are that of Shareware and the story is the same from one author and programmer to another. Of hundreds and some even thousands of downloads only a couple shareware donations have been received. This is not the way to treat our GREAT programmers. If they don't receive their (very small) shareware contributions, they can only surmise that what they are writing is not really wanted and will soon succumb to the temptation of upgrading to an Amiga or IBM style computer. And then we will have nothing. Now before you point your fingers at your editor, I admit procrastination in this area and have recently reassessed the programs that I have. I have sent off the requested shareware fee for those programs that I like and use, and for those I don't use I have passed them onto others that may have a need for them. Please support Shareware authors and programmers and help keep new GEOS programs coming out.

For those that would like to write something for publication in the geoJOURNAL or who would like to place an advertisement, we will run the next three issues'

publication deadlines in each issue in this column.

geoJOURNAL #12 July 21, 1991

geoJOURNAL #13 Sept 15, 1991

geoJOURNAL #14 Nov. 17, 1991

We are currently looking for articles and reviews of GEOS products and programs for the APPLE and ENSEMBLE users for a Special Issue in the future. If you use Apple GEOS or ENSEMBLE please consider writing something about your experiences or uses and send them in to us.

Be sure not to miss page 22 and the geoMETRIX Flyer contest. For more information, Contest Guidelines, and Entry Form send an SASE to us and begin your path toward some GREAT prizes from geoMETRIX and *TENEY Computer Express*.

We have received many questions as to what the code letter and number is, after their name on the mailing label. The last two geoJOURNAL issues (and this one) have a box explaining it in detail. But, I will explain it here. This code is not an account number. It is to identify when your subscription and/or membership expires. The letter stands for your status (M for Member, S for Subscriber, GEO for celebrity, and NEP for Newsletter Exchange Program.) The number is the geoJOURNAL issue that is or will be the last issue in your subscription and/or membership.

geoMETRIX meeting room provided by:

Pietro's Gold Coast Pizza

1222 S. E. Stark
Portland, Oregon

Meetings are on 3rd Sundays of every month
4:00 pm - 8:00 pm

Again, this month we have decided to not run the order forms for geoJOURNAL back issues or the geoMETRIX Public Domain Software Library because we are still not completely caught up with the overwhelming total of orders we received. As Pete said last issue, "we don't feel it's right to accept new orders until our backlog has been shipped." We are fast at work catching up on those orders we have already received and only then will we consider running the order pages again. If you are one that is waiting, hang in there. You won't be disappointed.

I was watching (for the first time) the movie Arachnophobia and found something very interesting. In the first hour of the movie where the new (young) doctor walks out of his office with his first patient, the camera leads them out and you see above a window the letters 'GEOS'. I know what it stands for in computer context but does anyone know what it means in this movie? Has anyone else noticed this?

And now, we are proud to give you the latest news and information on the GEOS front, with geoJOURNAL #11. Ken Nakatsu explains the cataloging system he used for the geoMETRIX Public Domain Software Library in this issue's **Reference Room**. Dick Estel gives us a list of GEOS font writers in his **FONTMANIA** column. For those that keep getting caught by those pesky little bugs called idiosyncrasies, the **BEGINNERS COLUMN** by Steve Wehner is the thing for you. This issue's feature presentation is an article by Hank Wilkinson of Anticipatory Design Sciences about GEOS disk directories and the new GEOS language called Brian. **Dir - GEOS Directories Using Brian 1.0** is an indepth look at this programming language and the make up of a GEOS disk with a sample instructing us on how to write a directory printing program. As always, you'll enjoy reading the latest **Rumor Column** from our Top Secret sources and catching up on the latest GEOS programs from Q-Link and elsewhere in our **GEOHIGHLIGHTS** pages, plus much more so read on and read carefully. Enjoy. ...Grady 

just saying a quick thank-you to our contributors to the geoJOURNAL, including Dick Estel, and Steve Wehner.

As I've said to several local folks, I imagine geoMETRIX to be, kind of like the settlers in the old west, pulling the wagons in a circle both for protection, and companionship. It's getting a little lonely these days out in 8-bit land, but here inside "the circle" I for one feel a lot better. even if Commodore and Berkeley (oops that's GeoWorks) totally leave the market, I think we'll all keep things moving forward for quite some time.

I hope by the time you are reading this, CMD has finally managed to release GateWay. I know this replacement for the DESKTOP will give GEOS another useful tool, and improve an already great operating system. On the same general subject, I cannot emphasize enough, how important it is to send GEOS programmers their requested shareware fee. It is the ONLY way we will keep these talented folks interested in producing programs for GEOS. I know many of these programmers feel the pressure to move on to a different computer. we can help convince them to stick with their Commodore and GEOS.

Anyhow, enough preaching, if I've convinced one person to send in a shareware fee, it was worth it. Now it's time to let you get on with this issue of geoJOURNAL. As usual, please feel free to write us with any comments, concerns, or questions. Take care and keep in touch.

Pete





Reference Room

A column by Ken Nakatsu

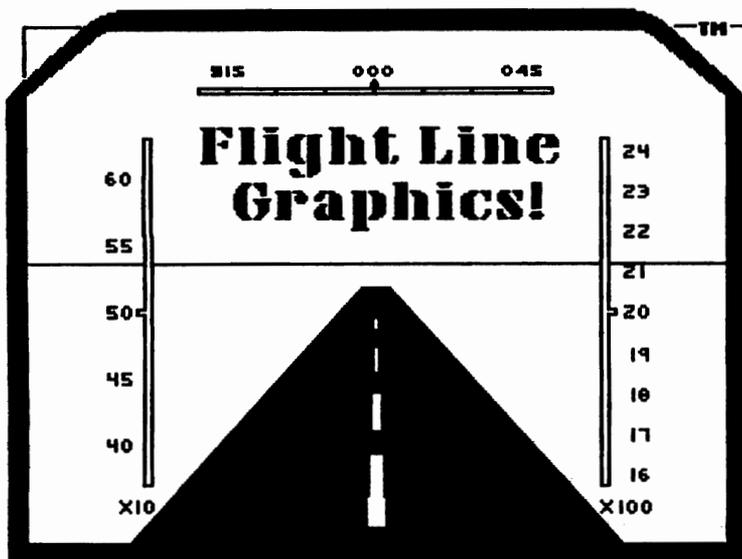
I have been receiving letters from a number of members that have ordered the geoMETRIX library expressing confusion over the way the files have been cataloged. I won't say how many, but let's just say that they were sufficient in number to provoke me to devote this issue's Reference Room to the task of clearing up the matter. :)

For those of you that feel I owe you an explanation here it comes, but please let me warn you that reading it could be hazardous to your sanity. (You may go crazy trying to understand me.) Here goes. Rather than simply number the disks I thought it would be a neat idea if I could encode the four spaces allotted for numbering or lettering the diskettes with information indicating what kind file it was and on which diskette it resided. (Containing only those kinds of files.) Well I was wrong. It wasn't such a neat idea after all. I didn't mean to make everyone's life miserable. Honestly I didn't. It just turned out that way.

Even up to this point I could have salvaged the situation

President's Corner

Hello all, and welcome to another issue of geoJOURNAL. I know I'm a little early this year but I'd like to start off this column with a few things I am thankful for. First off I want to say thanks to all our loyal geoMETRIX members who have stuck with us through thick and thin. I'd also like to give a BIG thanks to the patient people who ordered the Disk Library, and back-issues. I think we have finally gotten a handle on it, and I appreciate your patience more than mere words can say. Of course it goes without saying that I must say thanks to our talented editor Grady Brown, and also our equally talented librarian, Ken Nakatsu, you guys do fantastic work! I'll wind this up by



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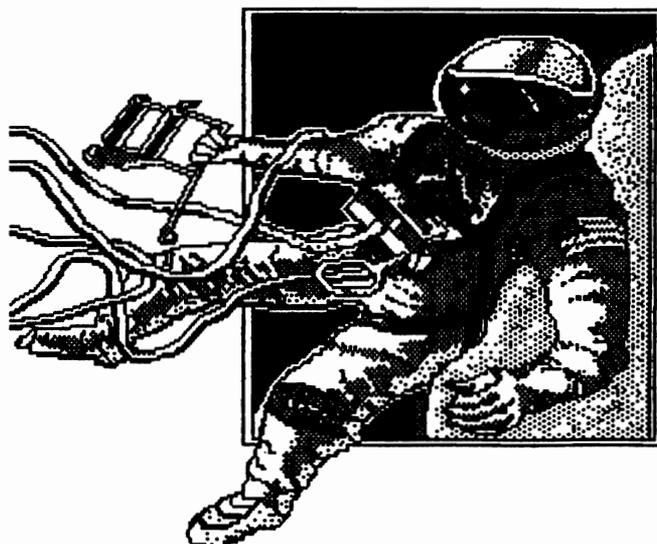
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by numbering every side of every disk as a single disk itself, without regard to the file type. But, nooooooooooooo! Not me. Instead I chose to distinguish the front and backsides with the A/B method and since I already committed the first two places to code for file types, and the front/back designation took up another place, I could only use single digit numbers for each disk. So I started renumbering from one each time I came to a new code for a different file type. I've probably lost more than half of you trying to explain this already, but the bottom line is I messed up. I apologize for that, and if you promise not to send me anymore letters telling me what I can do with this system I promise I will NEVER catalog the library this way again. (I didn't really get any letters like that, thanks for letting me off easy.)

The following is a key which, hopefully, will help straighten out the confusion and ease my guilt so I can get some sleep at night.

Applications -----	A
Application Data -----	AD
Auto-Execs -----	AE
Basic Programs -----	BP
Desk Accessories -----	DA
Documentation -----	DX
Input Drivers -----	ID
Photo Albums -----	PA
Printer Drivers -----	PD
System Files -----	SF
Supplement Disks -----	S
128 Only -----	80

The key above shows what the abbreviations designated in the first two places of the directory codes are. The third place designates what number disk the files reside on for disks of those file types, and the last place designates what side of that disk the file is on. ("A" for "side A" and "B" for "side B.") So, for example, "PA2B" after a file name indicates that the file is a Photo Album and you can find it on disk 2 of Photo Albums on side B.

The moral of this story? It doesn't always pay to try to be clever. 

MOVING?

Please let us know your new address as soon as possible, so that we may keep your newsletters coming to you without any delays. Just send it to the address listed on the inside front page and we'll update our files.

A New GEOS GROUP Is Found

We have just recently received information of a GREAT new GEOS group that everyone should know about.

Apparently they have been operating for some time as their list of newsletters and software is quite large. They seem to have quite a bit to offer the GEOS user, such as an extensive library of software with programs listed that no GEOS user should be without. They also list all their available newsletter issues and what each one contains. Quite an impressive list. And even more interesting, the group and newsletter it turns out is none other than our very own geoMETRIX and the the geoJOURNAL. These are being sold by a 'distributor' in the United Kingdom under the name 'GEOUSER'.

This distribution is being done without the knowledge and consent of geoMETRIX GEOS Users Group. The charges for the disks and 'partial' newsletters are much higher through them and none of this money goes to the rightful copyright owners. Also, ordering these products through them, there are no Member or Subscriber benefits received.

If you know of this company and plan to order from them or know someone ordering from them please beware. The so-called distributor's version of our geoJOURNAL has many pages left blank. The blank pages are those pages with our Portland, Oregon address and with our copyright notices. This plainly shows that they are thieves, selling our products for their own profit and greed. As I said above, they charge quite a bit more for much less.

With the Portland, Oregon geoMETRIX GEOS Users Group you get a years subscription to the geoJOURNAL, many 'members-only' benefits, access to the geoMETRIX Software Library and the BBS.

The geoJOURNAL contains many articles for all GEOS users from beginners to expert users. We have in depth reviews, columns for beginners and for font maniacs. We tell you what's new on Q-Link and tips for using GEOS throughout. We Are YOUR GEOS Connection.

So you see, don't settle for an imitation. (And a partial one at that). Deal only with the true source. And that is:

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BEGINNERS COLUMN

GOTCHA! Things to Look Out For by Steve Wehner (Relayer on Qlink)

I sometimes wish there was a book that I could browse through that would tell me all about the little intricacies and 'gotchas' of GEOS. Lord knows there are lots of them, but most that I have encountered I have been able to steer around. With this issue I thought I would veer away from the advice-giving and teaching and, instead, give you beginners some hints & tips & watch-out-fors. I cannot obviously touch upon all problems and I won't touch printing problems with a 10-foot pole (too many blasted printer drivers). But I can give some words of wisdom about applications from GeoWorks. I do not wish to bad-mouth any public domain programs for fear that my gotchas would be taken the wrong way. I also realize that not everyone encounters the same problems due to hardware configurations, but there are those universal gremlins that just can't seem to be gotten rid of. Let's begin.



geoWRITE

When you set up a document for the first time, it's a good idea to set your margins, tabs, line spacing, and justification at the beginning. That's a given. Now you select a font. You begin to type and you realize you picked a lousy first word. So you hit that delete key until the word is erased. You then type a new word, but the font is BSW and it's not in bold like you set it. Gotcha! Here's the fix: select your font and style and hit RETURN to get a new line. Now you can type. If you have to delete back, no problem. The font & style are preserved on the first line. You can always go back and delete that extra carriage return later.

Here is a common sense tip: when centering text in your document, first place the paragraph margin on top of the left margin. Centering takes place between the paragraph margin and the right margin. NOT left and right margins.

Be careful when typing text into a geoWRITE 2.1 document instead of a 2.0 one. You can fill up a full page of text with your margins spread out completely in 2.0. You will, however, have a page break inserted automatically in a 2.1 document about 3/4 of the way down a page (depends on the size font). If you paste text into a pretty full page it will fit. If you try to move down to look at it a dialog box will tell you that the page is too big and a page break will automatically be inserted. You will find yourself doing some extra editing to get things back to normal.

If you convert Commodore sequential files to geoWRITE, you might want to get a copy of the public

domain program called Yelveeta. This is a non-GEOS utility that strips those pesky 40-column hard-coded carriage returns that many sequential files have (especially ones downloaded from Qlink). Use Yelveeta on the file first and then use Text Grabber with the Generic 3 data file. There are a few GEOS pd files that claim to strip off extra returns, but none work as well as Yelveeta.

When using the SEARCH option the manual tells you that it is case sensitive. What it doesn't tell you is that the search starts where the writing cursor is located. NOT at the top of the current page. Even if you select ALL PAGES and wrap back to the current page, it will skip all text between the top of the page and the writing cursor (not the mouse pointer).

Another good practice is to put the names of the fonts used in a document in the info box. This not only helps you, but helps others as well if your file is distributed on Qlink, for instance (HINT, HINT).



geoPAINT

You might have heard about this one: its best to turn ON color in order to line up things. You will have a 'snapping' effect when using certain tools. This helps in lining up pasted object or cutting/copying items. Just turn the color off when you don't need it.

Make sure you have some extra Kbytes free on your disk when opening a geoPAINT document or creating one. If you don't you will get an error box. When exiting the box your mouse pointer icon is garbage. Don't worry, the desktop will refresh it just fine. It is frightening the first time, though.

DO NOT do any real complex drawing around the edges of a geoPAINT page. You better be real good at drawing in normal edit mode because the pixel edit window will not go all the way to the edges. You might also notice that the eraser tool in pixel edit mode gets real shaky when near the top edge of a page. This may be due to whatever input driver you use. Experiment with that if it bothers you.



geoPUBLISH

This application is very stable... provided you have the newest version. The newest version is a 2-disk set. Check the date and time in the info box. They should be 10/4/88 11:20 AM. Keep your older version, though, because many documents on Qlink were done with the older version and, yes, believe it or not, the documents are not upwardly compatible (at least most of the time they're not). GeoWorks will upgrade your old disk. Write to them for

details.

When making your geoWRITE text files for geoPUBLISH, put your margins all the way out. If you don't, you will have a lot of extra 'gutter' in geoPUBLISH. Let GP do the margins (gutters) for you. It reformats your right margin, but not the paragraph or left margins.

Make sure that when you open an existing GP document your text files (geoWRITE files) are accessible. If not, you will get an error that will crash the program. Believe me, its a bummer. Missing fonts are OK. Your document may look funny, but getting the fonts back later will fix that.

If you use the DATE and/or PAGE feature in GP, make sure your region for the date and page are large enough to accommodate the entire date for the size font you have selected. If you don't make the region large enough your date and/or page will be truncated, at best. Usually you won't have this trouble with PAGE, but DATE...

Don't make a region the whole size on the document. This will crash GP. Always have at least a couple of pixels for margins.



geoFILE

Don't be alarmed if, upon exiting geoFILE, that the year portion of the clock is 00. There is a bug in the FORM DESIGN mode of GF that always waxes the year. Just correct it. If you want your GF document properly timestamped, double click on the document, then immediately exit it. It will update again, properly, even if you went into the FORM DESIGN mode.

Make sure you pick the correct field you want to sort with in the form design mode. Yes, you can change sort fields later, but it is very, very slow. Another note about sorting. I have my YCR tape list in geoFILE. Most movie titles start with a letter, but movies like 1941, 1984, 9012Live do not. These titles show up prior to alpha characters. Its just something to consider. I have so many titles that I made 3 files; A-G, H-P, Q-Z & numbers. Well, the numbers showed up prior to Q. I solved the problem by setting up a search form for printing Q-Z and then a search for titles less than Q, hence, getting the numbered titles.



geoCALC

The biggest 'bug' in geoCALC is not really a bug, but a major inconvenience. All formulas are recalculated every time a cell's data is changed or inserted. You can speed up this process, however, by careful planning. DO NOT put formulas into cells until you are done filling in the rest of the spreadsheet. Try to put the formulas in a logical sequence of execution and make your layout conform to this logic. GeoCALC calculates the formulas in the order in which they were inserted.

Its also a good idea to set up portions of your

spreadsheet, if large, into printable sections. In other words, format portions that you can fit onto an 8 1/2 by 11 sheet of paper (or less). Remember, you can select the portion(s) of a spreadsheet that you want to print.



Paint Drivers

Here is a common sense tip. As you already know, both of the drivers (overlay, pages) create geoPAINT documents. These work very well with geoWRITE and geoPUBLISH. But keep in mind that a full geoPUBLISH page is 94 'cards' long while a geoPAINT page is only 90. Make sure that the PUB document's text/graphics does not go all the way to the bottom of the page. It is best to leave a 3/4 to 1 inch bottom margin, depending on your real printer driver. This way your PUB page will not be cut off in the PAINT document.



Photo Manager

Some of you may already have noticed that oversized photo scraps do not show up in the album while viewing, or they are only partially viewable. Don't despair, they're there. Just an inconvenient bug. I have never encountered any other problems with the photo manager or it's albums. The actual scraps can be a full page, if the program you use to cut/copy them will handle them that big.

There have been noted bugs in geoPROGRAMMER, and geoBASIC is... well... what can I say? I have not used geoCHART enough to really explore its workings. My hope is that I have lit up some street signs along your journey through the GEOS world. Its still the best software for the Commodore 8-bits. If you have any tip and/or tricks for using GEOS products, send them to me, in care of geoMETRIX. [geoMETRIX GEOS Users Group; 20224 S. Sprague Road; oregon City, Oregon 97045-9641 U.S.A.] A little something you think is no big deal may turn out to be a life saver for someone else. Till next time. *gd*

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Font Mania!

by Dick Estel



How many GEOS fonts are enough? For most purposes 30 or 40 should be plenty. But for some of us, the only possible answer is "all of them!" Those who admit to the dread disease of fontmania will never be satisfied if there is an uncollected font out there somewhere. Here's where to find more fonts to feed your addiction.

Hundreds of fonts are available on Quantum Link and other on-line services. All have a charge for the time spent downloading. A 5-minute mega-font download on Q-Link will cost you 40 cents. Bulletin boards all over the country also have fonts, and most private BBS's do not charge for downloading (nearly all require a certain ratio of uploading to downloading, however).

The following are commercial sources of fonts:

GEOWORKS (formerly BSW): Five fonts are provided with the original GEOS system disk; and a number of megafonts come with geoPublish. GEOS 2.0 also comes with laser fonts, identified by the prefix LW. GeoWorks also sells Font Pack I, Font Pack Plus and International FontPack. Many of GeoWorks fonts are available on Q-Link.

DALE BEACH: A monthly cartoon disk, each one including a font, is available for \$7. 7048 Michigan Street, Elwell MI 48832.

BRUCE GILSON: Font Collection 1 - Includes 30 fonts by Bruce and Jim Collette's Font Editor 2.4 for \$21.50. Font Collection 2 is the same price and includes new fonts and the upgraded Font Editor 2.5. MegaFont Disk 1 - \$16.50. Comm-Plex Software, 6782 Junction Road, Pavilion NY 14525-9755.

BRODY KOGA: 1 disk, \$6. 3251 S 176th #205, Seattle WA 98188.

SUSAN LAMB: Various disks of fonts and artwork are available. Write for details, look for her ads in geoWorld, or leave EMail to YumaLamb on Q-Link. 3575 E County 18th Street, Yuma AZ 85365.

LOADSTAR: Fonts are available on several Loadstar disks. Softdisk Publishing, P.O. Box 30008, Shreveport LA 71130-0008. Three-month and one-year subscription available.

JOE BUCKLEY (Red Storm on Q-Link): Storm Disk 1 contains three fonts and a number of utility programs, including the latest version of Wrong is Write and Joe Buckley's font editor, Font Monster. Send \$20 to Storm Systems, 464 Beale Street, West Quincy MA 02169.

RUN MAGAZINE: Geos Power Pak I and II; and RUN's GEOS COMPANION all contain a number of fonts, as well as graphics and programs. \$19.97 for I or II; \$39.94 for both; \$24.97 for GEOS COMPANION. 80 Elm Street, Peterborough NH 03458; Phone 1-800-343-0728.

TT GRAFIX: Four disks of fonts are available at \$6.95 each. Tom Treverrow, 326 Clothier Spring Road, RD 1, Malvern PA 19355-9657.

SUZART FONTS: 150 16-point pictographs; 26 borders and ornaments; see inside back cover of GeoWorld #23 for a display of these fonts. \$12.50 each; 2 for \$18. Box 410852, San Francisco CA 94141-0852.

IKE RIEHL: \$24.95 for a disk of approximately 20 fonts. P.O. Box 1509, Burleson TX 76028, 817-295-5806.

In addition there are a number of sources providing public domain font disks at a modest charge for those who can't or don't want to download them. These include:

Dick Estel, Font Resource Directory, 3487 E Terrace, Fresno CA 93703; 5 disks at \$3 each; leave EMail to DickE on Q-Link for more information.

Thomas F. Trocco, Kids Computer News, c/o St. Hilda's and St. Hugh's School, 619 West 114th Street, New York NY 10025; 18 disks of public domain GEOS fonts, \$4 per disk; plus clip art and many other items. Request the latest edition of the GEOS handbook.

PARSEC, Inc: 23+ single-sided disks, \$1 each; P.O. Box 111, Salem MA 01970-0111.

With a few dollars, and/or a few dozen hours of downloading time, you can easily have more GEOS fonts that you can possibly use!

(This information does NOT constitute an endorsement. Accuracy of prices and addresses not guaranteed)

Geo Idiot...



By Terry Witter

Here we go (again?) gang... <<By way of note>> I'm writin' this new bit of trivia, without my "trusty 'ol 1750 REU"... (Its gettin' "bumped" to one meg...)

(update, update, update...)

Since I only mailed the thing off "yesterday", I've suddenly found myself reminded of the fact that I've been spoiled by all that extra memory. In fact, I can't help but be astounded by the way we, (who can afford it), tend to get pampered by all of those wonderful contrivances designed to make life easier... (Why, even such wonders as coffee grinders, television remote controls, radio controlled garage door openers, and even flush toilets leave me in awe!!!)

(update, update, update...)

(Whewww! I can't decide which mass storage device I'd miss more...my 1581 disk drive...or 'the ol 1750' !) ... Thankfully, (in all truth), I've found the '81 is 'much more efficient' than either the 1541 or my "sickly" '71 when it comes to "updates"... Else, who knows? (I might become a bonified candidate for "GEOS-cide"!!!)... Ahhhh, I can picture it now: The local newspaper will give my denise "star treatment"... (This announcement will no doubt be found somewhere near the 'Want Ads' segment of the paper...)

"OVERNRAUGHT COMPUTER USER SUCCUMBS TO 'DEATH BY BOREDOM AND FRUSTRATION' DURING LENGTHLY GEOS 'SAVES' AND 'UPDATES'... Mr. T. L. Witter (aka "GeoIdiot", "Herr Witt") was discovered by his landlord in a "most-perished state... The County Coroner, upon investigating this untimely passing, reasoned the cause of death was due to one of two probable causes: either asphyxiation from the fumes coming from his overheated, smoking disk drives

-or-"death by over-repetition"... "This, unfortunately, is not uncommon among "GEOidiots", he stated... A memorial service is slated to occur at the Church of the Infernal Desktop, no. 10 GeoWrite Way....."

til next time...

[Please send cards, letters, flowers, or money in care of geoMETRIX. ;) - EDITOR] gJ



This is a collection of some of the best and juiciest rumors that we have heard. geoJOURNAL wants to keep you on the cutting edge.

DISCLAIMER: This column consists COMPLETELY of unverified RUMORS. And as such, they should not be treated with any amount of seriousness. These rumors may be true, but since they are unverified, they might be completely false. Please do not make any major decisions based on this information, as it might lead to undesirable circumstances.

*The 'Editors' of RUN magazine mentioned a company called **Cameraica**, working on a CD Player Interface about a year ago for the Commodore 64. With all the CD ROM players coming on the market, it should be in the near future for us 8-bit users too.

***GATEWAY** is now being shipped, but contains a few minor bugs that can be corrected with patch programs found on Q-Link.

***COMPUTE** with GAZETTE included, returned to the newsstands (Software Etc.) in July.

(Continued on Page 18)

WE LOVE TO HEAR FROM YOU!

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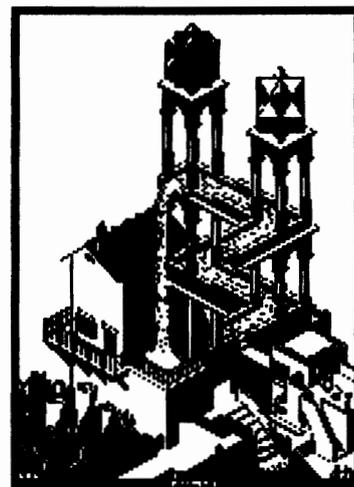
RAINBOW SOFTWARE



At Rainbow Software, we've made an art of collecting MACINTOSH files to convert to GEOS, combing the world for the very best in graphics, clip art, and full-page pictures. Hundreds of geoPAINTs, converted straight from hi-resolution MacPaint files.

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Dir GEOS Directories Using Brian 1.0

by Hank Wilkinson

Though useful, a directory lister is not the most glamorous program to write. Useful as it is, writing may prove difficult because the subject touches on systems programming. Unglamorous **and** difficult -- what a great place to start!

Here we list a few activities that benefit from some type of directory listing.

- 1) viewing disk file archives
- 2) preparing a GEOPROGRAMMER check list to follow during the assembly process, and to help write the file telling GEOLINKER what to do
- 3) using GEOPUBLISH to prepare one newsletter from many different files
- 4) as an exercise to learn the foundation of disk operations and use them

One unique aspect of this article is that it is also a program. Good programming practice includes good documentation. The combination of GeoWrite and GeoPaint allows program documentation good enough for a geo JOURNAL article.

Programming is the process of discovering and passing details to our computer system in a manner providing the necessary functionality. As such it has great potential to be boring. Also likely, when not boring, programming may prove frustrating.

This is partly true because the details have to be known to pass them on to your computer. When not known, the details have to be discovered. Random details pulled out of the air seldom produce desired results. (Ironically though, the production of random numbers is a useful function in its own right!)

This article may be loaded by the Forth programming language **Brian 1.0** and provides a rudimentary display of disk files on the GEOS screen. **Brian 1.0** is a version of fig-FORTH 6502 by W. F. Ragsdale modified by me to execute in GEOS. It started out as shareware on Q-Link, and now it is in the public domain as freeware.

Forth is powerful, but it is a little like a double-edged knife blade without a handle. Trying to use a handleless double-edged knife is to discover that the blade is not the only important part of a knife. Without a handle, it is hard to pick up and hold. It is harder still to carve even something as basic as a knife handle using a bare double-edged blade.

What you do is simple when you know how. Form a rudimentary handle by splitting a stick and insert the blade in the slot. Wrap the stick tightly with twine, gripping the blade. This "knife" is then used to make a better handle.

The point is you don't start with the finished product. You start with the basic parts and use them to build what you want. Each step adds more functionality and successively leads to your goal.

Many of you have used GEOPROGRAMMER, which of course is not a high level language. Perhaps even more have used BECKERBASIC, which makes use of the Commodore ROMs. All of us have used Commodore BASIC which starts up GEOS via LOAD "*"8,1.

Forth is not like any of those. When you are "in" **Brian 1.0** you are in GEOS. As a tool to make tools, Forth is a wonderful programming language. One programming trick is to think first and code later. Figure out what you are going to do, then do. Once figured out thoroughly, almost any language may be used to write the code.

Brian has several features to help the beginner. You may execute the language under complete control of GEODEBUGGER -- even while loading programs! I have provided **Brian.dbg** so that you may view everything using the exact symbols used to create it.

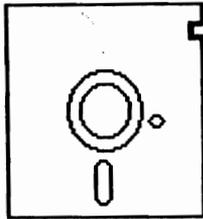
Additionally, **Brian** was written to use an editor that we all know and love. GeoWrite! **Brian** loads its programs from regular GeoWrite 2.0 files, but handles them exactly backwards from the way GEOPROGRAMMER does. I have provided **geOMETRIX** with the Brian Distribution Disk so you may read more about **Brian** if you are interested.

If you are not, please read on anyway because this article will explain aspects of the GEOS directory structure. Once understood, you may do things with the knowledge in any language.

Let's procede.

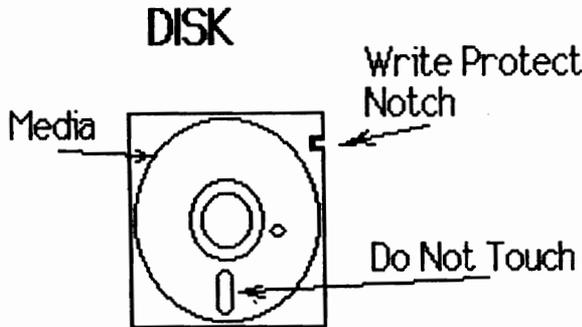
The 1541, 1571 and 1581 all have different layouts. These different drives are not fully explained in The Official GEOS Programmer's Reference Guide by Michael Farr. (Berkeley Softworks gave us a way, we just don't know what it is from one reading The Official....)

Let's talk about 5-1/4" disks.



This of course is a disk. As shown, it could be for the 1541 or 1571. The part of interest is inside the rectangular plastic envelope.

Labeled, "Do Not Touch" is the window the disk drive head reads and writes from.



Below shows the "media" removed.

Do Not Do This!

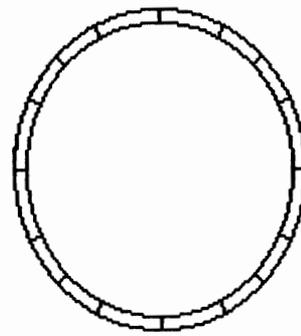


The 1541 divides a disk into 35 concentric circles, called tracks. The inner tracks are smaller in circumference than the outer ones. The 1571 does the same to both sides of a disk, and the 1581 has 80 tracks.

These tracks are divided up into sectors 256 bytes long.

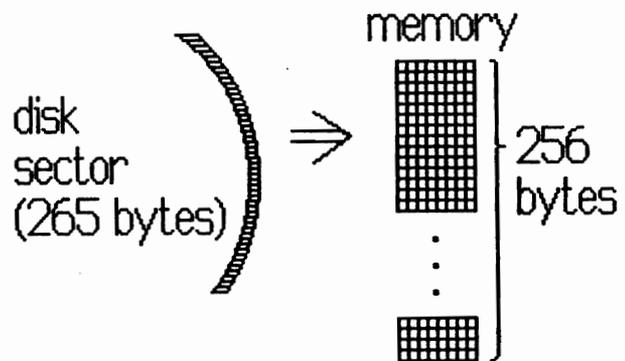
geo TIP

To draw a curve (or arc) in GEOPAIN, select the circle icon and draw a circle. Then erase the unwanted portion.

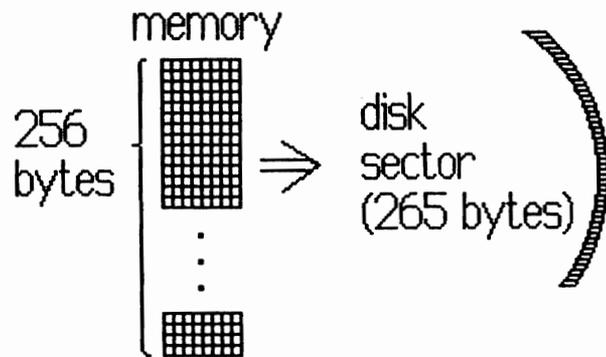


disk track divided into sectors of 256 bytes

Reading is copying the sector into memory.



Writing is copying 256 bytes of memory into a track and sector, or disk block.

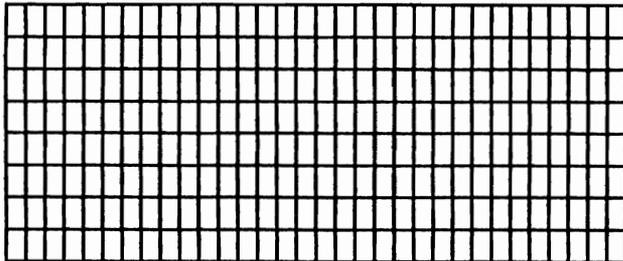


The 1541/71 directory structure is contained on track 18 (hexadecimal 12). This track has 19 sectors, making 4864 bytes (19*256) available for directory information storage. On the 1581 the directory structure is on track 40 (\$28 hexadecimal).

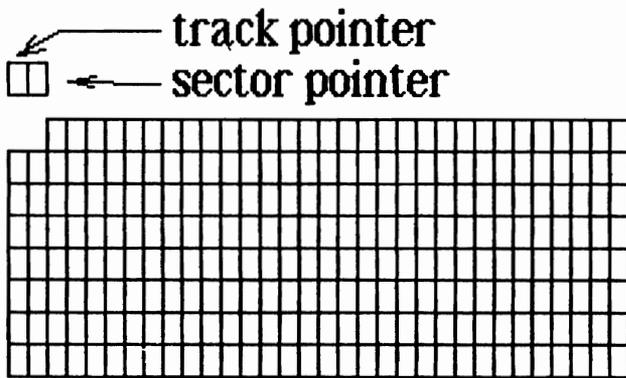
The first two bytes of the first directory block are the track/sector pointers to the "main" directory blocks. Bytes 171 & 172 (\$AB & \$AC) of the first directory block contain the track/sector pointer for the off page directory block.

These main directory blocks themselves are arranged in an orderly fashion. First of all, they are linked together by the pointers in the first two bytes of each directory block. Shown next are 256 rectangles, 32 per row, 8 rows. Each little rectangle represents one byte.

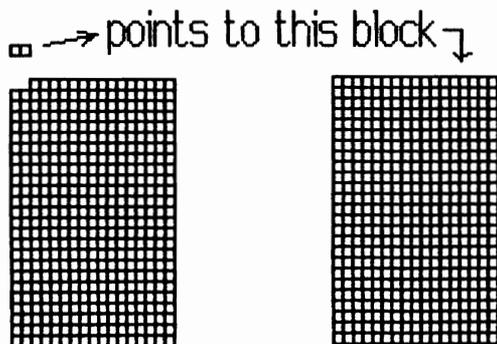
Disk Sector as one block



Conceptually, here is the idea of the very first two bytes being the pointers to the next block.



These pointers will link together the disk blocks that make up the directory.



The trick here is the very first byte, the track pointer, will never point to track 0. Tracks are numbered 1 to 35, 1 to 70 or 1 to 80. So a track byte equal to zero is a flag, saying "no more blocks after this one".

The last block flag is also a signal that the sector byte, in that case, is an index or offset to the last byte in the block. In the last directory block, this byte will always be 255 (\$FF), signifying that the whole block may be used.

Each directory block is divided into eight file entry positions of 32 bytes each. If we number the bytes from 0 to 31, we may state that the file's name starts at byte 5.

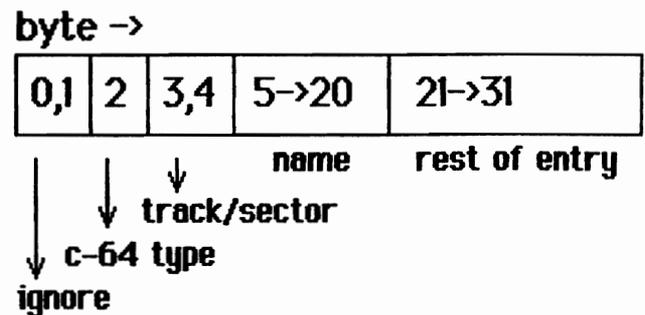
	2 bytes, unused
	1 byte, c64 type
	2 bytes, track/sector
	16 bytes, file name
	11 bytes, other information

Shown is one eighth of a directory block, or one entry. The first two bytes are not used for the directory entry. These are bytes 0 and 1. Only the first directory entry on a disk block has the locations written. The other seven entries on a block have these two bytes unused.

The third byte, number 2, contains the C-64 file type. The track sector pointers are bytes 3 & 4. Then comes the name of the file. Following the name are more slots containing "other" information (size, time & date, etc.).

We use the C-64 file type to determine if there is a name in the entry. When we (WE?!?) create a new page for file icons in our desk top, GEOS creates a directory block with zeros in it. This means a new, unused entry slot has a zero for a file type, name, and everything else. Later, after a file is saved, then erased, the file type is set to zero again.

When we want to know if an entry is a file or not, we look for a zero type. If the entry is empty or deleted, we may skip it when listing a directory.



To separate code from comments, we make use of the switches "{ }". **Brian 1.0** will compile or execute only what is between the curly braces. (There have to be spaces separating the switches.) The pictures and everything else are ignored. This coding method was explained by Dr. Glen B. Haydon in his article "Formatting Source Code" in the March/April 1989 issue of *FORTH Dimensions*.

Given the location of the first byte (byte 0) of a directory entry, we simply look at the third byte (byte 2). If the byte is a zero, we do nothing. If the byte is anything else, we will print sixteen letters of the file name, and perform a carriage return. Here is our first Forth command.

```
{ : ShowName ( address_of_entry -- )
  Dup 2+ C@ If 5 + 16 Type CR
  Else Drop Then ; }
```

Above we see a command for "typing" a file's name on the screen. Pass the address of a file name's slot in a directory block, and it reads the C64 type byte. When the file's slot is empty a zero is there, causing the "Else" part of the command to execute. When there is a file name in the slot, the "If" part executes and the "Else" part is skipped.

The fifth byte into a file name slot is where the ASCII name is kept. Since the file may be as large as 16 characters, we tell "Type" to print that many. Notice if there is no name, the command does not do anything.

There are eight slots on each directory block for file names, so a simple looping structure may be used to show all the entries on the directory block. We use the **Do . . . Loop** for this purpose.

```
{ : ShowNames ( address_of_block -- )
  8 0 Do ( set up structure for 8 loops )
  | 32 * ( calculate offset to name )
  Over + ( add offset to address )
  ShowName
  Loop
  Drop ; }
```

Notice **ShowNames** uses **ShowName**. In other words, **ShowNames** doesn't worry about anything except its task of calculating addresses, passing them to **ShowName** and looping. **ShowName** itself determines whether or not there is a name to type on the screen.

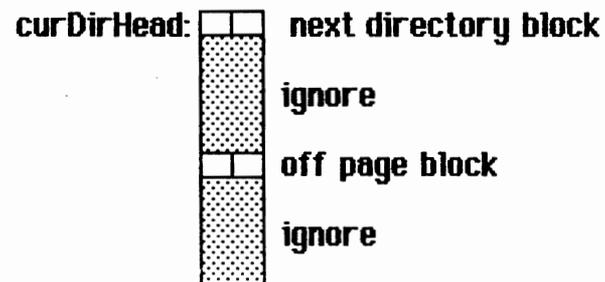
This demonstrates a fundamental method of programming using Forth. You build commands (words) based on other commands that do what you want. We started the word to display one file's name (or not), and

extended that process to display all the file names in a directory block.

Armed with that capability, we will extend those commands until they may list all the names off of any disk drive. So we need to develop the means of finding those disk blocks that contain the directory information.

It may seem like a big deal that basically all three disk drives use different layouts. Also, it seems troubling that we have to experiment to determine how the three differ, since they are not explained in The Official . . .

However, it turns out there is no problem at all! Berkeley Softworks provided us with a system call that avoids the problem entirely. The routine **GetDirHead** will put the directory header block of any disk format into the memory location **curDirHead (\$8200)**. From there we may use "offsets" to find the "off page" and "main" directory blocks.



The location of information is often given by an **offset**. The main **track** byte has an offset of zero. To find it, we add the memory location and the offset. In this case we have **curDirHead + 0 = curDirHead**. The main starting **sector** is **curDirHead + 1**. For the off page **track**, the location is **curDirHead + \$AB**. Likewise, the off page **sector** may be found by the calculation **curDirHead + \$AC**.

As of this writing, the actual address of the GEOS routine **GetDirHead** is \$C247 or 49735 decimal. If we have a constant equal to \$C247, we could simply provide this procedure.

```
{ Hex C247 Constant GetDirHead }
```

Brian has a command for interfacing with subroutines (it actually has two interfacing commands). After creating the above constant, the "action" of the routine may be "invoked" by the command phrase **GetDirHead Jsr**.

While we're in hexadecimal mode, we'll make a couple of more constants. Here is the location **GetDirHead** puts

the header from a disk.

```
{ 8200 Constant curDirHead }
```

By adding \$AB to the value of **curDirHead** we have our **OFFPAGEPOINTER**.

```
{ curDirHead AB + Constant  
OFFPAGEPOINTER }
```

GEOS uses the location **diskBlkBuf** and we are going to use it too.

```
{ 8000 Constant diskBlkBuf  
Decimal }
```

Notice the use of the exact same capitalization scheme as used in The Official . . . Constants are all caps, variables have the first letter lower case, with subsequent words having their first letter only capitalized. Though **diskBlkBuf** is constant, it is used as a variable. **GetDirHead** is also constant, but it is used as a subroutine or function.

It doesn't matter if we have a 1581, 1571 or 1541. After executing "GetDirHead Jsr" in **Brian**, we have the off page track and sector at **OFFPAGEPOINTER** and the regular directory's track/sector beginning at **curDirHead**.

To simplify writing and debugging, we break the task of printing the directory information into two tasks: off page and the rest of the directory.

```
{ : ShowOffPage ( -- )  
OFFPAGEPOINTER C@ ( fetch track )  
OFFPAGEPOINTER 1+ C@ ( fetch sector )  
diskBlkBuf GetBlock  
Drop ( drops error number )  
diskBlkBuf ShowNames ; }
```

The **OFFPAGEPOINTER** guides the GEOS system call **GetBlock**. We only have to be careful to initialize it before we use it.

To show the regular entries we use a different looping structure, the **Begin/Until**. This is because the rest of the disk directory blocks are big linked list, or chain of blocks.

```
{ : ShowEntries ( -- )  
Begin  
diskBlkBuf C@  
diskBlkBuf 1+ C@  
diskBlkBuf GetBlock Drop  
diskBlkBuf ShowNames  
diskBlkBuf C@ 0= Until ; }
```

It may seem unusual to have so many **diskBlkBuf** is used, but they are all easy to explain. The first use contains the track, the second obtains the sector and the third tells **GetBlock** where to put the block. Since **diskBlkBuf** is the disk block buffer, that is where the block is put.

Once a disk block is put there by **GetBlock**, **diskBlkBuf** is the address passed to **ShowEntries**. Finally, when the directory block retrieved is the last block, **diskBlkBuf** will contain a zero instead of a link to the next disk block. (and **diskBlkBuf + 1** will contain \$FF). By testing with **0=** the loop stops at the end of the chain of directory blocks.

Now we are ready to wrap up these commands in a manner that provides the necessary functionality. We need to initialize **curDirHead** with the **GetDirHead** call. When this is done, we pass the track and sector information to the proper location.

```
{ : Dir ( -- )  
CR ( start on a new line )  
GetDirHead Jsr ( initialize )  
ShowOffPage ( display off page block )  
curDirHead @ diskBlkBuf ! ShowEntries  
; }
```

Each of the "Show" words will use the data from **GetDirHead** to "prime" the directory entry search. In the off page case we are interested in one disk block. On the other hand, the main entries may be a very long linked list if you have a 1581.

This is a very rudimentary directory lister taking exactly 275 bytes of program space when loaded. You may want to change it to make it more useful. However, it works the way it is.

To change disk drives with **Brian**, use the **SetDevice** and **OpenDisk** commands. For example, suppose you have your RAM disk configured as drive A (device 8) and your 1541/71/81 as drive B (device 9). Further suppose **Brian** is on your RAM disk and you insert a disk with this article in your floppy.

In (on?) your RAM double-click on **Brian**. This will crank it up. To set your system to drive B, issue "9 setdevice opendisk" (no quotes) and hit RETURN. This sets up drive B. To check errors type two periods separated by a space and followed by another RETURN. You will see two zeros (for no error) followed by "OK".

Now the fun begins. Type "fn\$ getname" (no quotes) and RETURN. **Brian** will appear to lock up, but it is waiting for you to type in a file name. You type in the file's name

exactly (I used Dir for this article) and hit return again. That set the file name buffer (fn\$) to the file name.

Loading is simple. Type "load" and RETURN (again, no quotes). Brian will start loading. If you want to quit, hit any key and Brian will stop when it gets to the bottom of the page it is working on. If you don't hit a key, Brian will go through the entire document.

When Brian reaches the end of the file, you will get the message "Empty YLR" and control will be returned to the command line. Type "dir" (no quotes) and hit return. The file names on the current drive will spit out on the screen. Change devices and do it again.

If you want to, you may save the version you have created using the command SaveBrian. Hopefully, geoMETRIX will provide a way of getting you this file on a disk so you don't have to type it in. Once you have a copy, you may delete everything but the Forth code.

The entire article will load in about thirty seconds (from a RAM disk), close to the maximum a Commodore user will wait! Deleting everything but the Forth code will allow loading in under five seconds. Once you understand something, you don't need all the explanation.

Hopefully you have found this article instructive. You have been thoroughly exposed to the fundamental concepts of the GEOS directory. You have read an article that used the facilities of GEOS (GEOPAINT and GEOWRITE) to explain a part of GEOS. You have been exposed to Forth and seen how to perform systems programming. Finally, you have seen an example of good documentation.

We look forward to seeing your Brian code! 

[If you are interested in Brian and would like to receive the Brian Distribution Disk that Hank mentioned at the beginning of the article, just drop us a note or postcard. We will then decide how best to pass this disk and information on to you. For those that are on Q-Link, all of the Brian files can be found in the **GEOS Arena under User Applications - Part 3**. The Brian Distribution Disk contains the 6 programming language and support files. Brian.glossary, Brian.intro, Brian, Brian.errors, Brian.dbm, and Brian.dbg. There are also 3 additional files. Read Me, ROTADJ, and ROTPAGES. The Read me file explains how to use ROTADJ to customize ROTPAGES so you can print out a glossary for Brian that is easy to use. This article, Dir is also on the disk and can be loaded and run under Brian. Brian was named after Brian P. Dougherty, CEO of GeoWorks. Hank Wilkinson can be contacted on Q-Link as STUDENT4TH. - Editor]

The Rumor Column (Continued From Page 11)

***Twin Cities 128: The Commodore 128 Journal** after a close brush with death, has been sold to PARSEC Inc. (PARSEC on Q-Link). John Brown (JBEE on Q-Link), President of PARSEC says he will continue TC128's high level of service and quality that all are accustomed to.

***Midnite Software Gazette** (published by Jim Oldfield Jr.) scheduled to re-debut last January should be out very soon.

***ZIP TECHNOLOGIES** will undertake the job of manufacturing an accelerator chip or board for the Commodore 64 and 128 giving us 8 and 10 Mhz respectfully. A Support Survey is currently circulating on many Commodore boards for this.

*The **CMD HD 200** may be discontinued by Creative Micro Designs in the near future.

***RAMLink** and **RAMDrive** have been upgraded due to bugs in the original units. These upgrades should cure the known troubles. 

GEOS Product Availability

Many have asked about buying GEOS programs, replacing lost or damaged manuals or upgrading to higher versions. Although Berkeley Softworks has changed their name and moved on to producing Ensemble (the IBM version) they are still supporting the Commodore market. So here we give you the most current prices, replacement and upgrade policies direct to you from GeoWorks.

NEW PROGRAMS

Product	Retail Price
GEOS 2.0	\$59.95 (\$53.95)
GEOS 128 2.0	\$69.95 (\$52.95)
geoPublish	\$49.95 (\$39.95)
geoFile 64	\$49.95 (\$39.95)
geoFile 128	\$69.95 (\$49.95)
geoCalc 64	\$49.95
geoCalc 128	\$69.95 (\$55.95)
geoProgrammer	\$69.95 (\$59.95)
geoChart	\$29.95
FontPack Plus	\$29.95 (\$23.95)
DeskPack Plus (includes geoDex & geoMerge)	\$29.95 (\$23.95)
International FontPack	\$29.95
Clip Art Disk	\$9.95
GEORAM	\$124.95

Prices in parenthesis are a limited offer and may end at any time, so call to check on current discounts. Please add \$4.95 for shipping & handling. CA residents must add

7.25% sales tax. Order your NEW PROGRAMS from:
 GeoWorks
 Commodore Order Processing Department
 5334 Sterling Center Drive
 Westlake Village, CA 91361
 1-800-525-4518 ext.*1757 (Orders Only)

REPLACEMENT MANUALS

(Registered Owners Only)

<u>Product</u>	<u>Replacement Price</u>
GEOS 64 & 128 2.0 User Guide	\$15.00
GEOS 128 2.0 Addendum	\$10.00
GEOS 64 1.3 User Guide	\$10.00
GEOS 128 1.4 User Guide	\$10.00
geoDex	\$10.00
geoSpell	\$10.00
DeskPack <i>Flks</i>	\$10.00
FontPack <i>Flks</i>	\$10.00
geoWrite Workshop 64 & 128	\$15.00
geoFile 64 & 128	\$15.00
geoCalc 64 & 128	\$15.00
geoPublish	\$20.00
geoPublish Addendum	\$10.00
geoProgrammer	\$20.00
geoChart	\$15.00

Please add \$4.95 for shipping & handling. CA residents must add 7.25% sales tax. Order REPLACEMENT MANUALS from:

GeoWorks
 Customer Service
 2150 Shattuck Avenue
 Berkeley, CA 94704

UPGRADES

(Registered Owners Only)

<u>Product</u>	<u>Upgrade Price</u>
GEOS 2.0	\$25.00
Send the cover of your GEOS 1.2 or 1.3 manual.	
GEOS 128 2.0	\$35.00
Send the cover of your GEOS 128 1.4 manual.	
geoFile 128 (from geoFile 64)	\$20.50
Send the geoFile 64 disk.	
geoCalc 128 (from geoCalc 64)	\$20.50
Send the geoCalc 64 disk.	
Ensemble (from GEOS 2.0 or GEOS 128 2.0)	\$79.00

Send photocopy of your GEOS User Guide cover. Please add \$4.95 (\$5.95 for Ensemble) for shipping & handling. CA residents must add 7.25% sales tax. Order your UPGRADES from:

GeoWorks
 Commodore Order Processing Department
 5334 Sterling Center Drive
 Westlake Village, CA 91361

REPLACEMENT DISKS

(Registered Owners only)

GeoWorks will replace any disk(s) for free for reasons of material defect within the 90 day warranty period. Upon receipt of the disk(s) (ONLY) and the proof of purchase, GeoWorks will process the replacement order.

If the disks are not functioning due to user error or the warranty period has expired, please send the disk(s) and \$5.00 per disk plus \$2.00 for shipping & handling along with proof of purchase for replacement. CA residents please add 7.25% sales tax.

Before you return anything to GeoWorks, please check the SYSTEM REQUIREMENTS and INSTALLATION sections in your manual to be sure that the trouble that you are experiencing is not due to a hardware incompatibility, user error, or just simply defective.

Send the defective disk(s) with proof of purchase to:

GeoWorks
 Replacement Department
 2150 Shattuck Avenue
 Berkeley, CA 94704

If your GEOS disks were packaged with your Commodore computer, you must send them to:

Commodore Business Machines
 Customer Service (GEOS)
 1200 Wilson Drive
 West Chester, PA 19380-4251

The above information was taken from various messages from GEOS REPS on Q-Link, the Berkeley Softworks Customer Service booklet, and from Angie McKenna (GeoWorks Customer Service). (BSW ANGIE on Q-Link)
 Thank you all. 

Birthday Wishes

The staff of the geoJOURNAL would like to extend our best wishes to those whose birthdays fall in the months of July and August.

Ken Nakatsu 08/14 (Metrix1)
Jim Collette 08/06 (GEOREP Jim)
Carlos Amezaga 08/69 (The Smee)

We're just beginning this little tribute, so if you know of others that should be here let us know their name, birthday month and day. If you should be here, we're sorry that we left you out. 



This \$5.00 shareware application allows redefinition of almost all keys on the keyboard except RESTORE, SHIFT LOCK, and the C= key combinations. It uses AUTO EXEC format for data files, so the keyboard can be configured at boot time. Offers 2 drive support for saving and loading as well as Desk Accessories. Runs on the 128 in 40 column mode and supports the extra keys. The file to the right, KeyGrabber, is needed to create the AUTO EXEC files for boot up reconfiguration of the keyboard.

KeyMaker2.0 by Irv Cobb

geoGammon by Douglas S. Curtis

geoGammon is from a COMPUTE!'S GAZETTE disk and is based on standard BackGammon. You play against the computer. The object of the game is to move all of your checkers into your home board and then off the board. The first to 'bear off' all of your checkers wins the game. White moves counter-clockwise and black moves clockwise. This is good for someone just learning BackGammon as the game will not let you place your checker in the wrong place. Only legal moves are accepted. Be careful though, the computer is a very strong opponent.

This is a working demo of a new program from Quincy Softworks. The demo will act in every way like the final product except that it produces NO useful results. UltiPatt is the Ultimate GEOS Pattern Tool. This is a Desk Accessory which you can use from within most programs which use patterns. You may load paint pattern files that have been created by almost all pattern editors. Contains a pixel editor for editing or creating patterns and comes with 1600 built-in patterns (1500 unique/100 duplicate) which you can pick and choose from to create your own pattern sets. You can also create patterns at random or combine two. UltiPatt comes from:

Quincy Softworks
 9479 E. Whitmore Avenue
 Hughson, CA 95326-9745

UltiPattDemo by David B. Ferguson

*** CREATE AUTO_EXEC FILE ***

Filename:

GrabThemKeys

Cancel

This is a utility Application for use with KeyMaker2.0 (shown to the left at the top of page 19). First use KeyMaker2.0 to create the custom keyboard configuration that you want to save. Then run KeyGrabber. This will create an AUTO EXEC file that will install your custom keyboard set-ups if placed on your boot disk. You can even have different keyboard set-ups for different work disks depending on your needs. Just double click on the one that you would like to use for that session. As I understand it, KeyGrabber only works with GEOS 64 version 2.0. The final AUTO EXEC file may be later edited with keyMaker2.0.

KeyGrabber by Irv Cobb

This is an application that many people have been asking for in the past. A way to print more than one copy of major GEOS Applications such as: geoWrite, geoPaint, geoPublish, geoFile, etc. RePrint is not a 'new Print Dialog Box' but does the job that we've been wanting for so long. To run, simply open the application from the DeskTop. You will see the standard file selection dialog box and are asked for your choice of data files to print. Once selected, you will be asked for the number of printed copies you wish to make. RePrint, when first run, modifies the GEOS kernal to allow this. RePrint is found on STORM DISK 1 and may be ordered from:

Storm Systems
464 Beale Street
W. Quincy, MA 02169

Enter number of copies:

7

Cancel

- RePrint -

Copyright (C) 1989, Storm Systems

RePrint by Joe Buckley

The screenshot shows a GEOS file manager window with the following details:

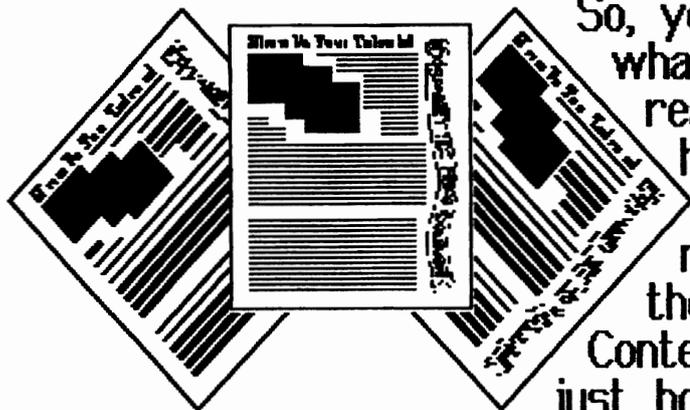
- RAM 1581
- 14 files, 1 selected, 189 Kbytes used, 142 Kbytes free
- File name: BootMaker128
- disk: RAM 1581
- type: Application
- class: Boot128 U1.1
- structure: SEQUENTIAL
- size: 3K
- modified: 8/22/88 1:12 PM
- author: Jean F. Major
- Write Protect
- Address: Jean F. Major; 119 Terrasse Eardley; Aylmer, Quebec, CANADA; J9H 6B5

BootMaker128 by Jean F. Major

This is an updated version of BootMaker128 that solves the problems of the first version. It is compatible with GEOWIZARD and the CMD Hard Drives. BootMaker128 creates a newly formatted bootable GEOS disk. If you run your AUTO EXEC files prior to BootMaker128 creating a boot disk, those files will be implanted in the GEOS kernal and will function without being on the disk. BootMaker64 is available on his 'GEOS Utilities #1' disk.

These programs and many more can be found in the geoMETRIX library, on Q-Link, or directly from the authors.

Show Us Your Talents!



So, you think you have what it takes to do some really great layouts, huh? Well, put your work where your mouse is, and enter the geoMETRIX Flyer Contest and see for sure just how good you may be.

geoMETRIX Flyer Contest!

Prizes

- | | |
|--------------------|---|
| Grand Prize | + Your flyer will be used as the official geoMETRIX flyer & will contain your name as artist.
+ Free 1 year geoMETRIX membership.
+ \$100.00 gift certificate from <i>TENEX™ Computer Express</i> . |
| 1st Prize | + Free 1 year geoMETRIX membership.
+ \$50.00 gift certificate from <i>TENEX™ Computer Express</i> . |
| 2nd Prize | + Free 1 year geoMETRIX membership.
+ \$30.00 gift certificate from <i>TENEX™ Computer Express</i> . |
| Runners Up | + We'll publish your flyers, and the First & Second Prize flyers in future issues of the geoJOURNAL. We reserve the right to publish only those that meet our guidelines and needs. |

Guidelines

1. Your flyer must be submitted in GEOS format, on 3.5" or 5.25" disk, in geoPAINT, geoWRITE, or geoPUBLISH.
2. Your flyer must fit within our page limits of 7.25" x 9.5" in size.
3. Tell us what desk accessories and applications you used to create your unique flyer.
4. The following information must appear somewhere in your flyer: Address; geoMETRIX GEOS Users Group, 20224 S. Sprague Road, Oregon City, Oregon, 97045-9641. Membership Benefits; geoJOURNAL Subscription, geoMETRIX Meetings, BBS Support, geoMETRIX PD Software Library, and SPECIAL Members Discounts!
5. A Submission Form must be filled out and sent in with your flyer.
6. Your entries must be received by November 15, 1991 to be judged.



For a Submission Form or more information send us a large SASE and get started toward your MASTERPIECE, and future purchase from *TENEX™ Computer Express*.

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Membership Renewal Newsletter Subscription

Name (First, Last): _____ Q-Name/Other: _____

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For Membership list, Publish: Address Only Telephone Only Address & Telephone

Date: _____ Where did you hear of geoMETRIX? _____

Please use the back for any comments and/or additional information. (Do you write GEOS programs?)

What Type Of System Do You Have?

C-64 64-C SX-64 C-128 128-D Apple: _____ PC: _____

Monitor: _____ REU/K: _____ Mouse/Joystick: _____ Modem/Baud: _____

Drive 1: _____ Drive 2: _____ Drive 3: _____ Drive 4: _____ Hard Drive: _____

Which Version Of GEOS Are You Currently Using?

Geos 64: _____ Geos 128: _____ Geos Apple: _____ ENSEMBLE: _____

Which GEOS Applications Do You Own?

GeoPublish GeoCalc: _____ BeckerBasic GeoChart GeoWrite WorkShop 2.1

DeskPack DeskPack *Plus* GeoBasic GeoFile: _____ Personal Newsletter

FontPack FontPack *Plus* International FontPack GeoDex Word Publisher

GeoTerm GeoProgrammer Other: _____

What Field Of GEOS Are You Most Interested In?

DeskTop Publishing Spreadsheets Word Processing Home Organization

Databases Entertainment Programming Time Management

Mailing Lists Graphics Other: _____

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U.S.A.	\$10.00	\$5.00	20224 S. Sprague Road
CANADA	\$12.00	\$6.00	Oregon City, Oregon
OTHER	\$20.00	\$12.00	97045-9641 U.S.A.

Please fill this form out in full. If applicable, check box and write version or model in the space provided. Please include payment (Check or Money Order) in U.S. funds made payable to "geoMETRIX GEOS Users Group" with this form.

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