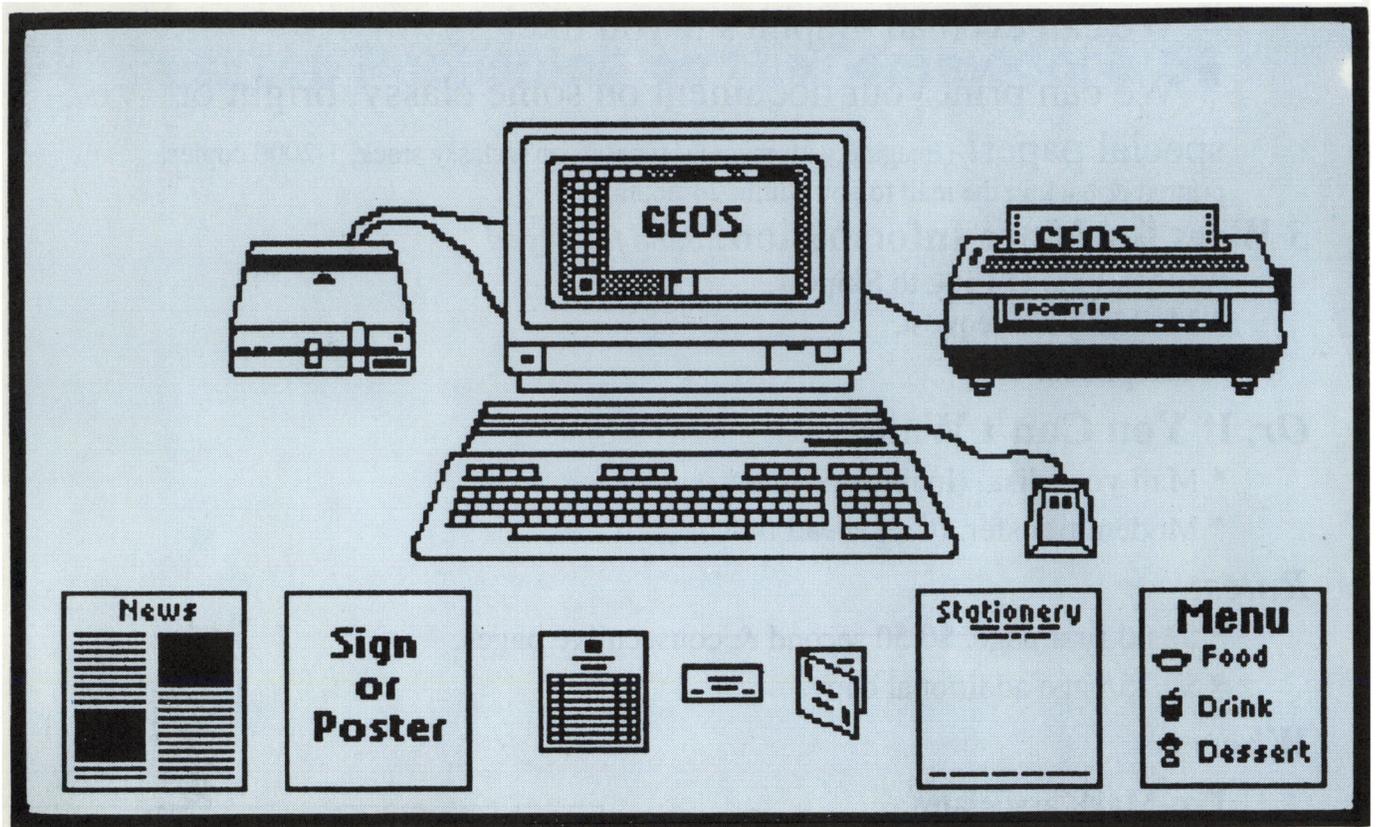


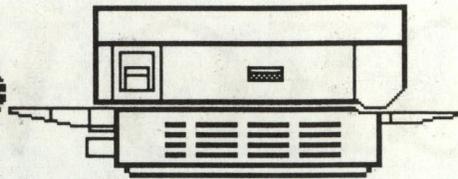
GEO WORLD

April 1987

Desktop Publishing on the Commodore 64 & 128



FAST LASER PRINTING



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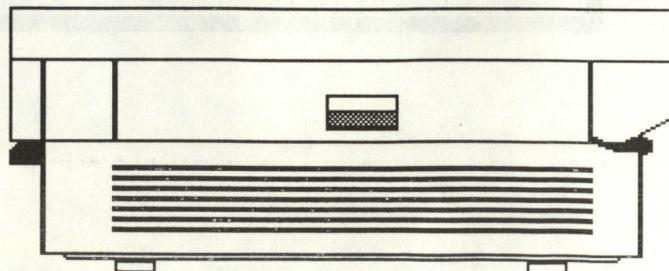
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All details and rates are contained within current flyer.



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April 1987

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As the world GEOS by...

Greetings Everyone in from Geoworld. March was a very busy month for me. We sent out over 700 copies of our first free issue and the response has been great ! There were some difficulties with the mail service though, and perhaps some of our readers are still waiting for their first sample of our magazine (I hope not).

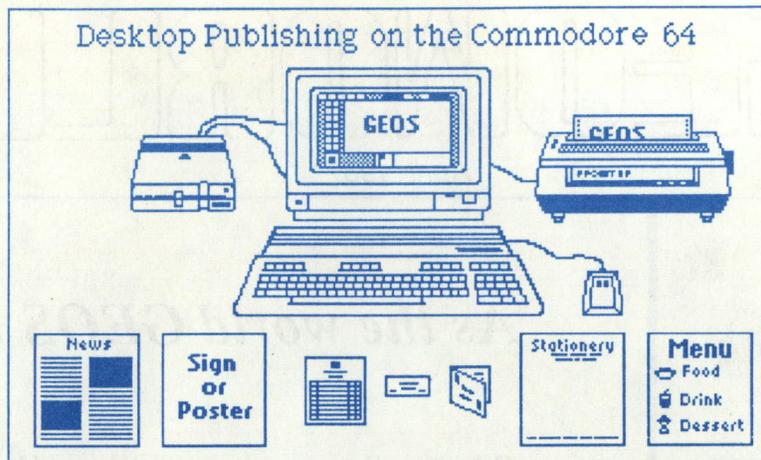
We will send all paid subscribers their copy first class mail to ensure delivery and if there are any problems receiving it please let us know through Qlink or snail mail.

I would like to take this time to personally thank everyone for their support of the publication . I have had a chance to meet some real nice people that would like to see GEOS develop into a even more powerful tool. Remember, GEOS is still pretty new and there promises to be many improvements and additions to come.

GGEOWORLD is printed at my home in Santa Barabara on a Multilith 2650 printing press, some preparation is done where I work but all production comes from my shop. In the near future Telegraphics will be able to print newsletters, flyers, stationary or whatever for GEOS users. The combination of desktop publishing, modems, and the laserwriter make it perfect for a print shop to do sattelite publishing. Newspapers have been doing it for years, its being done on the Macintosh and IBM, soon with the help of GEOS, it will be done with the Commodore. Stay tuned, GGEOWORLD readers will be the first .

Enough with the soap box. I hope you enjoy this issue and Next month promises to be even bigger and better. BSW will have a column with all the inside scoop on what is happening at Berkely and we should have some reviews on the new GEOfile GEOcalc .

Roger Ledbetter



By Peter Hughes

The Geos system includes GeoWrite and GeoPaint. With these two applications you can have your own desktop publishing system. You can make any printed matter for any occasion with these programs with a little imagination.

Create things that are needed for home, school, business or any organization. Make signs, greeting cards, business cards, menus, certificates, brochures, illustrations, forms, stationery, advertisements, labels and anything else that needs to be printed.

Use different fonts with many point sizes and styles. Get the new GeoFont editor from Myth Conceptions (111 New Canaan Ave., Norwalk, CT 06850) and create your own fonts with point sizes from 2 to 48 point. Mix text and graphics. Use Print Shop, Print Master and Newsroom graphics in GeoPaint. Get Disk Art - Geos clip art - from Those Designers (3330 Lewis Ave., Signal Hill, CA 90807). Even use Computereyes video digitizer from Digital Vision (66 Eastern Ave., Dedham, MA 02026) and make your own real world images for clip art. Bring those images in with Piconvert or use Graftix-Link from Solutions Unlimited (P.O. Box 177 Dobbs Ferry, NY 10522-0177) to bring any high-resolution format into and out of GeoPaint.

For the home, create your own personal greeting cards or signs. Put graphics and text any where you want. Draw your graphics as large as you want. Work on the whole page at once by scrolling around - loading and saving of areas is automatic. If you have a color printer like an Epson JX-80 or an Okimate 20 you may print out your work in full color.

For school, make signs or posters announcing a certain event. Make certificates for awards. Make your own newsletters for school clubs. With Geos fonts and graphics grabber for importing Newsroom graphics you can make great looking newsletters. Make clean looking diagrams for physics and biology class homework.

For business, make your own business cards, flyers, advertisements, catalogs, stationery and forms. Making business cards in a snap. Make your logo and type your name and address. Paste card in photo scrap size pieces around the page. Then make copies on card stock and cut with paper cutter.

Put together your own catalogs with text descriptions and illustrations. Layout your own advertisements the way you want. Create impressive graphics, charts, diagrams and maps to prove your point or show clearly your position.

(continued on page 5)

In this installment we are going to explore the header block of a file and discuss some ways to convert your own programs to Geos format.

All Geos files contain a header block. This block is detached from the rest of the file and contains information about the file. The first two bytes after the filename in the directory entry point to the track and sector where the header block is located. Note that non-Geos files (those displayed with a C-64 icon) will not have this block, their icon is generated by the Kernal. All Geos file MUST have a header block -- the desktop needs the icon data. If a file doesn't have one you will get an I:2 error when you try to open the disk.

The format of the header block is as follows:

- Byte 0 - 1 - Link (always 0,255).
- 2 - 3 - Width & height of the icon (always 3 and 21).
- 4 - 67 - Icon graphic data. The first byte is the number of bytes of data (3*21=63) plus 128.
- 68 - C-64 file type (128+type).
- 69 - Geos file type (1-13).
- 70 - File Struct. (0 = seq, 1 = VLIR).
- 71 - 72 - Load address of the file.
- 73 - 74 - End address of the file.
- 75 - 76 - Execution address of the file.
- 77 - 96 - Permenant filename. Bytes 0-11 are the name, 12-15 are the version string in the form 'V1.1", and 16-20 are unused.
- 97 - 116 - If a data file, parent disk name. Authors name otherwise.
- 117 - 136 - If a data file these bytes hold the name of the parent application.
- 137 - 159 - Applications can use these bytes for whatever they want.
- 160 - 255 - This holds the string viewed when info is selected from the desktop.

Note the load address for the file is contained in the header, there is no start address at the

beginning of the file like there is in normal CDOS. If you try to load the file in C-64 mode, the first two bytes will be lost.

The end address is used when loading DA's to tell the desktop how much memory to save before loading the accessory in. You can trick the desktop into saving a bigger swapfile by increasing this address. This is a handy feature if you need a buffer but don't want to compile it with the program.

The C-64 filetype is the same as in CDOS. All Geos files will be type USR (\$83). Here is a list of the Geos filetypes (the first three are for non-Geos files that will be loaded in and ran from Basic):

- | | |
|-----------------------|-----------------------|
| 1 - Basic | 2 - Assembly |
| 3 - Data | 4 - System |
| 5 - Desk Accessory | 6 - Application |
| 7 - Application. Data | 8 - Font |
| 9 - Printer Driver | 10 - Input Driver |
| 11 - Disk Driver | 12 - System Boot |
| 13 - Temp (swapfile) | 14 - Auto Boot (V1.3) |

The permanent filename is just that -- a permanent name. A user can change the directory entry but he can't change this name. The parent filename is used with Data files. Whenever a user 2clicks on a data file's icon the desktop will try to load in the parent file. If it can't find it you will be prompted to put in the proper disk. When you select 'print' from the desktop the parent application is still loaded in -- a flag is set telling the parent to just print the file (who's name is passed to it) and exit.

So here's the problem, we now know what headers are but how do we create them for our programs? There are acually several ways to do this but here is the way I found that works the easiest for me: when I compile a program I have the assembler compile a header as the first block of the file. Then I use a short basic program to split the header off. Watch this:

```

1000 *= $0304
1001 .byte $80+63; icon size plus 128
1002 *= *+63; dummy icon, will be blank on
.   the desktop.
1003 .byte $83; USR filetype
1004 .byte $06; Application (5 for DA)
1005 .byte 0; Seq structure
1006 .byte $0400; load address
1007 .byte endaddr
1008 .byte $0400; execute address
1004 .asc "Myfile V1.1 "; permanent name
1005 .asc "Master Blaster "; author
1006;
1007 *= $0400
1008 ; MAIN PROGRAM STARTS HERE
    
```

Notice that the starting address is \$0304. This is necessary because the first two bytes of this sector will be the link and the second two will be the load address. The program you use to split the header off must put the proper numbers (\$0,\$ff,\$3, \$18) into these positions on the disk.

The icon is composed of 63 zero bytes which means that it will be invisible on the desktop. It still works ok, you just won't be able to see it. If you want to see the icon just compile non-zero bytes. When the program is finished you can use an Icon Editor to make up an icon for it.

The ending address can be tricky. You can compile the program to the screen and then insert the ending address before you compile to disk or you can use a disk doctor to change it. My assembler (Abacus, an excellent one by the way) will let me assign variables. The last line of the source code (just before the .end psuedo-op) is: 2000 endaddr {backarrow} *. This will store the ending address of the program into the variable 'endaddr' which will be inserted into the header on pass 2.

It isn't necessary to take the header all the way out to byte 255. The *= \$0400 in the main body will pad it out for us. However you can compile in as much as you want.

Note that Geos uses true ASCII so use all lower case with the .asc (on your compiler it may be .byte ") psuedo-op. This will make all the text come out in upper case in Geos. If you want a mixture of upper and lower case you'll have to compile the individual bytes.

Once you have the header block compiled as the first block in the file all you have to do is 'split' it off. There are several programs out which will do this for you. One is 'Prgtogeos' which is listed in Berkey's reference guide. Unfortunately it has more bugs in it than a rotten log. Another choice is 'GeoSplitter' written by yours truly. A listing of it is in figure 1, or you can download it from Q-Link.

Both of these programs will only work with SEQ structures. VLIR requires special handling. This shouldn't be a problem at first because only VERY large programs need to be VLIR (data files are another story).

For those of you who want to try your hand at writing your own splitter here's what's required:

- 1) Read in the directory entry for the file.
- 2) Read the first block of the file and store the . T&S link.
- 3) Modify the first four bytes and re-write the . block on the disk.
- 4) Make the directory entry point to the link that . was saved from the header block.
- 5) Add to the directory entry the header link, . type, structure, time, and date; save it back.

That's all there is to it. The program can either get the type/structure data from the header or ask the user to supply the information.

That's all I have room for this time. Next month we'll start into the actual programming. We'll start off with menus, icons, and dialog boxes. I hope to see you there. MB

```

0 goto35
5 hi=int(a/256):lo=a-hi*256:print#15,"m-r"chr$(lo)
chr$(hi):get#15,a$
6 a=asc(a$+chr$(.)):return
10 print#15,"u1:"2;0;tr;sc:return
15 print#15,"u2:"2;0;tr;sc:return
20 print#15,"b-p:"2;ps:return
25 get#2,a$:a$=left$(a$+chr$(.),1):aa=asc(a$):return
30 print#2,chr$(a):return
35 dimdi$(29),ty$(14):poke808,234:poke53280,0:
poke53281,0
40 printchr$(147)chr$(14)chr$(8)"Program toSplit";
:inputa$:ifa$=""then135
42 gosub115:print:fori=1to5:reada$,l,h
45 printa$;:inputb$:e%(i)=val(b$):on-(e%(i)<lore%(i)>h)
goto45:print:next
50 fori=1to14:readty$(i):next
55 print:print:fori=1to14:printstr$(i)"ty$(i):next:print
:input"What type";ty$
60 ty=val(ty$):ifty<.orty>14then55
65 printchr$(147)
66 print"Date -"str$(e%(1))"/"
mid$(str$(e%(2)),2)"/right$(str$(e%(3)+100),2);
70 print"Time -"str$(e%(4))":right$(str$(e%(5)+100),2)
75 print:print"Type -"ty$(ty):print:print"Correct?
";:poke198,,:wait198,7:geta$
80 printa$:ifa$<>"y"anda$<>"Y"then restore:close2:
close15:run
85 ntr=asc(di$(1)):sc=asc(di$(2)):gosub10:gosub25:
xt=aa:gosub25:xs=aa:gosub10
90 a=.:gosub30:a=255:gosub30:a=3:gosub30:a=24:
gosub30:gosub15
95 di$(.)=chr$(131):di$(19)=di$(1):di$(20)=di$(2)
100 di$(1)=chr$(xt):di$(2)=chr$(xs):di$(21)=chr$(.)
:di$(22)=chr$(ty)
105 di$(23)=chr$(e%(3)):di$(24)=chr$(e%(1)):
di$(25)=chr$(e%(2))
110 di$(26)=chr$(e%(4)):di$(27)=chr$(e%(5)):goto140
115 open15,8,15,"i0":open2,8,2,"#":open3,8,3,a$:
close3:input#15,e1$,e2$
120 ife1$>"19"thenprinte2$:goto135
125 a=656:gosub5:ds=a:a=660:gosub5:do=a:tr=18:sc=ds
130 gosub10:ps=do:gosub20:fori=.to29:gosub25:
di$(i)=a$:next:return
135 close2:close15:poke808,237:end
140 tr=18:sc=ds:gosub10:ps=do:gosub20:fori=.to29:
print#2,left$(di$(i),1);:next
145 gosub15:print:print"Done!":goto135
150 data"Month (1-12)",1,12,"Day (1-31)",1,31
160 data"Year (0-99)",0,99,"Hour (0-23)",0,23
170 data"Minute (0-59)",0,59
175 databasic,assembly,data,system,desk accessory,
application,appl. data,font,printer driver,input driver
180 datadisk driver,system boot,temp,auto boot

```

FIG. 1 - GEOSPLITTER

(Desktop Publishing continued from page 2)

For user groups and other organizations make handouts and your own newsletter. With Geos it is easy. Put your text in columns and insert stock graphics which you can keep in photo albums. People who do not have Geos - though they should - can have their articles put into a newsletter created with Geos. Their text created with their own word processor can be converted with the text grabber and inserted easily into the newsletter as a GeoWrite document.

Even for just writing letters with the nice expressive text fonts is fun. With GeoPaint you can doodle to your heart's content.

With GeoWrite and GeoPaint you can create any printed matter your self quickly and easily. Doing graphics on a computer is great because of the tools at your disposal and that you can save, copy and rework any thing you want at any time.

With your imagination and Geos, you can create professional work. The power of desktop publishing is here at a very low price. All you need is a Commodore 64, a good monitor, disk drive, and an 80 dpi dot-matrix printer.

Laser printing is available on Quantum Link from Berkeley Softworks or from 3rd party laser printing services like Pro-Mark Associates (P.O. Box 20913 Milwaukee, Wisc. 53220-0913.) It is unbelievable the quality you can get from your little old Commodore 64 computer; whether dot-matrix printed or laser printed.

With Geos you can design and print complex page layouts and highly detailed graphics. Geos is like Print Shop, Newsroom, Certificate Maker and Flexidraw in one system. With Geos you can design and print anything.

One of the unique things about Geos is the ability to work on the whole page. I used to make signs with Doodle! and then Flexidraw; with some difficulty. Now with GeoPaint I can make a full page sign easier and in less time. Plus with the great fonts the signs look better. Everyone interested in graphics or desktop publishing should have Geos. Let your little Commodore 64 shine and maybe outperform the big Mac.



GEOS
Graphic
Environment
Operating
System

A Whole New
Universe for
the
Commodore
64 Computer
System

Universal Rumbles by Kai Cherry

This little column, which I hope will be able to appear monthly, is sort of like INFO's Rumor Mill. That is, anything you read here may or **may not** be true. I don't make this up; I only know what I'm told. Okay? Well, here goes!

- > According to a young woman at Commodore by the name of Yvonda, the **1764 RAM Expansion** will be released late this month (April) or early next month (May), and should at that time be available in local retail outlets.
- > Speaking of releases, **Berkeley Softworks** will *not* be releasing **DeskPack2**. I was told by Keeva Beckeley that **geoSpell** would be released separately. She also told me that **geoFile** and **geoCalc** should be shipping by the end of the month. Also, BSW is working now on **geoPublish**, and that they were waiting for the prototype of the **geoMouse** to be sent to them for testing.
- > Arthur Dahm III, also known as **Cosmac**, sold **geoFont** to BSW. **GeoFont** is still available through Myth Conceptions.
- > And since I mentioned myths, I hear that **Timeworks** is "seriously considering" writing productivity software under GEOS. **Electronic Arts**, on the other hand "just can't see windows and pull-down menus in *Marble Madness*". I wonder if Accolade would feel the same way? Have you seen **Hardball** for the Mac? It's incredible! Well, I'll call Accolade and see what they say and let you know next month!

Well, that's it for this month! See you again soon!**KC**

GEOpaint

Tricks & Tips from a professional Graphic Designer

GEOpaint is an excellent text/graphics program. At last, the power of desktop publishing is available at a very affordable price.

WILLIAM ZEILINGER of THOSE DESIGNERS has been using GEOpaint ever since the 1.2 version came out. Several valuable tricks and shortcuts are included here. If you follow the directions you can create documents and artwork that look like they were done on a system costing thousands of dollars.

PART ONE: DRAWING ON THE SCREEN

With GEOpaint you don't have to be able to draw a straight line. GEOpaint will do it for you. You don't need a compass to draw a circle. GEOpaint does that as well! Oh Yeah? well then what about those complex curves when you try to draw people or copy a picture to the screen?

TIP #1 DIGITIZING ART

This is a method of transferring a picture to graphic format on your screen.

1. Find a picture you want to copy.
2. make sure it is between 5 and 12 inches in either direction.
3. place a piece of clear plastic kitchen wrap over the picture large enough to cover the area.

A POINT TO REMEMBER ABOUT PRINTERS . . .

Some printers are different than others. If you own GEOS, you may have a printer that prints things kind of 'fat' or stretched out. That is because there are two common types of printers used by Commodore computers. those that print with 60 dot per inch and those that print with 80 dots per inch (dpi). The 80 dpi printers give a correctly proportioned graphic screen printout while the 60dpi, using fewer dot in the same distance, will make images appear wider than they are. In order to compensate for this, you can do two things.

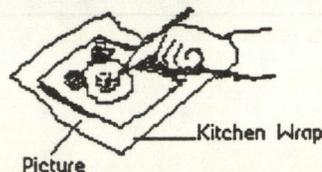
You can make sure that you always use the left 2/3 of your available screen page or, you can also draw your images with a slight elongation so when you print them, they appear more proportional.

When you download a file that takes too much room on your screen you can try editing it before printing by capturing the right half and transferring that portion to a new file on the left side of the paper (you will have to use the EDIT mode) then print them as to different files and tape them together. Photocopy the taped version and you can see what you downloaded.

Note: Laserprinters provide the same resolution on GEOpaint graphics as dot matrix printers

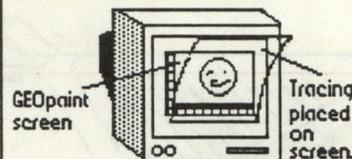
4. Smooth the Kitchen wrap over the picture to eliminate as many wrinkles as possible. This will provide a better base when tracing the drawing on the screen.
5. Use an extra fine or fine tip felt marker of a dark color. Press lightly when tracing to avoid tearing.

6. Using the felt pen, trace around the picture and all the major details



5. After you have finished all the tracing you want-smooth the tracing onto your GEOpaint screen. with the upper left portion of your drawing in the upper left corner of the drawing area.

Now, you can follow the contours of the tracing with either your joystick (in the LINE mode) or with a lightpen, on the screen.

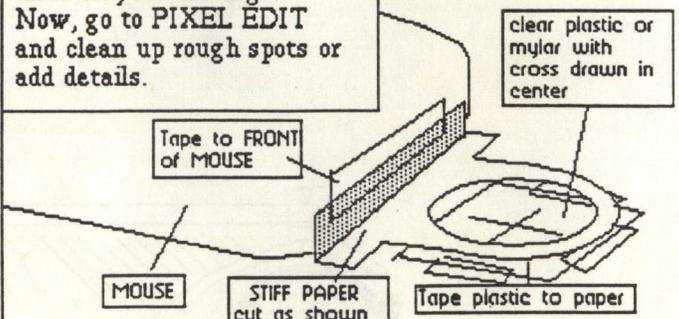


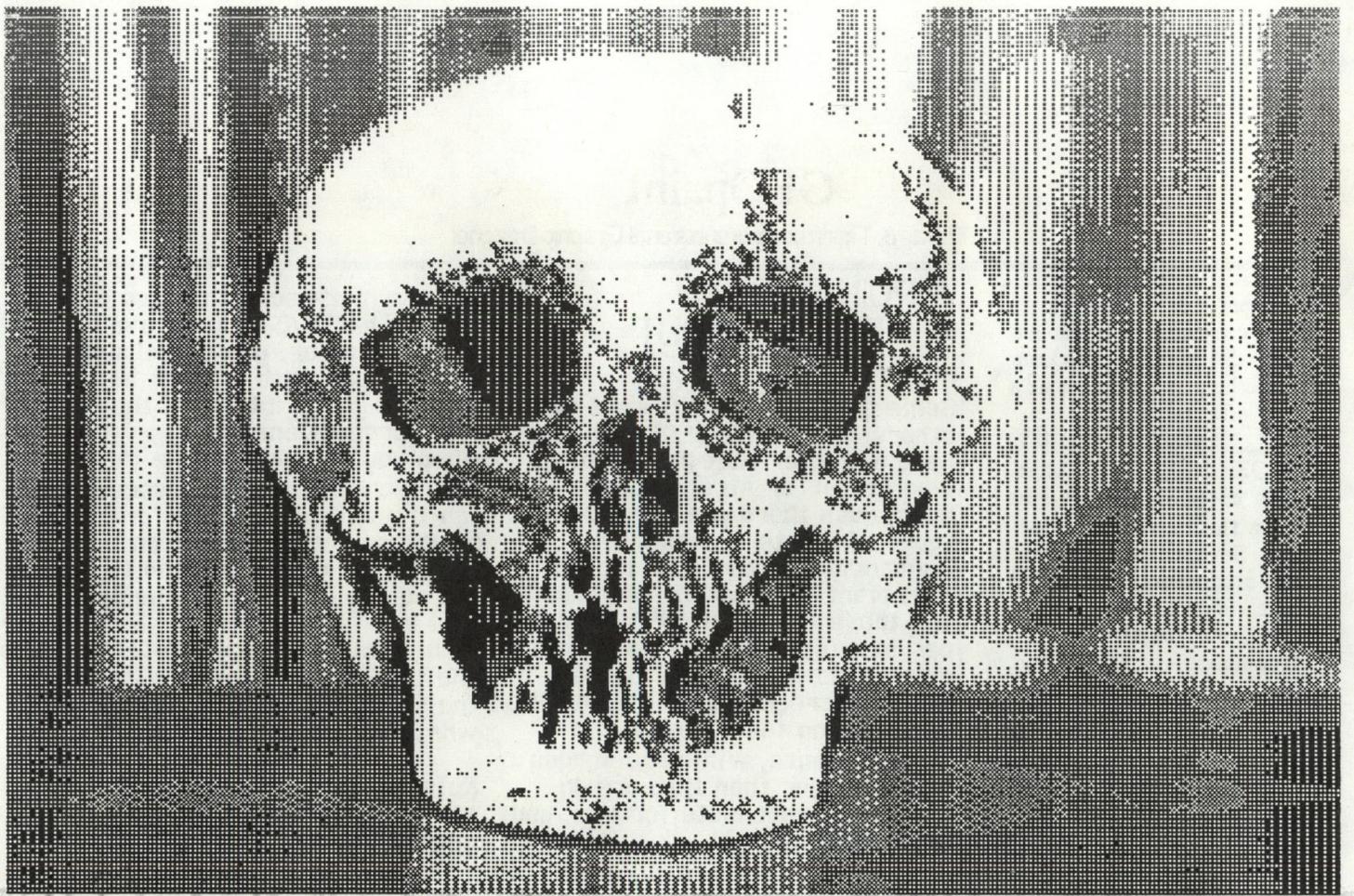
7. If using a joystick, position the crosshairs on the contour line and click ON and OFF until you have duplicated all the lines on your tracing. Now, go to PIXEL EDIT and clean up rough spots or add details.

8. If you are using a KOALA PAD to enter your picture- follow the same directions except place your tracing on your KOALA PAD instead of the screen.

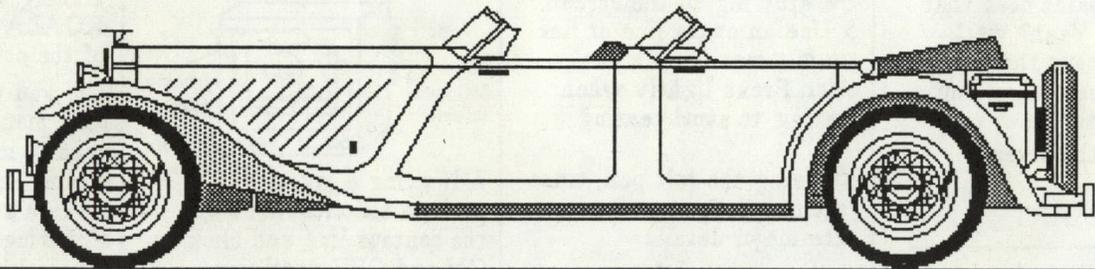
9. If you use a 1350 or 1351 mouse. You don't need to make a tracing, but instead-make a small digitizing head for your mouse like this...

(CONTINUED ON NEXT PAGE)

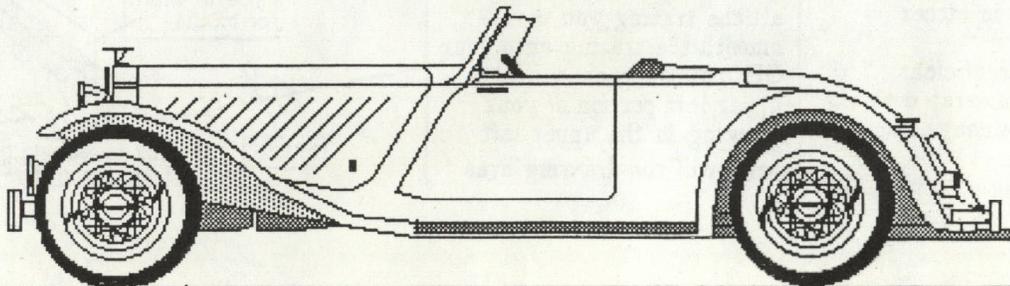




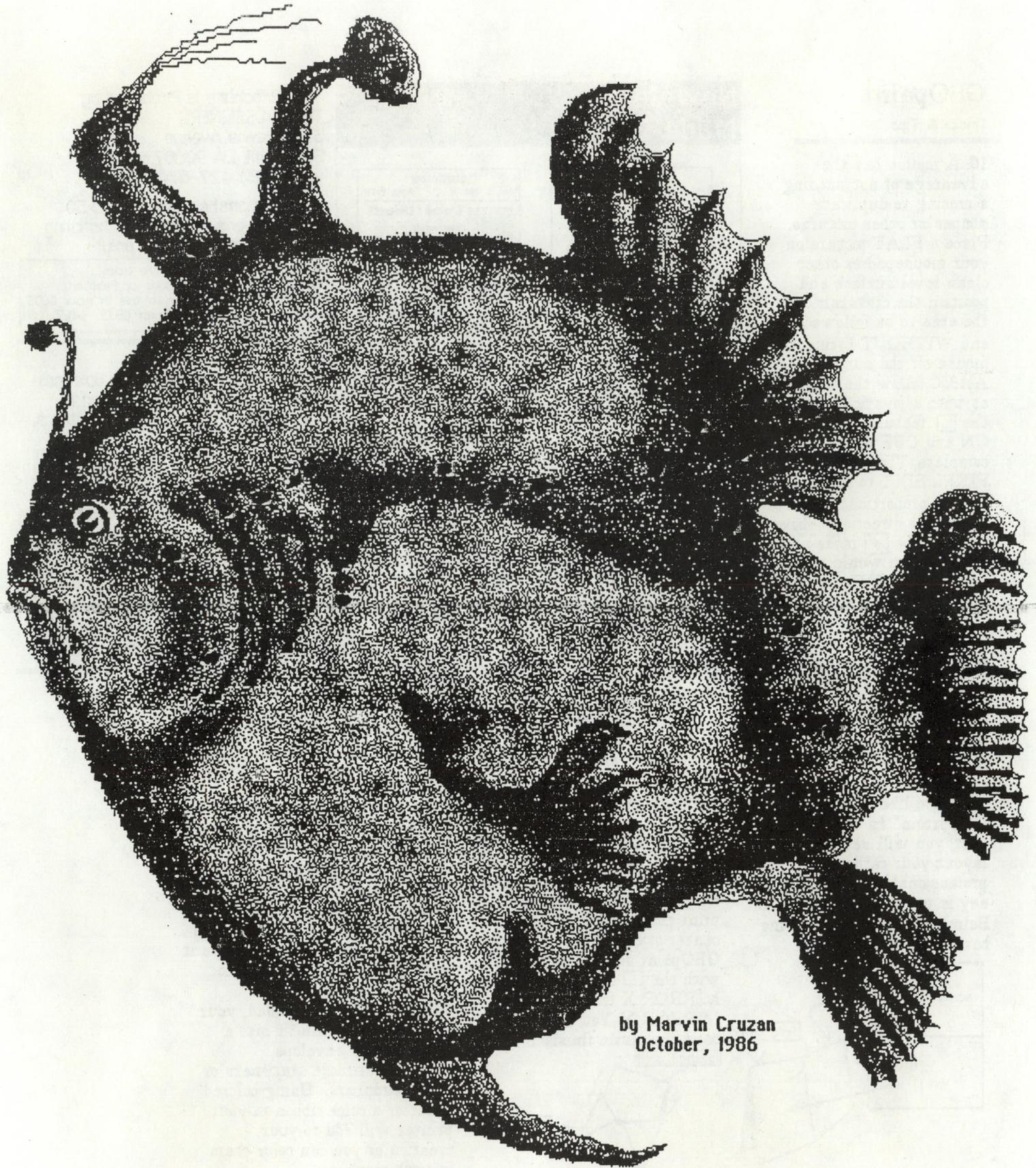
Digitized with ComputerEyes by I. Dunlap



THOSE DESIGNERS 1986 WEZ



THOSE DESIGNERS 1986 WEZ



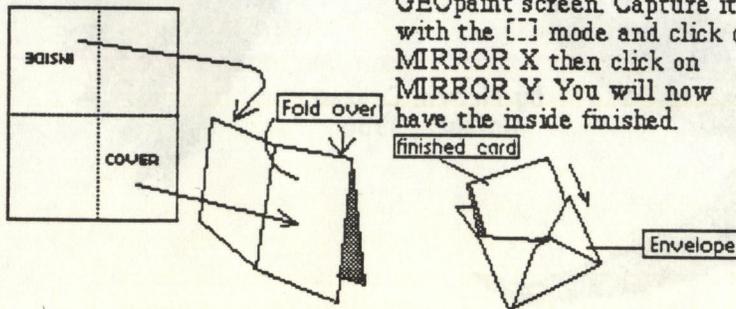
GEOpaint

Tricks & Tips

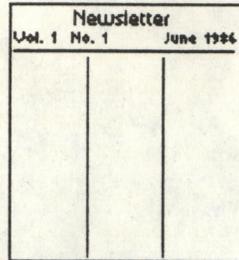
10. A mouse has the advantage of not needing a tracing to duplicate shapes or other pictures. Place a FLAT picture on your mousepad or other clean level surface and position the crosshair over the area to be followed and WITHOUT lifting the mouse off the surface, A)1350 follow the contours as with a joystick using the feature and click ON and OFF until complete. Then go to PIXEL EDIT to finish up. B)1351 proportional mouse-follow the directions above but use the mode and draw as you would with a regular pencil. Remember NOT to lift the mouse off the surface or you will lose your reference point.

MAKING YOUR OWN GREETING CARDS

With GEOS, it is easy to make our own greeting cards without using other software like PrintShop™ or Newsroom™. In the following part, you will see how to layout your cards in a professional way! What you say is up to your imagination. Below is a diagram showing how to layout your card.



Newsletters Made Easy



Create a master layout that will work with your printer (60 or 80dpi) and write protect that file. Draw vertical lines between columns as a guide for pasting in the text/copy blocks or graphics from pictures or clip art. Erase the guides later if you wish.



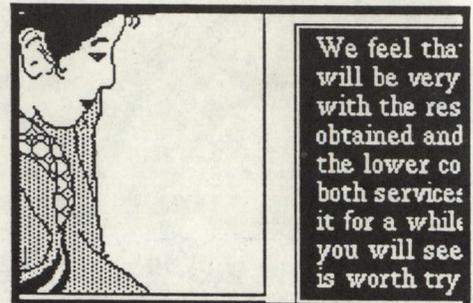
For each new issue, go to FILE and make a duplicate of the master layout. Rename it for each new issue and make the changes to the masthead as needed. Save each issue for convenient reprints and as a file for pictures you may need for follow up stories.

THIS Brochure is Produced by
THOSE DESIGNERS
3330 Lewis Avenue
Signal Hill, CA 90807
voice (213) 427-6742

For additional copies send \$3.50 which covers postage and handling [check or money order only]

Watch for DISKART Software from THOSE DESIGNERS in January or February. A collection of graphics to use in your GEOS documents and created with GEOS. WEZ

Below is an example of a text/graphics module picked up from a different document and pasted in here. This is a good way to file items.



To begin with, this will create a "french fold" greeting card that can be printed on one side of the paper and still have an outside cover and an inside greeting.

In the diagram below you will see that the inside cover needs to be printed Upside Down and Backwards. To accomplish this, print the inside greeting in the center of the upper left corner GEOpaint screen. Capture it with the mode and click on MIRROR X then click on MIRROR Y. You will now have the inside finished.

The outside cover consists of two parts, a) The front cover and b) The back cover. Position your art for the front cover Right Side Up in the lower right corner of your GEOpaint page (60dpi printer owners take note-leave adequate margin for your printer) For the back cover, you may center the copy/graphics in the lower center portion of the bottom left screen. This can be your name a clever graphic logo or sign off or whatever you want to add that finishing touch to your work.

When finished and folded, your greeting cards can fit into a 5 3/4"x4 3/8" envelope, available at most stationers or paper suppliers. Using colored paper or a color ribbon in your printer will add to your creation or you can color them in with markers.

Desk-Top Publishing

A Beginner's Guide to Becoming an Expert.

"Desk-Top Publishing", "Electronic Page Make-Up", "Text/Graphic Composition". All terms for this revolutionary new method of creating printed communications. When speaking with Roger Ledbetter (your publisher of GeoWorld), he said he was looking for samples, examples and work that people had done using GEOS. He also mentioned that it would be great to have an article written addressing "How to be a Desk-Top expert when you don't know what a font is!" I'll try to slow-down and explain all of this as clearly as possible. Here goes . . .

I started in this "Print-Communications" business as a layout artist for the nation's largest independent hardware distributor. It was my job to up-date and organize 2000 pages of hardware. As fate would have it, I was eventually promoted to Manager - anyway I ended up running the advertising/catalog/printing department for a \$45 million/year company. The deadlines and production level with a reduced staff were driving me to the funny farm - So I began to look for ways to stream-line our operations, that led me to desk-top publishing equipment. This is getting boring. Today I own my own ad/marketing agency where we use GEOS daily 8-12 hours/day to create finished art and print communications in a professional environment. Our demands of GEOS have probably been greater than most users, our experiences should help in shedding some light on this "Desk-Top" publishing "revolution."

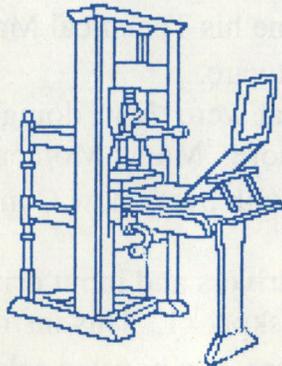
To understand Desk-Top publishing it is necessary to look back and see how printed pages were traditionally produced. Typically, a page of printed matter was first typeset, then someone would go off and find artwork to go with the ad or article. Once all the elements were gathered, the paste-up artist would "paste" down these items into place to create a finished, printable piece of artwork. This procedure was time consuming and expensive at best.



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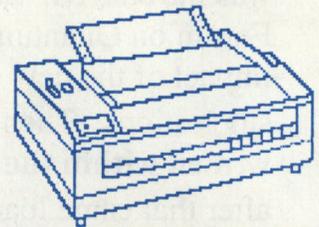
Today, you can electronically merge text and graphics onto the same page without using traditional methods. The savings are enormous, the time is usually cut in half. Combined with the power of Laser printing and Near-Typeset-Quality (NTQ) fonts, this in a nutshell is the excitement of "Desk-Top" publishing.

I want to create a professional looking page - but I'm just not creative.

OK. The greater your understanding of traditional methods, and/or your creativity level . . . the more professional your document will look using GEOS. If you've ever worked with a "real" typesetter", you become aware of the flexibility of the system. (Unfortunately they cost \$20,000+) But learning about this flexibility enables you to apply the same principals to GEOS; even if GEOS won't do *exactly* what you want it to do. Not everyone wants to learn how a typesetter works in order to create great looking pages with GEOS. You don't need to know how an internal-combustion engine works in order to drive a car. There are short-cuts to learning professional page make-up techniques. Generally, try and keep the following points in mind when creating a page:

Balance- An equal balance of text and pictures. The pictures should be scattered throughout the page. Don't load them all on one side or the other. Remember: people like pictures, but make your page exciting for the eye.

Experiment- If you have the time to play with GEOS, experiment with the "overlay" option. This is the method by which you integrate text and



graphics onto the same page with GEOS. Even if you don't have access to a Laser Printer you can use "overlay" to create some great looking pages. As long as you own Writer's Workshop version 2.0 you can create an overlaid document by separating each section of the page with the moveable margins and then prompting a page-break. Simply print out a page at a time on your printer, but roll back the paper to the head of the page after each printing. The more you experiment, the greater your knowledge.

The Evolution of GEOS

by Kai Cherry

By now, everyone that owns a C64/C64c/C128 home computer should know what GEOS, the Graphic Environment Operating System, is. I'm happy to announce that Commodore has named GEOS its *official* user interface! What an accomplishment for a small company in Berkeley that started out as a consulting firm!

But exactly how far has GEOS come? Well, most people were made familiar with Version 1.0 of the operating system one year ago this month. The major Commodore publications all had multiple-page reviews of the most "revolutionary" software of the '84. But GEOS was around before then.

If many of the people who began using GEOS with Version 1.2 first used 1.0, they would have been disappointed. For one, color editing in *geoPaint* was not supported, *geoWrite* was full of all kinds of bugs, and the *entire system* would *crash* when you finished printing a document! To make matters worse, the system only supported about eleven printers and only *one* input device!! All of these problems, plus both the software's and the company's obscurity made many people feel that GEOS was just "an art program with a word pro" package. Some of us, on the other hand, knew what was yet to come.

Then came Magic Moment #1. In May/June of last year, GEOS Version 1.2 was introduced. With those multiple-color, multiple-page snazzy advertisements with catchy phrases that we all know so well, along with support by Commodore & that fact that the software was being made available through local dealers brought GEOS to full recognition. Many people still felt that GEOS was just a paint program, but everyone knew for sure that it was around.

Magic Moment #2 was a real boost for GEOS. Over the summer FontPack1 was introduced. So what. The really **BIG** news was the introduction of the GEOS Forum on QuantumLink. This was great moment. From this, we began to see the full impact of the new operating system. People began asking questions, making suggestions. Then Alexander Boyce began uploading utilities for GEOS that were written **within the system**. Soon afterward came his Technical Manual, and soon after that came loads of user-written GEOS software.

But what about Berkeley Softworks? What were *they* doing? Well, they were developing software and dealing with Commodore. Magic Moment #3? The announcement that GEOS would be packaged with every new Commodore C64c computer!

The support went on and on. new printer drivers and input drivers were introduced. And as 1987 got closer, we saw Deskpack1. This instilled a firm belief that GEOS was going forward for present owners, and boosted sales for BSW. As '87 reeled its way in, so did new releases from BSW released Writer's Workshop and Geodex. And more is on the way! (see my "Universal Rumbblings" column.)

So remember: In just a year and a half, GEOS has come from not being able to print at all to making publications like this on that put the Mac ill at ease. And its just the beginning! **KC**

Desk-Top Publishing (Continued)

Content vs. Appearance- Although I make my living by "dressing-up" the appearance of printed pieces, I'll be the first to admit that the content is of the utmost importance. Desk-Top publishing, as a graphics tool, only allows you to easily enhance the look of a piece - to graphically help you make your point. Remember, this is Desk-Top PUBLISHING, not Desk-Top art. Don't detract from your message by overloading the document with too many graphics.



Tricks- Ultimately, it's the "tricks" you learn using GEOS that allow you to create a creative looking document, such as: the word-wrap around the photo in the column at left, how to create a vertical divider between these two columns from GeoWrite (it was not imported as a graphic), how to create 2- and 3-column pages - overlaid with graphics in the proper position. Unlike software for the MAC, GeoWrite does not directly allow you to put photos next to text on the same page, or have multi-margin settings within the same page (you could do it w/tabs), because GeoWrite must "overlay" pages in order to create a finished page it can get confusing. It's learning the ways around the limitations of our software and hardware that I'm speaking about when I say "tricks." When and if, BSW ever comes out with GeoPublish, life will become much easier for the infrequent "Desk-Top-Publisher."

A how to guide:



Let's use this article as an example of how to create desk-top type pages using GEOS. Within my GeoWrite document the pages are organized as follows:

Page 1: Left column text. (Right margin @ 4.1)

Page 2: Left column art.

Page 3: Right column text. (Left margin @ 4.3)

Page 4: Right column art.

Pages 5 & 6: Center Line (NOT a graphic!)

The text was laid in first, with holes left open for later pics to be added. These holes for pics are easily manipulated with your margins. At the bottom of each page a page-break is prompted in order to keep it separate from the other pages. If you didn't create page-breaks, every time you went to make changes you would alter the vertical position of everything on the following pages!

Positioning Pictures- Since we know that pics are on a page unto themselves placing them is relatively easy. If you've already created a hole for the pic to appear and the first line of that hole is 20 lines down from the top using a 12-point font, then you simply "return" down 20 lines with the same point size and paste your pic into position. If the pic needs to be left or right, simply adjust with the appropriate margin. (It's a good idea to place the margin setting PRIOR to the pic being pasted into position.) This measuring of "returns" is the only accurate way of vertically measuring your depth for proper pic positioning.

* Keep a minimum of 30 K bytes free on your work disk. This will help to eliminate "disk clog". When you are working with an overlaid document you tend to make quite a few revisions before you're happy with its appearance. If you have less than 30 bytes free you run the risk of getting pic "scatter" when you go to replace its position; or you may experience erratic appearance of the highlighting feature when simply editing some text. Use the update feature often.

* Choose your pics carefully. Even printed on a Laser Printer your pics will only be at 80 dpi!

* You can push your pics off the right margin up to 5/8". See the printer on the previous page.

* What you create within GeoPaint for Laser Printing will get printed in a slightly different way from your dot-matrix printer. Tab locations are the most noticeable. I have created an example chart of a page printed on a Panasonic KX-P1090 & the LW, along with other little helps. This "kit" is available for \$5.00 from the address below.

* If you are planning on having your pages Laser Printed, make sure that you use one of the four LW- fonts. If you don't your document will be printed on a Laser Printer with dot-matrix fonts that look like this!

I have tried to give you a very quick history lesson and a "how-to" guide. I'm sure I've neglected someone's question. I will be happy to answer anyone's questions regarding this subject if forwarded to:

By Mail: Pro-Mark Associates
Attn: Mr. Skip Goetzinger
POB 20913
Milwaukee, WI. 53220-0913

Via Q-Link E-Mail: SkipG1

**Mystic Jim
2388 Grape
Denver CO
80207**



This is your invitation to join Mystic Jim's GEOS Shareware Group. Our group has several hundred members, and we're growing rapidly. We hope that, after reading this, you'll want to join us, too.

Our purpose is to distribute good GEOS programs, and to compensate programmers, who might not have any other way to market their work. We offer several disks full of GEOS programs, utilities, fonts and graphics, on request, as shareware. This means that users can pay whatever they feel the programs are worth to them, after trying them. Contributions go to cover our expenses, and the remainder is paid to the talented people, just like you, who provide us with programs. Of course, we welcome up-front contributions, too.

GEOS, as you may know, is the fantastic new operating system for the Commodore 64 and 128. It allows the user to do things with these computers that rival the much more expensive Macintosh and IBM PC. Unfortunately, the cost of programs available from the manufacturer, BSW, can be quite high. We believe that our group can offer an inexpensive alternative, with programs as good as the expensive ones. We actually offer more programs, and more code than BSW.

While it's possible to get our disks by simply asking for them, you will probably want to join our group by paying a nominal membership fee in advance, or after trying our programs. Shareware members receive important privileges:

1. Subscription to GEOWORLD, with a monthly list of available programs, along with all of the other wonderful features of this fine magazine.
2. Access to our members-only bulletin board, where you can download new programs, get help with problems, fixes for program glitches, replacements for faulty disks, or just to chat.
3. Timely updates: while non-members can get new programs by waiting for update disks, members can request new programs on disk, or from the bulletin board, at any time.
4. Fastest service on any request: we will soon be able to guarantee one-week service.

We add new programs continuously, and membership is the best way to be sure you get the ones you want.

We have in the works:

1. Programmer's utilities: GEOMonitor, threading disassembler, GEOEditor, GEOHeader, GEOCross, and more.
2. Graphics: GEOMetry, for GEOPaint, with arcs, ellipses, expand/contract, proportional printing; Picture libraries; GEORotica, and more.
3. Fonts, fontmaker, patterns, etc.
4. Telecommunications. GEOTerm: move an icon to the 'modem' icon, and the file is uploaded without any kind of conversion necessary.

Shareware membership is only forty dollars, for which you'll receive all of our disks, along with the privileges listed above: checks can be made to Mystic Jim.

To order any of our disks, you may e-mail Mystic Jim on Q-Link, or write to us. We are always looking for new GEOS programs or art, and we enjoy reading the letters you write, so we look forward to hearing from you soon.

Best.



MYSTIC JIM'S SHAREWARE UPDATE

(Disk #2, cont.)

GEOS Return: Reboot from prg. Jeff Fox 1/87
 GEOSFormat: fast formatter. Art Dahm 1/87
 GEOLcon: For programmers, Bill Coleman
 design variable size icons March, 1987

Imagecon: Convert hi-res/ Mystic Jim
 multicolor images to GEOPaint Nov. 1987

Computereyes: Runs 'eyes and clones from GEOPaint. BSW Feb. 1987

GEOPAINT HELP FILES: Mystic Jim
 Greygrid, Metricgrid, Colorgrid, Crossgrid, Okicolor, Grid Cards.

Convert 1.4: Set of three programs Ben Taylor
 which convert ANY GEOS file for U/Downloading. A super program.

DISK #2 SIDE B: Updates Disk #1 for those who have early versions.

DISK #3 SIDE A:
 Fonts, keyboards, Megafonts.

Dvorak : 10 pt.
 Esperanto: 6,10,12,14,18,24pt.
 Greek 12pt.
 Banner 36pt.
 IBM 9pt.
 Star Trek 48pt.
 Fill 48pt.
 MegaBanner 280 point
 Dvorak: Keyboard patch
 C128 Keyboard
 Paintbrush 36pt.
 ZOPF 14pt.
 Script 24pt.
 Writing 14, 18pt.

Fonts created by P. Hughes, Cosmac and Mystic Jim using Cosmac's Font Editor. For info, E-Mail MJ on Q-Link, or mail to: Art Dahm, 111 New Canaan Ave. Norwalk, CT
 DISK #3, SIDE B
 Print samples of all GEOS fonts.

DISK #1

Bootstrap: Make workdisks into bootdisks. Mystic Jim 11/86
 Bootstrap 1.3: For v1.3 bootdisks. Mystic Jim 2/87
 *Strap 1.3: Improved version for v1.3 bootdisks Mystic Jim 3/87

GEOTab: Adds tab function to GEOWrite. Alex Boyce 1/87
 Note Printer: Prints contents of Notepad files. Art Dahm 11/86
 GEODump: Prints any GEOS screen, color, too. Art Dahm 12/86
 Textgrab 1.3: Seq to GEOWrite Text Scrap. R. Winchester 11/86

INPUT DRIVERS:

Supersketch. Alex Boyce
 Penjoy: Hybrid joystick/lightpen. Mystic Jim
 Anypen: Uses RUN/STOP as clicker. Mystic Jim
 Inkwell: BSW's only lightpen, for Flexidraw. BSW
 Mouse 1351: BSW's 1351 mouse driver. BSW
 Mouse 2: Modified for port#2. Mystic Jim
 Joystick2: Modified for port#2. Mystic Jim
 KoalaPad: BSW's awful driver. BSW
 KoalaPad2: Modified for port#2. Mystic Jim
 KoalaPad II: Cosmac's excellent driver. Art Dahm III
 Koalapad II2: Modified for port#2. Art Dahm/Jim
 Koalapad III: Improved KPad II. Art Dahm III
 KoalaPad I: Proportional. W Bruce Moore
 Comm Mouse: For 1350 mouse. BSW

Icon Maker/Sprite Magic: Design and install your own program icons. Mystic Jim/PD 11/86

Piconvert: Doodle, Screen Magic to GEOS. Public Domain

Convert.ml: Make ML programs work with GEOS Don Mosedale 2/87

DISK #1, SIDE B.

Alex Boyce's excellent GEOS Tech Manual, with programs for printing it out.

DISK # 2, SIDE A.

Auto Preference: Select preferences without using the Preference Manager. Art Dahm III Jan 1987

Change Input: Select new input device from within an application. Art Dahm III

Change Printer: Select printer within an application. Art Dahm III Jan. 1987

O'Clock: Displays time permanently. Mystic Jim

Watchset: Set time and date from desktop. Bill Coleman 3/87

Quick Dateset: set date from desktop. (Master Blaster) Jeff Fox 1/87



MYSTIC JIM ENCHANTS THE EAGLE

GEOS is a tradename of Berkeley Softworks.

CONNECTIONS

The Logo to PrintShop Screen Magic Connection

By Thomas F. Trocco

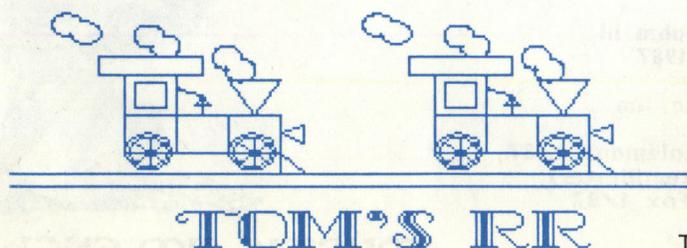
One part of *PrintShop, Screen Magic*, lets you produce kaleidoscope patterns on the screen, with text overlaid. However, you are not limited to kaleidoscope patterns! If you have *Logo*, you can create pictures that will work with *PrintShop*. After creating your *Logo* picture on the screen, type:

```
SAVEPICT "<filename>  
For example, SAVEPICT "TURTLE  
then hit RETURN
```

This saves the file in two parts: a 33 block hi-res file (TURTLE.PIC1), and a five block color file (TURTLE.PIC2). It's the first one that will load into *Screen Magic* when you choose the GET SCREEN option. You can now add text if you wish, and print out your *Logo* screen and/or SAVE this altered screen. This is a MUCH faster way of printing your *Logo* screens than the BASIC screen dump program that comes on the *Logo* UTILITIES disk (which should win the award for the slowest screen dump routine ever written).

We have taken a *Logo* picture, the **Logo Turtle**, and added text to it. The result is this month's cover. Again, the steps were simple. Let's create another, and go through the steps one by one:

- 1)Create your picture in Logo
- 2)Save your picture, using SAVEPICT "TRAINS
- 3)Exit Logo
- 4)Load PrintShop
- 5)Go to Screen Magic
- 6)Using GET SCREEN, load in the Logo Picture you just saved (TRAINS.PIC1)
- 7)Add text if you wish (we used the Gatsby font from the PrintShop Companion Disk)
- 8)Now you can SAVE and/or PRINT your combined Logo/PrintShop creation.



The Logo/PrintShop/GEOS Connection

- To produce the art in this newsletter we had to go four steps further. After saving the new picture:
- 9)Load *piconvert* (available on the Kids Computer News GEOS Download #1)
 - 10)Convert from *PrintShop* to *Geos*.
 - 11)Enter *Geos*, and create a photo scrap of your picture.
 - 12)Paste this photo scrap into your document.

The TPUG/PrintShop Connection

Another source of screens for *Screen Magic* is the TPUG graphics disks. These 32 block picture files will also work with the GET SCREEN command in *Screen Magic*.

Some of these are digitized photos, and make quite interesting *ScreenMagic* printouts. We have taken one, a picture of Albert Einstein, and converted to *GeoPaint*:



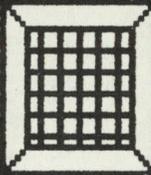
This picture is available on our GEOS PICTURE DISK A. If you'd like some **Picture Disks**, I have 8 disks with 16 screens each. These are all available in *PrintShop*, *Screen Magic* format, *Koala Pad/Pen* format, *Doodle!* format, and *GEOS GeoPaint* format:

- Picture Disk A: Digitized Photos
- Picture Disk B: Digitized Photos
- Picture Disk C: Animals
- Picture Disk D: People
- Picture Disk E: Geometric Designs
- Picture Disk F: Designs
- Picture Disk G: Landscapes & Space
- Picture Disk H: Vehicles & More
- Picture Disk I: Cartoon Characters
- Picture Disk J: Computer Stuff
- Picture Disk K: Space Scenes
- Picture Disk L: Animals
- Picture Disk M: Landscapes
- Picture Disk N: Winter Scenes
- Picture Disk O: Digitized People
- Picture Disk P: People
- Picture Disk Q: Fonts
- Picture Disk R: Rock Stuff
- Picture Disk S: Vehicles
- Picture Disk T: People
- Picture Disk U: Msc. Doodle! pictures
- Picture Disk V: Msc. Doodle! pictures
- Picture Disk W: Msc. Koala pictures
- Picture Disk X: Msc. Koala pictures
- Picture Disk Y: Msc. Doodle! pictures

These are available for \$4 each. Specify which you want, and in which format. Make checks payable to Kids Computer News, and give to Tom Trocco, or mail to: Kids Computer News, St. Hilda's & St. Hugh's School, 619 W 114th Street, New York, NY 10025



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