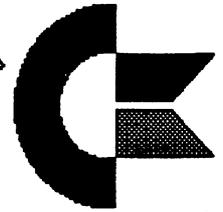
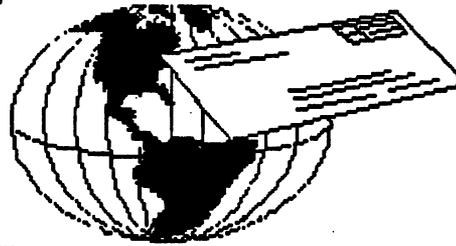


COMMODORE MAILINK

**NEWSLETTER OF —
MEETING 64/128 USERS
THROUGH THE MAIL**

Francis Redmond, President

SEPTEMBER 1995



PRESIDENT'S MESSAGE FOR SEPTEMBER 1995 1996 DUES ARE PAYABLE BY 1 JANUARY 1996!!!

Greetings to all you new members whose bios are listed elsewhere in this issue and Hi again to you older members whose bios are listed in this month's membership roster.

We are sorry about the passing away of Egon N. Kornicer. His last address was 110 Anglewood Dr., Fairfield Glade, TN. 38558.

Last year I sent out some one hundred fifty cards with a terse message, notifying members that they had not paid their 1995 dues. This year it would be nice not to have to send out any messages! I know I'm kind of jumping the gun, but there are only this and the November issue to make this reminder.

Next year's dues will be \$12.00 per year domestic, \$13.00 Canadian/Mexican and \$22.00 foreign, all U.S. currency. We're no happier with the increase than any of you. We worked up the figures and calculated every angle and it still comes up that way. Even with this, everything has to come out right. Actually, the 1995 dues did not quite cover expenses but we had a enough reserve to cover it.

Remember to make your checks out to J. Y. Powell, and send them directly to him at 5366 Fieldwood Dr., Houston, TX. 77056.

Perhaps we don't have the slick paper and sophistication but we feel that we compare favorably with any of the current Commodore commercial magazines in content at about a third of the cost. We furnish an evaluation of new products by actual users who secure their products over the counter. It also means hints and how-to by people that have learned to manage without a lot of elaborate laboratory equipment. I am sorry to say that we don't have a lot of fancy commercial advertising, but we do have a swap and sell section for transactions by individuals and the opportunity to obtain a few items at discount. Also our type-in programs are limited to an occasional short utility program without the benefit of any copy check program.

In addition to the information printed in the newsletter, you have access to some 270 individuals with varying expertise in the Commodore machine, its peripherals and its programs. If you have a problem, drop a line to someone. We do have a list of experts that offer assistance in almost every category. - Try that "Commodore World"!!

Now some of you, despite all the companionship you receive and valuable information about Commodore programs, sources of materials and general information that can not be obtained elsewhere, are still determined not to renew. I would appreciate your dropping me a note stating your intention. That way I won't have to bother you with a card. If you haven't made up your mind, just procrastinate until I send you a notice. You may be convinced to renew. In fact if you are still undecided, let me know and I will write you a sweetheart letter instead of an impersonal card to try to convince you to stay with us.

I would like to ask a favor of you folk. We have three good persons that keep this organization going and their only salary is a bunch of zeros that I pay them annually. In fact they do such a good job that I'm going to give them a bonus of a year's salary as of the first of the year. What I would like from you folk is to send a card, note, bouquet of flowers or some indication of appreciation to Tom Adams, who makes the timely distribution of the bi-monthly Mailink; Joe Powell, who guards the club's fund with his life and makes everyone file requests in triplicate for all expenditures; and Brian Vaughan, who maintains the 'bios' of all the members in spite of my poor spelling and typographical errors in the data I send him. They really do need an occasional word of encouragement and would really appreciate your thoughtfulness in sending them one. Also, I would like to give kudos to Joan Melton and Esther Olson, who are our official greeters as well as the unofficial people to drop a line to our new members. Thank you!

ADDRESSES FOR MEETING 64/128
USERS THROUGH THE MAIL

Organization business and membership...
Francis Redmond, president. Rt 7, Box
7614, Palestine, TX 75801.

Newsletter printing and distribution...

Tom Adams, vice-president. 34427 39th
St., Brentwood, MD 20722-1022.

Dues and donations...

Joseph Y. Powell, treasurer. 5366
Fieldwood, Houston, TX 77056.

Membership addresses and biographies;
corrections and changes...

Brian Vaughan, 2101 Shoreline Dr. 352,
Alameda, CA 94501
Newsletter...

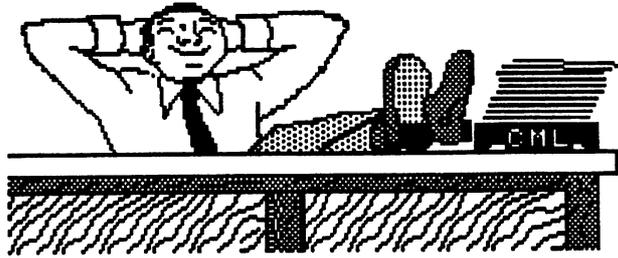
Jean Nance, managing editor. 1576B
County Rd 2350 E, St. Joseph, IL
61873-9743.

COMMODORE MAILINK

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original documentation.

All manuscripts or any material for
review or publication should be sent to the
editor of the next issue (see "Editor's
Desk"). Commodore MaiLink reserves the
right to edit submissions.



GUEST EDITOR'S DESK

Bob Hunter

Greetings to new members-- Patricia Carmany, Shade Courtland,
William Heyboer, Betty Ann Jamadar, Eddie Kelly III, Rick Mosdell, Philip
Pegues and Leonard Radosti. I hope you find membership in Meeting 64/128
Users through the Mail as satisfying as I do.

In March I opened my blurb by saying that I'd found the issue
challenging because of the small amount of submitted. This time the challenge
came in trying to fit as much of the material submitted as I could in the eighteen
pages allowed for the issue.

Thanks to Gary Noakes for improving the appearance of the
Commodore MaiLink banner created by Bill Lyons and first used in the January
1991 issue. Thanks also to all those who contributed material for this issue. In
particular, thanks to members and others who responded to my request for an
article or information on a particular topic--Hubert Laliberte (pages 4-5), Hugh
McMenamin (page 7), Fender Tucker (page 7), Allie Hunter (pages 8-12), and
Creative Micro designs page (16).

To those whose material I ended up having to forward to the editor of
the November issue, all that I can say, "I'm sorry, but I did my best." I
apologize especially to Gary Noakes, whose Questions and Answers hadn't
arrived when I was writing this. Another item that I'll be forwarding to the next
guest editor, because there just isn't enough room for it in this issue., is the
second installment of a two-part article by me on sorting lists with a word
processor begun in the July issue.

Hugh McMenamin and Jean Nance will be co-editors of the November
issue of the Commodore MaiLink. Submissions should be sent to Jean early
enough to arrive by October 20th.; it would be a big help if they arrive before
that. Anything over about a paragraph should be on disk, preferably in Pet
ASCII sequential or TWS files.

The articles appearing in this issue were entered/edited in The Write
Stuff and then converted to geoWrite format. Text and graphics, from various
sources, were combined and laid out in geoPublish. The master pages were
printed on my daughter's Postscript-compatible laser printer.

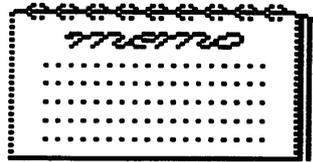
The following have address changes, Richard Glisson, Carolyn and
Ronald Snyder, and David Sorenson. Check the "bios" for the new address.

Please add Steve Barcena, John Casey, and Jeff Fleming to the
"Friendly Correspondents"

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NOTICES



WARNINGS

RENEW YOUR MEMBERSHIP!

Annual dues for membership in Meeting 64/128 Users Through the Mail will be \$12 for members in the U.S.A., \$14 for members in Canada and Mexico, and \$22 for members in other countries. All amounts are in U.S. dollars.

Payments are due by January 1, 1996. Send them to Joseph Y. Powell, 5366 Fieldwood, Houston, TX 77056, making out checks to "J. Y. Powell Jr."

Caution Re Power Supply Connector

J.H.L. Garrison

If the power supply computer connector on your C-64 is of the SPLIT RING type, be very careful when it is inserted in the computer. Always be sure that the keyway is UP.

The SPLIT RING connector is so flexible that the connector can be improperly inserted in the computer, and when you turn on the power you blow the KERNAL/JIFFY-DOS chip.

How do I know? I did it.

Of course, you can obtain a replacement Jiffy-Dos chip from CMD for \$32.95 plus shipping.

Gazette Disk Shafts Subscribers

Frederick G. Krierr

Gazette Disk has moved all its subscribers over to its Omni magazine, then to Walt Disney's Discover magazine, closed down, and left town with the money. The last contact I had with Gazette, I was informed that as soon as a decision was made, we (subscribers) would be informed by mail. No offer or refund was made. No money was received by Discover (Discover Toll Free 1-800-829-9132).

Will DieHard follow suit? I have heard the same story since November of 1994, that the next issue is going to the printers soon.

Mad and Disappointed.

Editor: I've been told by a fellow member that DieHard has bit the dust. I guess that it's to be expected that, as the number of Commodore 64/128 users continues to decrease, the suppliers of Commodore information will find it increasingly hard to survive and that more of them will fold. Unfortunately, some will fold without repaying subscribers for material paid for but not provided. Thus, as Jean Nance warned in the January issue of Commodore Mailink, it's necessary to be cautious in subscribing to Commodore 64/128 periodicals. One publication that was favorably reviewed in CML July 1994 and that seems safe is Commodore World. It can be obtained from Creative Micro Designs, Inc., P.O. Box 646, East Longmeadow, MA 01028, at \$29.95 higher outside United States for a year's subscription.

GEOS Publication

Carolyn Snyder

As a rather new GEOS user, I value GEOS Publication. I am finding lots of things that 'click and add up' and also that I am not the only one who has difficulties with getting started. I was fortunate that a fellow member of our local user group, Bill Swift, helped me get GEOS into RAMLink. Also, Bob Hunter encouraged me by faithfully answering my queries.

There are many well-known names involved in providing the information presented in GEOS Publication. There are lots of letters that are both informal and informative and many other features. There is enthusiasm on the part of the increasing number of subscribers and from the editor, Willis Patten, who is doing an excellent job, with the help and encouragement of his wife.

MAY IT SUCCEED!

Editor: GEOS Publications is published by Willis C. Paten, 713 E. Main Street, Independence, Kansas 67301-3726

IS FASTER BETTER?

Walter L. Johnson

PC users talk about speed.
"Lots of megahertz we need."
"Do it in a hurry, get it over with".
Faster is better? Now that's a myth.
If you are crunching numbers, maybe you need
Lots of memory and lots of speed.
If you are looking for numbers prime,
You don't have the memory or the time.
With small computers like the 64,
Then you need to go out and get some more.

But with a small computer like the Commodore,
You can balance your checkbook and even more.
Letter writers, it's no task at all;
Formatting text won't drive you up the wall.
Keep a budget, play a game,
Listen to music, SID's the name.
Paint a picture, add some text,
Multi-media, that comes next.
What if it's slower, what's your rush?
If your friends tease you, tell them to hush.

The price you paid for your little system
Goes over their head, you just missed 'em.
And software for your little computer
It's still available, more valuable than pewter.
Enhancements are there, just look around;
If you look in the right places, they can be found.
If there's something special that you can't find,
Ask another Commodorean; they don't mind.
They will show you where to find it then go another
step,
Even make it work, with a little help.

Windows, DOS, BASIC, C++.
PC users make such a big fuss
Over how easy it is to communicate
With the monster they have learned to hate.
LOAD, RUN, answer YES or NO.
That's all it takes to make the Commodore go.
Maybe a joystick, maybe the keys,
That's all it takes, not even a please.
Only remember, all Commodoreans,
The C-64 is not a DeLoreans!



Editor: In the May issue of CML, Donald Squire compared his Commodore 64 and his IBM-compatible computer under the title "Is There Really a Better Computer?" and invited follow-up articles. Walter Johnson's poem and Hubert Laliberte's article, the latter written at my request, are such. Thanks!

Following Hubert's article is another article by Donald which will likely also spark feedback. I hope that members of our computer user group are not among those who gave Donald the negative treatment that he describes. My own experience in our group has been positive, my having received free help and even software from other members. Don't give up, Donald. The Commodore 64 is a great computer, and Meeting 64/128 Users Through the Mail is a great computer user group.

THE DEBATE--

COMMODORE 64/128 VS. THE PC

Hubert Laliberte

The big question nowadays is whether to stick to our faithful Commodore computer, may it be a 64 or a 128, or to switch to a PC (many call them IBMs, 16 bits, or whatever)? The big reasons for this dilemma is that parts and service are getting scarce, since the company folded a few years ago, and many of our friends are switching over to PC's.

I discovered my first computer around 1986 in an electronic gadgets store. It was an Intellivision video console, a video game for sure, but a computer just the same. It was way ahead of its time for interactive games; you could play cards or other games, some of them against electronic adversaries.

Then in 1987 my son bought a Commodore 64 that you could use with your TV. Looking at a demonstration in my son's home opened my eyes to a new world made possible by the "home computer".

A few months later, after shopping around, looking at store window demonstrations, and speaking with clerks, I bought my first computer system, a Commodore 64-C, complete with disk drive and printer.

After installation came the first slow steps, aided by the manual, into this marvellous world.

The 64 was a complete machine. You did not have to buy costly options to enjoy it. I soon discovered that I could write a letter, play a game, or listen to music with my new toy. What a joy! That machine was an improved and modern typewriter, with a word processor, a pin ball machine, a chess partner, and a juke box. Of course you had to buy programs to change your 64 from a typewriter to a juke box or chess Kasparov.

I enjoyed my "faithful 64" for five long years and never regretted my investment. I thought at one time that it would be interesting to learn programming with the BASIC language, but this would have entailed more studies in manuals, so I let it go. Around 1989 I discovered Meeting 64/128 Users Through the Mail club in an electronic magazine, became a member, and met new friends all over North America by corresponding. During all these years my 64 never broke down, although during the last and fifth year the keyboard keys began to stick, a common problem, I learned.

Then in 1992 my MPS1250 Commodore printer broke down and, to my great dismay, I couldn't find anyone to repair it, not even at the store where I had bought it; everybody was in PC's. I finally found a person to repair it, but it opened my eyes and I began to look at PC's. Sometime later I bought my first PC, a Packard Bell 386SX with a 85 megabyte hard disk to store data. Wow, what possibilities! Then came the learning period I had experienced with the 64. After a while (a few months) I got used to my monster and began to learn all about its possibilities and faults.

To my great sorrow, I first discovered that, unlike my 64, my PC had no sound. Nobody had told me I had to buy a sound card; I suppose they didn't want to scare the customer away so soon. A word processor, database, and spreadsheet were included with the computer. I soon discovered that with these programs, under DOS, I wouldn't go very far. So I had to buy Windows in order to enjoy some of the goodies offered in store windows.

With the Commodore 64, I had tried many word processors, such as GEOS and The Write Stuff, before settling for Fontmaster II. I never could succeed in inserting graphics into my letters as most Commodore users, for that matter.

With the PC, I had to follow the same procedure. I had to find the perfect word processor for me. I tried WordStar for Windows, Word 2 for Windows, and others, before finding the ideal word processor, not too

difficult to learn and yet powerful enough for all I wanted to do--Easy Working Desktop Publisher for Windows, by the Spinnaker company, now defunct. This program combines a full-featured text editor with a table editor, spell checker, thesaurus, pre-defined templates, and clip art. Running under the Windows graphical environment, this word processor and desktop publisher, can satisfy all my needs for documents with a polished appearance. I'm sure my correspondents would attest to that. (*Editor: I would.*)

I can hear some knowledgeable Commodore fans say, "We have been doing all of this for years!" I would reply, "Maybe, but not with the facility and speed of a Windows and mouse equipped PC and a 400 million bytes of storage capacity hard disk." I'm convinced that the majority of today's Commodore users would, with patience and a little study, enter the marvelous world of the PC computers without any hardship. Let me add, though, that I entirely approve those who would rather enter the 21st century with their faithful 64 or 128.

Now for the PC enthusiasts, multimedia has arrived and taken them into an unparalleled world of learning, travel, action, music, and games with the CD-ROM drives, all this at affordable prices.

COMPUTER USER GROUPS-- FORUM OR BATTLE GROUND

Donald Squire

I have been both amazed and disturbed by the diversity of opinions that I encounter in computer user groups. I have found that the best course to take is to join a group for a short period of months or years, make a few friends, and then break off into a splinter group. It is disheartening to learn that people can become so opinionated that many important facts seem to fall by the wayside.

I have owned a single C=64 for 5 years and have only had to replace the original power supply. NOT ONE SINGLE CHIP HAS FAILED. NOT ONE KEY ON THE KEYBOARD HAS FAILED. ALL OF THE I/O PORTS WORK JUST FINE. ANY QUESTIONS?

Sure, I would love to be an expert in color graphics, computer repair, machine language, and GEOS. However two obstacles stand in my way--lack of financial means and the changes our technology has undergone. Would it be worth it for me to study these subjects, or should I get out of the business at the end of the year?

I have so far received four requests from computer

users to get out of computing, two from C=128 users and two from IBM users. They have been charging me anywhere from \$5 to \$50 for their advice. Should I keep paying them money just to hear them complain, or should I just cancel out and hang out with my friends?

What is the purpose of a user group? Is it to ask for advice and receive it, or to have a mailbox stuffed with unwanted advice from people who mean well but don't always do well?



More on the Trojan Horse

Roger Detaille

It was with considerable interest that I read the rebuttal by Gary Noakes on the Trojan Horse (see July Mailink). I don't think that it is necessary to sort of 'warn' GEOS users about this program, that it was intended only for the 1581. It was intended to prevent the trashing of the boot files. The statement that it would can the boot files, if found on anything but a 5-1/4 inch disk, is inaccurate. I have a C64 with 1541 drives and had my GEOS 2.0 boot files trashed twice on 5-1/4 inch disks. I also know of three other persons who had their 5-1/4 inch disks wasted the same way. This is not a 1581 phenomenon exclusively. After I used the Trojan Horse killer, no one whose disks I treated had problems of this nature again.

Aside from the first seven files, my boot disks are unrecognizable. I have moved, trashed and mutilated files on boot disks, added auto-execs and other useful programs and never, ever, did I experience the trashing of boot files again after using this utility. I had no side effects either. The Trojan Horse killer works on the desktop, and the desktop doesn't care where it sits. I have desktops on boot disks, work disks and in RAM. Ditto for some friends with 128's. The treated desktop has proven to be a heaven sent in this respect. Maybe Gary would like to respond and explain the consequences of using the Trojan Horse killer on 5-1/4 inch disks. This is a great debate, especially since other GEOS users may profit from all this verbal exchange.

I received the utility from Mr. Jim Collette, who sent me a note along with it telling me to use it on all the desktops I have on my various disks. Gentleman Jim was very helpful in this respect. If there would have been problems using it on 5-1/4 inch disks, he would have mentioned it. However, since all my trashing troubles disappeared and I've experienced no side effects, I can only recommend using it. Do like I do: Make sure that you keep an unaltered back-up of your boot disk in a safe place AT ALL TIMES. Which you should do anyway with your GEOS disks, boot disk or otherwise. In GEOS we trust!

Editor: The rebuttal by Gary Noakes referred to above appeared under Feedback in the July CML. It was written in response to Roger's article "Un-installing GEOS" in the May CML.

Printing with Print Shop on 24-pin and Inkjet Printers

Charlotte Mangum

Brian Vaughan's version of the C= World Magazine remedy for elongated vertical printing in graphics mode of 24-pin and inkjet printers worked for me with the Print Shop main program as well as with Print Shop Companion, for which Brian intended it. The C= World version didn't work with either program. I use a 128D in C64 mode, a Canon BJ-200, JiffyDOS, and a Super Graphix Gold interface.

The short program, which must be run immediately before loading PS or PSC, is:

```
10 OPEN 4,4
20 PRINT#4,CHR$(27)CHR$(65)CHR$(8);
30 PRINT#4,CHR$(27)CHR$(50);
40 CLOSE 4
```

As noted by C=World, the printer must be placed in IBM mode (Canon calls it BJ-10 mode) with Alternate Graphics Mode disabled; on the BJ-200, that means DIP switches 7 and 12 turned OFF.

Using the SGG interface, PS locks up during the initial loading and again during printing. With the 128D, the problem can be solved by resetting the internal 1571 drive at those points or whenever the green light stays on for a long time.

Editor: Brian Vaughan's article on printing with Print Shop Companion on 24-pin printers appeared in the July 1994 CML. He had a "CHR\$(7)" instead of "CHR\$(8)" in line 20.

A Personal Tribute

Bob Hunter

I'd like to pay tribute to two members of Meeting 64/128 Users Through the Mail who have distinguished themselves in the wider world of Commodore 64/128 users: Hugh McMenamin, developer of The Illustrator, and Fender Tucker, managing editor of Loadstar.

I've had the privilege of corresponding with HUGH MCMENAMIN since the fall of 1991, when he asked me to try out an early version of Illustrator because of my interest in graphics and The Write Stuff. In the months that followed I often turned to him for help in using RUNPaint with Illustrator, help which he always promptly and patiently gave. His tutoring paid off so well that I encountered no problems (and so had no questions for him) when later on he let me try out Illustrator II, which combines two of my favorite programs--The Write Stuff and Fun Graphics Machine.

Hugh describes himself as "a dirty old man who ogles pretty girls and doesn't do much else." However, his letters to me suggest that he's really a "fuzzy old teddy bear" who enjoys babysitting his grandchildren more than ogling pretty girls. And his bio indicates that he does a lot more than babysit grandchildren or ogle pretty girls, his having had several programs published by RUN and Loadstar in addition to authoring Illustrator and Illustrator II.

Hugh is a retired physician of, as he puts it, "almost 69 years of senility." His wife, Irene, and he celebrated their 45th wedding anniversary on July 29 of this year. Also on that day, his last single daughter, Carol, a chemistry teacher, got married. Hugh and Irene have had eight children, six of whom have survived, and eleven grandchildren. Among the other children are a nuclear power plant operator, an industrial engineer, two marketing experts, and a policeman.

Since retirement, besides "playing with the computer," Hugh's done some sailing (but has given that up) and Irene and he have done some camping. They used to camp a bit when their kids were small but stopped when their kids got into their teens. Then a few years ago they got a camper and started all over again. As a friend and a beneficiary of Hugh's playing with the computer, I wish him a long, happy retirement.

FENDER TUCKER is described as the "Grand Exalted Mojo of Loadstar" in the membership list that accompanies this issue of CML. This makes him a very important person because Loadstar and Loadstar 128 have been faithfully supplying good software on a

periodical basis to Commodore 64/128 users for a long time. Fender provided the following "progress" report, dated July 25, 1995, for CML readers. Information on obtaining Loadstar/Loadstar 128 at the user group rate is found on the information pages at the end of the membership list.

The Latest from the Loadstar Tower

Fender Tucker, Managing Editor, LOADSTAR

Jeff Jones and I have been slaving over a hot computer to get the issues out but with the help of Charles "Bill" Calvert of Oakville Ontario we managed to produce a couple of new COMPLEAT products this month. THE COMPLEAT PS Volume 1 and Volume 2 are now available. The "PS" stands for Print Shop (tm) and each volume (which comes on one 3.5 inch disk or two 5.25 inch disks) contains over 1300 excellent graphics for use with Print Shop, FGM, The Illustrator, or even our own STAR BOOK on LS #134.

In order to get that many graphics, which usually come one to a file, on a disk we came up with a nifty presenter that displays the graphics one at a time, or in batches of nine. Each batch of nine is saved in a packed file. From this presenter you can "create" 2-block, 3-block or PrintMaster (tm) files on any disk. In other words, we "archived" the images for you and all you have to do is "convert" them onto disks as you need them.

I used my Star NX-1000C to print out all 2871 graphics on 12 sheets of paper so you get a printout of each graphic. Get out your magnifying glasses!

Volume 1 is a compilation of all of the graphics published by our Apple magazine so even if you are a longtime LS subscriber, you won't have seen these. They're great! Volume 2 is a compilation of all of the graphics published on LOADSTAR over the years. Thanks to Bill Calvert for a lot of hard work copying all of these images.

LOADSTAR 128 #28 also came out this month with the final installment of DAVE'S TERM 128. This ambitious program is a terminal "package" that gets you online in style and then does anything you might want it to do. Dave Jansen's goal was to write a modular program that you never have to leave once you boot it. Hardcore modemites have told me it's the best terminal program they've ever seen. You can get the complete DAVE'S TERM by ordering LS 128s # 26, 27 and 28.

Other than that it's busybusybusiness as usual here at the magnificent LOADSTAR Tower.

A geoPaint Tutorial

Allie Hunter

Back about 1988 I first discovered geoPaint. Although I would, in the early 1990's, show students in my dad's grade five class how to use it, I didn't create anything with it myself at that time as I'm not an artist. Watching kids use it, however, proved a wonderful experience. They grabbed the joystick, clicked on tools, and simply played with the program. In the midst of their play, they created some nice sketches.

This attitude of experimenting and creating something, maybe not professional but yet pretty good, is what I now try to convey to my students at McGill University. My students are mostly teachers. They use, among other programs, a package for IBM compatible computers called Paintbrush which is comparable to geoPaint.

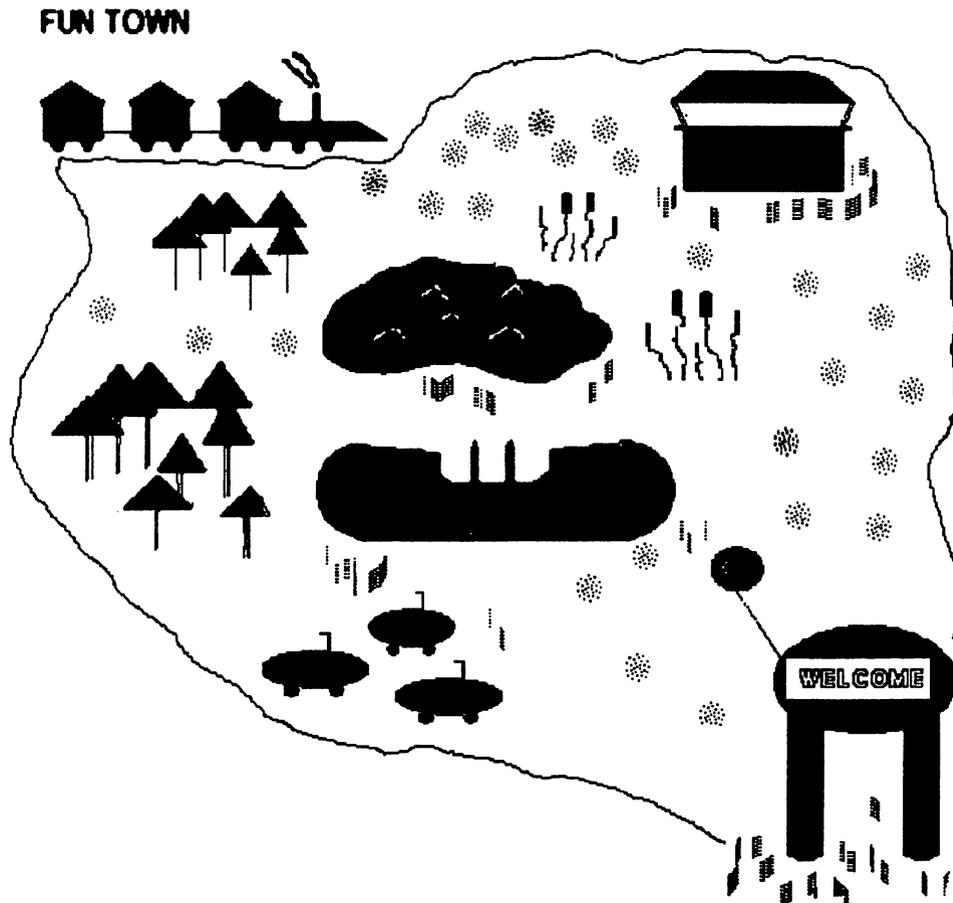
Seeing the maps which they created for their first assignment proved to be a wonderful experience. Rather than relying on clip art, they used basic principles of art to create original maps, complete with buildings, road signs, and vehicles. They made the maps completely within Paintbrush. Many of them had previously ignored

using Paintbrush because it was a product bundled with the Windows operating environment (as geoPaint is with GEOS) and because they lacked artistic ability.

In this article, I'll take you through a step-by-step tutorial which will get you into geoPaint. By the end, I hope you'll have designed a scenic map as illustrated, in black and white, on this page. The map's a modification of an assignment sent by one of my students. It portrays an amusement park with nine objects in all (train, building, tree, lake, bulrushes, canoe ride, bumper car, balloon on the Welcome sign, and the Welcome sign itself) and is entitled Fun Town. I hope you have fun recreating it and using geoPaint!

To start, boot GEOS and load geoPaint. To load geoPaint, move the mouse (or other input device) pointer to the geoPaint icon. Next, click on the mouse button twice or click once and select open from the file menu.

The screen will change to show the geoPaint command menu along the top and toolbox along the left. Select Create new document from the dialogue box in the center of the screen. Then in the box that next appears,



type in a name such as "FT Objects" for the document you'll create. You can use up to 16 characters, including spaces, for a filename.

Finally, the geoPaint screen will appear, and you can settle down to a leisurely time of creating your own map using only geoPaint, your imagination, and this tutorial. At the geoPaint working screen, besides the command menu and toolbox, a status box will appear. It'll rest along the bottom and display different information depending on the tool in use. In the middle of the screen, a rectangular box'll appear. This box is your drawing window and is for creating and editing artwork.

So now you're staring at the blank drawing window, wondering how to recreate the Fun Town map. Well, the hardest thing about creating anything is knowing where to begin. The easiest way to overcome this hurdle is to create one image at a time. Indeed, I orchestrated this whole map by drawing an object each morning for about a week. Then I sat down for another morning and rearranged the objects, but more about that later....

As I said, I created the map one image at a time. I also created the map by progressing from the simplest objects to the most difficult ones. The object I considered the simplest of the nine was the stick figure tree. After all, anyone can draw stick figures, even if nothing else.



For the tree, you'll need only two tools. However, before using any tool, you should always select the object's color. To change color, click on color in the toolbox. A palette will appear in the status box. The upper row is for changing paint (foreground) colors while the lower row is for changing canvas (background) colors. In this tutorial, you'll change only the foreground color. What resembles a fat cylinder encloses the current color. Click on the desired foreground color, in this case green, and the cylinder will instantly relocate.

Okay, back to creating our scrawny tree. First, click on the line tool, shown as an icon with a diagonal line. The icon will darken, showing it's been selected. Next, move the pointer into the drawing window. A blue crossbar appears representing the pointer. Move this pointer upwards and diagonally to the right to draw a diagonal line. When you reach the end of the line, hold down the Commodore key (used here for connecting

lines) and click. Then release the Commodore key and move the pointer downwards and diagonally to the right. This results in two connected diagonal lines. Join these lines together along the bottom to form a triangle. This is the tree top.

For the tree trunk, draw a straight line proceeding downwards from the center of the base of the triangle. If you encounter any difficulties drawing a straight line, select constrain from the status box.

The tree is now complete except for the filling. For filling, use the faucet tool, shown as an icon with a leaky tap. To work the faucet, click on the icon and then position the pointer inside the object to be filled, in this case the triangle, and click.

What if color proceeds to flood not only the triangle but the entire drawing screen? Without hesitation, select Undo from the toolbox. Once you've undone the paint leakage, select options from the command menu and, from the menu that appears under it, pixel edit. An editing box, pictured as four blue brackets, appears in the upper left corner of the drawing window. Drag the brackets over the tree top and then click. The area will enlarge to fill the drawing window and you will likely discern a gap between the triangle lines. This gap may be small, but it needs to be fixed. To fix, draw a line across the gap. When repairs are complete, return to normal edit by selecting normal edit from the options menu.

The next object I created was the balloon. However, before attempting it, I saved my work and pasted the tree into a photo album. To save my file, I selected file and then update. Now whenever I made mistakes, if Undo didn't work, I could fall back on recover. This command, also under the file menu, would revert my work to its last saved version. The option proved invaluable because Undo is often inoperative, functioning only when chosen before any other menus, tools, or options.

Pasting objects into a photo album is somewhat more complicated, involving more steps and the making of a photo scrap. To turn the tree into a photo scrap means selecting an editing region. To do this, select the edit box tool, shown as an icon with a dotted square. Next position the pointer at one corner of the area to be selected, then move the pointer to the diagonal corner of the area, and finally click to set the editing box in place. The editing box will resemble dotted lines. In its upper left corner, a tiny move/copy box will appear and in the lower right corner a resize box will appear. Finally, select copy from the edit menu to make a photo scrap from the tree.

As a photo scrap, the tree is available for use within other files only until the time another scrap has been made. To store it permanently requires copying it to a photo album by selecting photo manager from under the geos menu. When the dialog box appears, select Create new photo album and then type in a name such as "FT Photos" and press RETURN. The photo manager screen, complete with a menu in the upper left corner, photo pages in the center, and page numbers at the bottom, will appear. Select paste from its edit menu to copy the tree into the album.

Okay, back to creating objects. But first, if there isn't room alongside the tree for another object, relocate to another area of the drawing window. This is done by using the scrolling arrows tool, shown as an icon with a four-sided arrow. As soon as the pointer is moved into the drawing window, it transforms into a four-sided yellow arrow. As this yellow arrow is moved, so is the screen. Below, in the status box, a page map will indicate your location on the screen. When you've discovered a vacant space, simply click. The blue pointer will reappear and the editing box tool will be highlighted instead of the scroll tool. Now you're ready to move on to creating the next object.

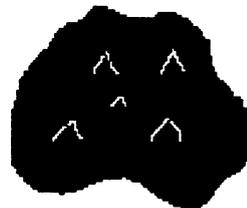


Creating the balloon requires the use of color, three tools, and both normal and pixel edit mode. First, select a bright color, say pink or yellow, from the palette. Next, use the filled ellipse tool, shown as an icon with a colored circle, to create a colored ellipse. To work the ellipse tool, click on it in the toolbox. If you prefer a circle to an ellipse, select constrain from the status bar. Then position the pointer on the drawing screen, click, and move diagonally in any direction. When finished, click again to anchor the ellipse. Finally, draw a line projecting from the balloon bottom to represent string.

The balloon is now complete except for an optional off-centered crinkle within the ellipse. The crinkle effects the illusion of texture and, hence, reality. My first inclination was to use the line tool to draw two black connected lines within the circle. Big mistake! The lines bled, spreading blocky chunks of colour throughout my bright bouncy balloon. How then does one create fine detail? Again, pixel edit mode comes to the rescue!

Within it, I selected the pencil, pictured as an icon with a pencil tip. The eraser tool, pictured as an icon with a pencil eraser, can be equally effective. To work either, click and move until two connected lines are formed and, when finished, click to stop. Both pencil and eraser operate similarly, except the eraser creates wider lines. I used the pencil tool and, back in normal edit mode, a crinkle had appeared in my balloon. Yeah!

At this point, save your work and copy the balloon to the photo album. (Do the same after each object you create.) Then move on to another object, let's say the



lake. It's created using color, the pencil and faucet tools, and both normal and pixel edit mode. For color, select blue. To outline the lake, select the pencil tool. The pencil tool is for drawing individual points and free hand lines. It's also relatively easy to use: simply click on the pencil tool in the toolbox, move the pointer to a desired location, and begin drawing. When finished, click to stop.

To add form to the outline, use the faucet tool to color the lake blue.

The lake is now complete except for some optional crinkles, which in this case represent waves. To create the waves, switch from normal mode to pixel edit mode and once again use either the pencil or eraser tool to form two connected diagonal lines. Repeat the steps a few times until you're satisfied with the overall appearance of the lake. Changes in the lake can be observed in the status box. Here, you'll see an actual size representation of the selected area. It'll appear solid blue but, as you move the pointer to create lines, white streaks will appear.



Back in normal edit mode, move right along to create the bulrushes. They're easily created, employing only two tools! After switching from a blue to green color, select the pencil tool and draw some wiggly vertical lines. Make some short, some tall, for variance and reality. One other detail remains. In the illustration,

you'll notice that atop the stalks of the bulrushes are thick vertical lines. GeoPaint doesn't allow for line width changes such as these except through a paintbrush shape change. A shape change can be invoked by selecting the paint brush tool, pictured as an icon with the tip of a paint brush, and selecting change brush from the options menu. A series of shapes will appear in the status bar. From the shapes, choose the tallest and thickest vertical line. Then move the pointer to the drawing window where it'll transform into the brush shape. Click atop a bulrush stalk. The brush turns green, ready for painting. Immediately, click again to anchor the brush shape. The brush reverts to its original blue and you can freely move the pointer on to another bulrush stalk. Repeat the steps for all the bulrushes, using a shorter and thinner line for the smaller bulrushes.

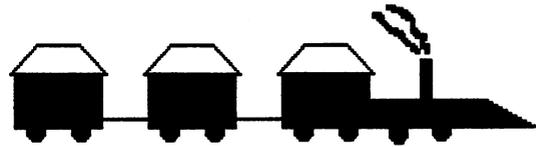


Next move onto the canoe ride. The canoe's created using the pencil, line, faucet, and paint brush tools -- tools I've previously explained how to work, so their use should be becoming second nature to you. Anyway, can you figure out how the boat's created? Well, first I selected a dark color; brown is good. Then I selected the pencil tool and drew the canoe outline. I stopped several times, as my mouse got tired of moving or ran out of space on its mat. Then I fixed the canoe bottom by using the line tool to draw some horizontal straight lines, which smoothed out bumps. The outline complete, I rapidly colored the canoe with the faucet tool. For the finishing strokes, I added handles using the paint brush with a vertical line shape.



Now how about that bumper car? Which familiar tools do you think it uses? Well, for the body, I used the filled ellipse. For the wheels, I also intended to use filled ellipses. But guess what? My circles turned into building blocks as soon as they touched the bumper car base! What then to do? Should pixel edit mode be used, as for the crinkles in the balloons and the lakes? Good idea, but circles are difficult to master. Well, what then? That's when I discovered the circle brush shape. The biggest circle brush overwhelmed my car and the smallest couldn't support the base weight, so I used a middle

size. I simply clicked under the car with the paint brush and wheels appeared. Whew! As for the bumper car handles, they're created with the faithful vertical line brush.



Well, before you start getting complacent, thinking there's no more to learn, move on to the train which'll introduce you to more tools as well as to the third basic art shape. (Art consists of three basic shapes: triangle, circle, rectangle.) Take a deep breath, as this is the most complicated object yet, and plow ahead by selecting a dark color such as black. Then select the filled rectangle tool, shown as an icon with a filled rectangle, and position the pointer on the drawing screen. Click and move diagonally in any direction. When finished, click again to anchor the rectangle. If you prefer a square to a rectangle, select constrain from the status bar.

The roof is created using the line tool. Choose a location a small bit before the box, yet horizontally even with the box, and then click. Next, move the pointer upwards and diagonally to the right. Then hold down the Commodore key and move the pointer across, still to the right. Keeping the Commodore key held, move the pointer downwards and diagonally, again to the right. Finally, move to the left and connect with the starting point to create a four-sided polygon.

The wheels are created using the circle brush tool, as with the bumper car wheels.

The train has three equivalent sections plus an engine. To create the remaining equivalent sections, copy and paste the train twice. To paste, select the edit box tool. Then use the pointer to create an editing box in line with and near the size of the train already on the screen. Choose paste from the edit menu. Along the bottom, an edit mode box will appear with options for mirroring, inverting, rotating, copying, or clearing the pasted object, which in this case is a train. Obscuring the drawing screen will be a dialogue box with options, also for placing a pasted object. An object can be centered in the region, scaled to fit, or stretched and scaled to fit. It can be filled with one of any number of patterns. It can also be smoothed and made transparent when pasted. The choice is yours and open to experimentation. Myself, I chose centered to region and transparent. This meant the train would paste in original size and that the borders of the edit box, if overlapping an object

on-screen, wouldn't erase parts of that object.

When the train is first pasted to the screen, the edit box will still surround it. If the train isn't in correct position, reposition it simply by clicking along the bottom of the move/copy box of the edit box. The corners of the dotted edit box will transform into two blue brackets. Move the brackets, then click to relocate the train.

Now for the engine. It's created by using the line tool to draw a three-sided polygon resting along the right side of third train in the series, as shown in the illustration, and using the faucet to fill the entity. Use the vertical line brush tool to create the smoke stack and the dot brush tool to create two ringlets of smoke. For the finishing stroke, connect the trains with a horizontal line.



That completes the train, leaving only two objects in the map to complete: the building and the sign. The building consists solely of shapes to which you've had prior exposure: filled polygon, lines, and filled rectangle. The sign also consists of shapes to which you've had prior exposure: filled ellipse and filled rectangles.

But how about the text on the sign? We haven't yet explored how to create text. So just how is text created? Well, first select a color; white is good. Then select the text tool, pictured as an icon with a T. Next click on the drawing window, in any vacant space, instead of within an object. Drag diagonally until the text box that appears seems big enough to contain the desired text, which in this case is "WELCOME". Along the bottom of the screen, in the status box, they'll be options for making text appear as bold, italics, underline, outline, or reversed. The choice is yours and open to experimentation. I choose bold and outline. The typeface and size are changed through the fonts menu. I choose California and 14 pts. On the drawing window, within the dotted text box, a vertical line (text cursor) will appear. Type in "WELCOME" and then click outside the text region to anchor the text. If you want to add more words, you can enter up to 253 characters including spaces.

Now use the edit box tool to select the text and paste it atop the desired object, which in this case is the sign. Be forewarned that any pasting will remove parts of the underlining sign. As with the lake, the undo and recover commands will prove invaluable.

You might be wondering why not simply type the text on the sign. After all, you can look at the map to determine exactly where the text is to be typed. Well, I tried this method and found that centering the text on the sign was extremely difficult. If I didn't center it properly the first time, I'd be left with a white cut-out in my sign from where I'd drawn a text box. Needless to say, Undo and recover commands become invaluable. Unfortunately, instead of these commands simply restoring my sign, they also removed my text box. After many frustrated attempts, requiring endless retyping of text, I hit upon the method described in the previous paragraph. Typing text aside from the sign meant that using Undo or recover restored my sign without disturbing my text.

At long last, with all the objects drawn, your map is nearing completion. Now you must rearrange the objects to match their positions on the complete map. To do this, make a new geoPaint file (by choosing close from the file menu and Create a new document from the dialog box that appears and entering a name such as "Fun Town" for the new document) and pasting objects on the drawing screen from the photo album. Every now and then, check your composition by selecting preview under the file menu. The appearance will be rough yet it'll be good enough to proof for spacing difficulties. For example, with my map, I discovered my sign wasn't far enough down to allow for the lake and log to squeeze in between the sign and the train. To correct the problem, I cut my sign and pasted it further down the page.

Be forewarned that when objects are pasted they'll appear in whatever color is current when the object is pasted. If a balloon was originally in pink, it'll appear in black if pasted when black is the current color. I also discovered that the tops of my trains were no longer hollow but filled with the current color.

When all the objects are pasted, it's time to take care of a few remaining minor details. For example, to change a solitary tree into a grove, paste multiple copies of the tree. To create grass, use the airbrush tool, shown as an icon with a spraying water hose, or the paint brush. I made extensive use of the airbrush tool and a dotted brush, in its vertical and diagonal renditions. To create a border about the amusement park, use the pencil tool. To add a title, use the text tool. The rest I leave to your imagination.

When your map is complete, choose print from under the file menu, and sit back and watch your creation unfold on paper.

Isn't art marvellous?

GENIE I Paint Roundtable

Editor: The following GENIE file was sent to Jean Nance by Tom Adams.

Tonight's conference is hosted by GEOS-TIM (Tim Hewelt). The capture and editing of tonight's conference is being done by CBM-Bandit (Cam Stewart). Hi Cam.

<Bandit> Howdy.

<GEOS-TIM> Special behind the scene's production and help is being provided by C128-QT.Pie (Sherry Freedline). Tonight we have a special guest, a programmer that has created a program that many say is one of the most, if not the most, powerful paint programs for the C128. Let's welcome Rick Kane! Tonight's conference is divided into four topics.

- 1) The beginnings.
- 2) Features of I Paint.
- 3) Features of I Port.
- 4) Future improvements.

Rick, one of the more interesting questions we have been asking guests is how they have gotten into computing. Could you tell us what drew you into computing?

<Rick Kane> Well, that's going to take me back! The first computer I had any hands-on experience with was a TRS-80 that a roommate had after I graduated from college. Then I got a TI-99, which had some games, etc., but was less programmable without Extended Basic or whatever that was. Also, tape loading was slow! I bought a C64 in late 83 and a disk drive later. Eventually I needed a 128. I was always too cheap to buy the simpler programs, and with my Compute! and later Gazette and RUN I typed in a lot of stuff, even Speedscript (whew!). I always liked the way Compute! would have programs for various platforms side by side. I think I learned a lot by seeing how other languages or versions of Basic would handle things.

<GEOS-TIM> Looks like you've been computing for quite a while. What got you interested in graphic programs?

<Rick Kane> I guess that stems from my job and experiences related to that. I worked at a TV station from 80-83 as a videographer (I'm not happy with that term) and also ran the CG unit which supplies names, etc.,

under people's faces on the news. I think it was just something I was GOING to be drawn to.

<GEOS-TIM> You must have gone through a lot of paint and drawing programs before you started programming I Paint. What were some of them, and at

what point did you decide that there must be a better way to do it?

<Rick Kane> At first I had Koala Paint, then Flexidraw (I was going for the record in number of input devices). I don't recall whether Basic 8 came out before I got a 128, but I had to have it as soon as possible because I couldn't wait for the sharp color displays possible. By this time, I certainly had geoPaint too, but I wanted color and RGB! The Basic 8 manual had some talk of interlace, but not quite what we use now. It got me exploring, screwing up VDC registers, kind of the atom-smasher approach to learning hardware.

When Fred (bless'm) Bowen published some interlace work in TC128, I got really fired up. I managed to extrapolate from his monochrome work and created, I believe, the first color interlaced display in the C128 (a D by this time). It was 640 x 600 and could show SIX Doodles at once. I took it to our user group to show, and Loren Lovhaug (formerly of TC128) said I should write an article for him.

Eventually, I figured somebody needed to create a program to originate art in this new mode, so I started slugging away at what became I Paint--very literally learning as I went.

<GEOS-TIM> Once you have a color interlaced display, how far is that from a program that can manipulate color and images? Were there a lot of problems to overcome?

<Rick Kane> You can do simple cutting and pasting pretty easily. It gets harder to start from scratch with memory and screen management, pointers, etc., so that's where Basic 8 came in handy. I was already learning a lot about it anyway. I had to fool it into doing what I wanted a lot, but at least I didn't have to reinvent FILL.

<GEOS-TIM> We are about ready to go into topic 2, I Paint, where we will look at the features of I Paint. Are there any questions from the audience at this point concerning the development of the programs?

<Sherry> Rick, I Paint was your very first programming project then?

<Rick Kane> No, there were a lot of earlier programs, but nothing anywhere near as big. The next biggest thing I wrote, mostly out of stubbornness since the 128 version had been released, was an 80-column version of Speedscript 64 which used the RGB display on a C128. It works in every detail, even uses fast mode, but has no practical value. I should point out I bought the Speedscript source book to learn more about machine

language and look what happened!

<GEOS-TIM> Rick, I know that I Paint has a lot of features, but what do you think are the most outstanding features of I Paint?

<Rick Kane> The MOST outstanding? (Whew!) After the obvious, the interlaced display itself, I guess first I'd mention features that other programs never had any reason to have, such as the ability to draw on only one field of video without affecting the other. This is a fast way to work with the color-mixing capabilities as well as do some pretty nice double-exposure effects. Also, I Paint has a very powerful recolor (WASH) mode. And you can select drawing mode--Over (replace), With Thru (sort of transparent) and Mask. They make for some pretty fascinating possibilities.

<GEOS-TIM> We keep on talking about interlacing. There are probably people who are going to read these transcripts that may not know what that is. Could you give us a brief explanation of interlacing?

<Rick Kane> A video display that is interlaced has picture information on both video fields. A field is composed of alternate scanlines, so each field has half the information of the image. Computers used to always display only one field because with such discreet information you could view it quite well enough and the computer only has to draw a field every 30th of a second, instead of the 60 per second for two distinct fields. Actually, the flicker of many interlaced screens, including I Paint, is due to the fact that the computer is still updating one field every 30th of a second, and, needing to draw two fields, it just lets the picture fade on the opposite field. This field idea was thought up in order to MINIMIZE flicker in TV.

<GEOS-TIM> Great definition. I think I even know what it is now. Let's say, I'm a user that has seen this conference, and I'm sold on I Paint. What are the minimum hardware requirements for using I Paint?

<Rick Kane> Good question. You have to have a C128 with 64K of video RAM first of all. This can be a C128D or a flat C128 with upgraded video RAM. It's a kit from SSI or a trip to a very good techie to upgrade. Next, you need a 1351 compatible mouse and a monitor RGB or one of those monochrome cables to see your work on the 40-column side. Also you need a disk drive.

<GEOS-TIM> Speaking of disk drives, what storage devices does I Paint support?

<Rick Kane> I Paint works with any CBM DOS-compatible drive--1541,71,81, 8040, FSD, any CMD HD, FD or RAM device which is transparent to the OS, and Commodore RAMDOS on any 17xx REU. Did

I leave any out? In short, I Paint doesn't do anything nasty such as fastloaders or copy protection that nix certain devices.

<GEOS-TIM> With CMD on the cutting edge of technology, it would have to be supported. I would assume that I Paint supports most dot matrix color printers. How well does I Paint perform with the new color ink jets?

<Rick Kane> Absolutely! That was me agreeing to the CMD statement. I have been developing new drivers to take better advantage of the output of the inkjets. I wish I could show you--I'm REALLY happy with the results! I've written a prototype driver for the Epson LQ series since it's emulated so often by other printers. It's a prototype in the xxx that it uses dithering to get a very close match to the colors you see on screen. I'm using it with a Canon BJC4000 with beautiful results. It will lead to similar drivers for 9-pin printers as well. I got a little lucky--it barely fit into the printer driver slot in I Paint! Another driver prints separations--first a cyan copy, then magenta, then yellow, then black. I don't know if anyone needs that ability, but it's coming!

<GEOS-TIM> I was reading an article about I Paint in Commodore World that was talking about the WITH option and how text could be superimposed on top of the current image creating a 3-D effect. A friend of mine has a program with his clone that takes fonts and creates 3-D effects on the fonts. Could a person using I Paint get this effect for signs, banners, etc.? Would a person using it be able to manipulate fonts?

<Rick Kane> Text is treated as graphics once it's laid down, so I Paint wouldn't recognize a letter as different from a sphere; but you CAN do 3D types of effects by shifting a bit up and right, say, and typing the same text off-axis a bit--that would give a 3D effect.

<GEOS-TIM> Yes, that is what I wanted to know. Okay, I Paint is a powerful paint program. I am a GEOS user. Is there any way they could be used together in some applications? Could some of geoPaint's capabilities be used to supplement what I Paint can do? Could some of I Paint's capabilities be used to supplement what geoPaint can do?

<Rick Kane> Yes, GEOS can be a great addition to I Paint. For instance, there are many nice fonts in GEOS and text manipulations that are unique to GEOS and would enhance many graphics. The stretching of clips that geoPaint does could be a handy thing. In order to use I Paint's features in GEOS, you are a little limited because GEOS can't handle I Paint's color scheme. But if you want to draw something using the full 640 pixel

width, yet maintain the correct pixel aspect ratio, you could use I Paint in monochrome to draw up to 400 scanlines, then convert that to GEOS. I think there's a program out there that does Basic 8 to GEOS, which would recognize I Paint format as Basic 8 in disguise.

<GEOS-TIM> I Paint saves to a Basic 8 format?

<Rick Kane> It uses the same structure as Basic 8, so that any Basic 8 viewer or paint program would be able to load it, but the interlacing of the color information will get screwed up.

<GEOS-TIM> This seems like the natural borderline for our next topic: I Port. I Port is the program that takes the files that I Paint produces and gives the user the ability to change it to a GIF? Is that correct?

<Rick Kane> Yes, that is ONE of the things it does. Actually I Port has a lot more to do with importing from other formats. It will take a GIF up to 256 colors and render it onto the 640x400 screen. It also handles IFF files up to 4096 colors, Macpaint pix, GEOS, Doodle, Koala, and Printshop, Basic 8 and uncompressed Doodle.

<GEOS-TIM> So, Rick, If a person was going to use another paint or drawing program in conjunction with I Paint, they would need to purchase I Port. Is that correct?

<Rick Kane> That's probably a fair statement.

<GEOS-TIM> I notice that one of the features is the Color Tables and Palette Equalizer. What do these features do?

<Rick Kane> The Color Tables are used in converting Doodle and GEOS pix. For a given source color, you can select two of the sixteen RGB colors to represent that source color once it gets to I Paint. You might find that you can change a shade of red, for instance, or make all light green come out purple! As for the Palette Equalizer, now there's an animal! In short, you set it like a graphic equalizer to change how a picture is converted. You can ask for more red (a red component in the source pic will then be more likely to turn on the red in the I Paint), or you might want to try to make all lighter blues and greens turn to light grey, etc. This is a tricky control and very powerful. Experimenting is truly the only way to get a handle on it.

<Snogpitch> Does I Port have an option for printing, or must it be printed from I Paint?

<Rick Kane> Printing is handled by I Paint. I might sometime make a print utility.

<GEOS-TIM> One more feature of I Port needs to be looked at. I Port has the ability to compress GIF files

that are made. Up to 5 levels of compression are possible. Why does a user need 5 levels of compression?

<Rick Kane> <chuckle> They may not need'em all, but it was just as easy to give that many choices as two! The reason you may want to select your level is because compressing a GIF takes a fair while. Selecting a level that does less compression may save you 1/2 the time of one that maximizes the compression (minimizes the file size). A user might want to opt for max compression if they're just letting I Port work and walking away for a while, or let it slack off if you'd rather be on to another picture file sooner.

<GEOS-TIM> Okay, I'm a user that has been at the conference, or I am reading the transcript and I decide I just have to have I Paint and I Port. Where do I have to send the order, and how much money do I have to send? Can I call and order by phone? Can I use a credit card?

<Rick Kane> You can order I Paint and I Port direct from Living Proof, Ltd., PO Box 80714, Minneapolis, MN 55408-8714. The prices are I Paint-\$39.95 ppd., I Port-\$29.95 ppd., or both for \$59.95. Sorry, we (I) don't take phone orders or plastic. But you can order from CMD if you want.

<GEOS-TIM> Now I have purchased I Paint and I Port. Is there any support for it? A phone number to call, a BBS, any support on GENie?

<Rick Kane> I find the best way for me to help is mail, snail or otherwise. I have always uploaded bug fixes (precious few, thankfully) and printer drivers as they are released, and will answer any questions delivered by e-mail or snail mail as best I can. Often, I'll need to get more info from the questioner, but that's easy with either mail type!

<GEOS-TIM> Okay, you are actively working with I Paint and I Port. Are there any improvements that you are working on that you could let us know about?

<Rick Kane> Well, there's a lot of ideas floating around. For I Port, I'm looking at the ability to decode interlace GIF's directly to the screen and maybe add PCX conversion. Some people want JPEG, but they may want too much!

<GEOS-TIM> That would really be great if it could. Especially since that seems to be the direction files are going.

<Rick Kane> Burts read routines are in the works as well. As for I Paint, that's a lot stickier. I don't want to promise things because it's a ways off since virtually everything would be rewritten. I'm thinking I should do

The Write Stuff Help Menu

Bob Hunter

a survey of users to see what's important to them. For instance, do I have to continue to support the Basic 8 printer drivers? Would two powers of magnify be worth more than having the ability to see part of the normal-size picture at the same time? There is only so much room to work with, and I Paint had only about 400 bytes remaining available for new stuff!

<GEOS-TIM> Well, it sounds like this is going to keep you busy. The burden that all C= programmers have to contend with...memory Well, I certainly know more about I Paint and I Port. I can see how I could use them for my graphic applications. Are there any questions from the audience?

<128PowerUser> I would like to see input drivers or support for the Handy Scanner and videodigitizer. These would greatly enhance I Paint's usefulness.

<Rick Kane> Good point! This is an area where there is much to be done.

<128PowerUser> Animation would be another interesting thing to play with. If you had the ability.

<Rick Kane> Well, the VDC is slow to access, but by decreasing screen size and buffering frames in VDC RAM, some fun would be sure to follow!

<128PowerUser> It would most definitely require a RAM device for full effectiveness. Oh, I would still like to see a free-form or lasso clip ability in I Paint.

<Rick Kane> That's a big order, Tom, but you know that.

<GEOS-TIM> I'm surprised at what our programmers are coming up with for the C= platform. It is just incredible.

<128PowerUser> But I think you can do it! Berkeley was planning on using it in geoPaint on the 128.

<Rick Kane> It can be done; it's just a matter of allotting resources (time)!

<GEOS-TIM> Yes, time is the problem. If only someone could make a living just doing Commodore programming.

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From the Commodore 64/128 RoundTable File#:#####

Editor: CMD lists I Paint at \$39 and I Port at \$29, plus shipping. Recently I requested and was promptly sent CMD's latest catalog and was surprised at how much hardware and software it carries besides the Commodore hardware, Geoworks software, and its own excellent products--some of which have been reviewed in past issues of CML--that I'd known it carried. Orders can be made to the address on page 3 or to 1-800-638-3243.

One of TWS's outstanding features is its capacity to be customized. After installing The Illustrator and BB Dictionary in a partition in my RAMLink, I was bothered by two deficiencies in accessing Help:

1. Accessing BB Writer's Help files involved their being read from a physical disk, which was much slower than reading the files in RAMLink.

2. There were no Help files with Bb Speller.

I solved the first problem by following the instructions given in the fourth paragraph on page 9 of the TWS manual (page 11 of the C-64 manual) to alter the "help.w" and "help.8" files so that they would contain five options--Start, Command, Print, Spell, Illustrate in the "help.w" file; Getting Started, Keyboard Commands, Embedded Commands, Speller, Illustrator in the "help.8" file. Note that the first and last characters in a menu must be a SHIFTeD space and the individual words in an option, such as "Getting" and "Started" in "Getting Started", must be linked by a SHIFTeD space.

Next I changed the names of The Illustrator's "help0" and "help80" files to "help4" and "help84" and changed the name of each of its files that began with a "0" so that it began with a "4". Then I copied the help0, help1, help2, help80, help81, and help82 files and all the files whose names began with a 0, 1, or 2 from my BB Writer disk to my TWS partition in R: MLink.

I solved the second problem in two stages:

1. I followed the instructions given in the second last paragraph on page 9 (11) of the TWS manual to alter my "help4" and "help84" files so that they would access the four BB Speller help files that I planned to make--Calling Up, Quick Check Menu, Correction Menu, and Adding Words. For example, I substituted "Calling Up" for "Graphic Prep", making sure that a SHIFTeD space preceded "Calling Up". I saved the altered files as "help3" and "help83". I had to put "QuickCheck Menu" for "Quick Check Menu" to stay in the 15-letter limit.

2. I followed the instructions given in the last paragraph on page 9 (11) of the TWS manual to make the BB Speller help files. Basically they present in slightly expanded form the information on the back cover of the BB Speller manual. Since each file name must begin with the menu number, I saved my "Calling Up" help file under the name "3Calling Up" and prefixed each of the other file names with a "3".

Now I can access Help files for BB Writer, BB Speller, and The Illustrator at RAMLink speed!



Editor: These questions came to me, and there weren't enough of them to forward to Gary Noakes, our Answerman, until it was too late to do so.

LANDMARK Reference Bible

From Bob Hunter

If another user of the 128 version of LANDMARK is able to load it from RAMLink, please tell me what you do. I tried the suggestions that Gary Noakes made in the May issue, but they didn't solve the problem that I stated there.

Roger Detaille observed that line 10 of the program that I listed in stating my problem contained an omission, "I=" between "for" and "1to500". The omission occurred only in the program listing, not in the program itself.

Using The Illustrator

From Wylene Knight

I use the 40-column version of The Illustrator 128, which I have installed in my RAMLink. My printer is a Star NX-10 and my printer interface a G-Wiz.

1. I have the RUNPaint program but can't figure out how to work it. I love to do graphics in my letters and would like to include some of the other graphics I have resides Print Shop.

2. Why does the printer not print all of the 2-block graphics?

3. What is The Illustrator II? I have The Illustrator.

Editor: The Illustrator II uses Fun Graphics Machine graphics instead of RUNPaint and Print Shop graphics.

4. What do I do to change fonts? I have Ultrafont from Compute!'s Gazette, Sept. '86, but can't get it to work. I also have Excelfont 80 from Compute!'s Gazette, June '88. I wanted to make a label that had just a name using a large font and couldn't do it. I even tried using a program in the printer book but couldn't get it to work properly.

5. I have collected all of Loadstar and am a subscriber through issue 154. I would love to be able to use some of the graphics from their disks. Can I convert some of the GEOS graphics to TWS?

Editor: Free Spirit Software's Grafix-Link can convert a geoPaint picture into various formats, including Doodle and Flexidraw, which both RUNPaint and Fun Graphics Machine can load. Inkwel Systems' Graphics Integrator 2 can convert a GEOS Photo Scrap into Doodle format.

Repairing a Super Graphix Gold Interface

From Charlotte Mangum

Recently my SSG failed. When I phoned Xetec, I was told that they had auctioned off their property on May 1st and were in the final stages of dissolving the company. Does anyone know who might work on my SSG?

Using Italics in The Write Stuff

From Suzi Miller

Suzi would like help in using italics in The Write Stuff. The preview shows text in italics, but the printer prints the text normally.

Editor: For a printer to print italics in a BB Writer document, BB Writer has to send a message telling the printer to print in italics and the printer interface has to pass that message on to the printer. Since different printers use different control codes, a person must use BB Customizer to define the codes for his/her printer. See TWS manual, pages 44 ff., for further details. According to Suzi's bio, she has an Okidata 120, which according to its Pocket Writer printer file uses 18 to turn italics on and 146 to turn italics off. I've passed this information on to Suzi but would appreciate anyone who uses The Write Stuff and the Okidata 120 together to let her know how you use them to print italics.

File Copying a GeoPaint File

From Jean Nance

Is it possible to file copy a geoPaint "user" file without using GEOS? I tried it with both Krackerjack Cannon and Disk Whiz, and a 23-block file ended up as a 1-block file each time. I had to copy the entire disk to get that one file copied.

Editor: I copied the file correctly with GEOS but got the same result as Jean did with Copy II's file copy utility. So, is it possible?

BUY -  - TRADE

WANTED by Roger Detaille. I am looking for some original programs: The Powerpak I and II from RUN, the DualTop 3 (Landmark series by Paul Murdaugh), the Music Shop, and the Enhanced SID Editor book and disk as published by Compute!.

FOR SALE by David Drew. 64C, \$25; 1541C, \$30; 1541-II, \$35; 1581, \$50; Magnavox Mono Monitor, \$25; Okimate 20, \$60; Mach 5, \$8; Partner 64, \$12; Incredible Musical Keyboard (64 only), \$8. Software:

Sim City, 4X4 Off Road Racing, PaperClip III, Mavis Beacon Teaches Typing, Print Shop, Print Shop Companion, Red Storm Rising, \$5 each. Prices do not include shipping.

FOR SALE by Joseph (aka kilroy) Fenn. Don't forget to send your orders for Harv Harris Tax program to me by no later than Nov. 1st. Send no money. I will bill you when the program is mailed in early December. Cost will be determined by number of orders received as of 11/1/95. Orders are already trickling in.

Editor: See reviews of the Harv Harris Tax program in the Sept., 1994, and May, 1995, CML's.

FOR SALE by Richard Glisson

I have the following software, books and manuals for sale. Prices include postage. For UPS COD you pay shipping and COD charges.

Software: GEOS 2.0, \$20; GeoPublish, \$20; GeoFile, \$15; GeoCalc, \$15; GeoBasic, \$10; Gateway 2.5, \$15.

Books: Machine Language for Commodore 64, 128, and other Commodore Computers w/disk, \$12; Assembly Language For The Commodore 64, \$8; Compute's Reference Guide to Commodore 64 Graphics, \$7; Commodore 64 Programmer's Reference Guide, \$8; The Official GEOS Programmers Reference Guide, \$15; Compute's Beginners Guide to Sound, \$7; Graphics Guide To The Commodore 64, \$7; Commodore 64 Basic For Beginners, \$5.

Manuals: Easy Script User Guide, \$5; Commodore 128 Introductory Guide & System Guide, \$11; Commodore Portable SX-64 Color Computer User's Guide, \$6; S'More Basic Instruction Manual, \$4.

I also have a FD-2000 w/manual, disk and cable, only 4 month old, \$120, you pay UPS COD.

Phone 813-544-5839 before 9 pm or email on GENIE T.Glisson.

FOR SALE by Howard F. Gold. A complete Commodore 128 setup in excellent working condition.

Equipment: 128 computer w/JiffyDOS installed and Suncom joystick attached; 1084S monitor; 1581 disk drive; 1571 disk drive w/JiffyDOS; CMD 2mg. RAMdrive; 1351 mouse; 1670 modem-1200 bps; power supply for each disk drive; Flexidraw light pen; Epson FX 80 dot matrix printer w/Super Graphix interface. All connecting cables included. All tech manuals for the above equipment included.

Programs (all for Commodore 128): Superbase; Swift Calc; Cadpac by Abacus; CPM; PaperClip, Fontmaster

and The Write Stuff word processors; GEOS 128 2.0 plus geoFile, geoWrite, geoPublish (64), geoFonts (also Perfect Print fonts); Kracker Jack's Maverick; Sylvia Porter's Personal Finance; Free Spirit's Drive Alignment; EA's Financial Cookbook. Also cartridges: Partner 128 and two fastloaders-Warp Speed and Mach 128. Plus many more too numerous to mention. Also about 2 game programs including Microsoft's Flight Simulator.

Price for all of the above: \$300 plus shipping charges.

FOR SALE by Walter L. Johnson

Books: Commodore 64-Getting the Most from It, \$8; Commodore 64 Users Guide-First Edition, \$5; Commodore 64 Users Guide-1984 Edition, \$5; VIC-1541 Single Drive Floppy Disk Users Manual, \$2; Commodore 1541 Disk Drive Users Guide, \$2; MPS-801 Dot Matrix Printer Users Manual, \$2; Commodore 64 Programming: A Step-by-Step Guide-Book One, \$2; Programming in BASIC for Business, \$8; TRS-80 Model III Operation and BASIC Language Reference Manual, \$5.

RUN Magazines For Sale, \$2 each postage paid or 6/\$10: Sep-86, Jul-87, Aug-88, Dec-88, Mar-89, Sep-89, Dec-89, Mar-90, Dec-90, Apr-91, Jun-91, Aug-91, Oct-91, Feb-92, Apr-92, Dec-92.

Commodore Microcomputers Magazine, \$2 postage paid, Aug-86.

Equipment: VICMODEM Model 1600, 300 baud, \$10 postage paid; KOALA pad and Cartridge, w/manuals - make me an offer; Commodore 1541 disk drive, runs all time but w/w arm will not move, acts like step motor froze up, make offer; MPS-801 printer that still works, no cable - you pay postage and you can have this old clunker to get it out of my way!

Telephone 903-667-2839

FOR SALE by Bill Lyons

I'm making some Commodore equipment available for the cost of packing and shipping. It is a C-128 computer, a 1571 disk drive, a Star NX-1000C (Commodore-ready) printer, and a Commodore 1670 1200 baud modem. All is in working order except the C-128 needs the key contacts cleaned as a few are sticking.

FOR SALE by Robert Mullady

128-D computer w/manual; Key-DOS installed. Star NX-1000 printer w/manual; cracked top cover. Magavox monitor model CM8764; RGB display 80. All in working condition. \$300 postpaid USA.

Questions & Answers

By Gary Noakes

From Walter L. Johnson

Here is a problem that I recently uncovered in one of my programs. I have written a short program to simulate the conditions, input three examples and then print the answers to the screen. Obviously, the three answers should all be zero, but I also know that the C-64 does not always do mathematical computations correctly. My problem is, how can I convert the answer to a usable number? I was attempting to do the rounding off with lines 30 and 40, but they only made the situation worse.

```
10 input a$,b$,c$
20 rm = val(a$)-val(b$)-val(c$)
30 if rm<0 then rm$ = str$(rm-.005):goto60
40 if rm>0 then rm$ = str$(rm+.005):goto60
50 rm$ = "zero"
60 print
70 print rm$, rm
```

Sample runs:

```
? 73.11,58.49,14.62
-5.00002235e-03 -2.23517418e-08
```

```
? 77.48,61.98,15.50
zero 0
```

Answer:

Commodore (and many other 8-bit) computers have difficulty with math due to the fact that people normally calculate in decimal (base 10), while the computer calculates in hexadecimal (base 16). The errors occur when the computer translates the decimal input to hexadecimal to do the calculations and then translates the hex back to decimal for output. The result is, zero doesn't always equal zero.

You're right, lines 30 and 40 aren't any help at all in rounding off the numbers. You first need to determine to how many decimal places you need accuracy. Then take the integer of your remainder (RM) multiplied by 100 (for two decimal places, 1000 for three, etc.) to strip off the decimal point and add .5 to round the whole number up or down. Then divide by 100 (or whatever your multiplier was) to restore the decimal point. Here's the modified program:

```
10 input a$,b$,c$
20 rm = val(a$)-val(b$)-val(c$)
30 rm = int(rm*100+.5)/100
40 if rm<>0 then 60
50 rm$ = "zero"
60 print
70 print rm$, rm
```

If the remainder is anything but zero (line 40), RM\$ will not be defined and only the remainder is printed.

If you need to print the variables immediately or do calculations elsewhere using the numbers represented by A\$, B\$ and C\$, these can be rounded before determining the value of RM:

```
11 a = int(val(a$)*100+.5)/100
12 b = int(val(b$)*100+.5)/100
13 c = int(val(c$)*100+.5)/100
20 rm = a-b-c
```

This is a lot of repetitive typing and you will still need to round off any additional calculations before printing the results. However, if your program does a lot of calculations like this and the results all need to be accurate to the same number of decimal places, define a function (DEF FN) early in the program (where you declare your variables and arrays) to do the rounding and adjust your other lines accordingly:

```
5 def fnr(n) = int(n*100+.5)/100
6 rem define function "r" : accuracy is to two decimal places
7 rem "n" is a "dummy" variable; it may be reused elsewhere
11 a = fnr(val(a$))
12 b = fnr(val(b$))
13 c = fnr(val(c$))
20 rem line 20 may be deleted
30 rm = fnr(a-b-c)
```

On copying GEOS files, from Jean Nance:

No, you can't file copy GEOS files. By using a variable-length indexed record (VLIR) as a means to store both the files and the information about those files, GEOS can access data on disk from virtually any point within an application or datafile. However the VLIR file structure, like the Random-Access file

structure it closely resembles, is not directly supported by Commodore's Disk Operating System (DOS).

Unlike DOS, where each entry in the directory points to the location on disk of the file itself, the directory entry of a GEOS file contains only the pointers to the GEOS Icon/Info block and the VLIR Index Table, which contains the pointers to the actual file data. Each time a file is edited, GEOS writes the data to the file and then updates the Index Table of that file, including how many blocks the file occupies. This allows the file to expand or shrink and still let DOS keep track of how many blocks should be shown in the directory, unlike Random-Access files which are invisible to DOS. This method allows GEOS to reread and rewrite data from anywhere inside of a file without having to continually start at the beginning of the file each time data is added or altered.

But since DOS sees only the directory names and the Block Allocation Map (BAM) of a disk, it doesn't know about the GEOS system's use of pointers--to DOS, the list containing these pointers IS the file, regardless of the block count in the directory. Consequently, VLIR files will NOT survive a DOS Validate command because everything beyond the pointers is destroyed, reallocated as free space in the BAM. GEOS must use its own version of Validate in order to preserve file data.

This is also the reason that VLIR (and Random-Access) files cannot be file copied or transferred by modem from outside of the Geos environment. What the DOS sees when requested to copy a file, or read a file for modem transfer, is only the Icon/Info block and the Index Table--the actual file data itself may be scattered all over the disk and DOS has no way of finding it. For modem transfer, GEOS conversion programs gather the Icon/Info sector, the Index Table pointers and the actual file data into a package that DOS recognizes as a single, coherent file that can be transferred. No current file copiers can do this, so a whole-disk copier is the only option outside of GEOS.

On the questions posed by Wylene Knight:

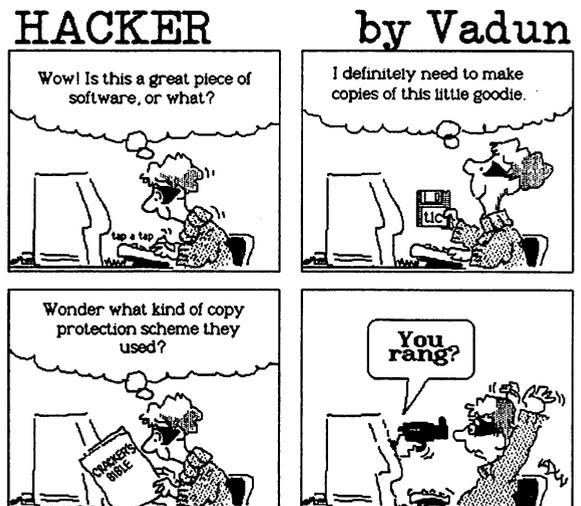
You don't state exactly WHAT it is about RUNPaint that you can't make work, so I'll assume that you mean the program in general. RUNPaint works with a mouse or joystick in port 2. When the program is running, F1 turns the joystick on, F3 turns on the mouse. To activate the menu, move the pointer to the top of the screen (touching or "under" the screen

border) and click (or press the fire button) to pull down the menu. Select your tools and options from this menu. Other submenus will appear with more options, including printing. Full documentation is available in the March 1989 issue of RUN magazine. It should also be available from Creative Micro Designs, as RUNPaint is included on disk with their SmartMouse/SmartTrack devices.

(Be aware that there is a problem with the mouse driver. There was a patch available on QLink (by GULLIBLE (Jon Purkey)) that I'll try to find and include in the next issue.)

Ultrafont and Excelfont-80 are both terrific tools for what they were designed to do: create fonts for use in programs, NOT to create printer fonts. You'll have to find a wordprocessor (or an interface) that supports loading and printing non-resident graphic fonts and a way to convert font files to a format that can be used by your wordprocessor. Or you could switch to GEOS and design your own fonts for use with geoWrite.

From within GEOS, Graphic Storm, from Storm Systems, will convert geoPaint images to Print Shop, Newsroom and Doodle! files. This may help in converting files to use with the Illustrator program.



NOTE: By the act of reading this comic strip, you have entered into a licensing agreement with Chuck Vadun and are thereby required to mail him 62.5% of your wages for the remainder of your lifetime or 99 years.