# CoCo~123
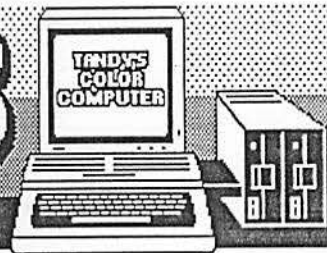
# Glenside Summer Picnic Set for September 9th

## Glenside Picnic

With the help of Club Member, Len Zielinski, the Glenside Color Computer Club of Illinois will hold a family picnic on Saturday, September 9th. This picnic will be at the Schiller Woods Forest Preserve. Throughout the coming meetings, we will be asking you to lend-a-hand in putting this activity together. Neither Len or the other Board Members can do it alone!

As we get more information regarding the time, the food to bring, etc. we will pass it along. Mark the calender, it WILL be a lot of fun...!

## SEPTEMBER 9TH



NEXT MEETING OF
THE GLENSIDE COLOR COMPUTER CLUB

Thursday August 10, 1989 - 7:30pm
GLENSIDE PUBLIC LIBRARY
25W. Fullerton Avenue
Glendale Heights, IL

DIRECTIONS: Glendale Heights is located between Glen Ellyn/Wheaton, IL and Bloomingdale, IL. Fullerton Ave. is West of Bloomingdale Road in Glendale Heights. The Library is about a half a mile down West Fullerton on the left side from Bloomingdale Road. The meetings are open to all Tandy Color Computer 1, 2 & 3 users and owners.

## JULY/AUGUST NEWSLETTER

If another person even thinks about asking me if its hot enough, I'm going to hand them a snow shovel! Hot topics or heat conversations should be reserved to CPUs, power supplies and the Color Computer. Because all are hot, 'YEAR-ROUND'.

During last months (June) meeting, a reward of sort was announced for CoCo ~ 1,2,3 newsletter article. For those who were not in attendance, here is the deal. For every newsletter article you submit and that is published, you will receive 10 floppy disks. This promotion will continue until we gather enough articles to cover MONTHS of newsletters or until we run out of money! People, this newsletter once enjoyed a monthly release with a page count around six to ten. To see how it has been reduced to a mere one or two page flyer being released every-so-often cuts real deep. During the summer months we always experience a lower then average attendance. The summer months are being spent with family and out side activities. This is when our newsletter should be in full swing. Making sure that our sun bathing members know what is going on with their club. I'm not going to beat the drum much longer on this subject. WE NEED ARTICLES.

For the next three meetings coming up, we will be reviewing business type software programs. For July, we will focus on Database programs. In August we will look at Spreadsheets and September will be on Word Processors. Each meeting is designed more as an information presentation then a review on anyone software program. We will highlight so good points and bad points of the different programs, but it will mostly be center around the use of the application and program more then a product review. Once a year we try to do a series of business software programs and each year always produces a

## GLENSIDE SOFTWARE SALE

* MUSICA RAM DISK (CC3 Only)
    Speech Systems ................... $ 5.00
* CoCo 3 MEMORY TEST
    Speech Systems ................... $ 5.00
* HARDCOPY (for either DMP-200, 105, Geminix 10X or SG-10) Computize ......................... $10.00
* TERMTALK: DelSoftware .............. $ 5.00
* REAL ESTATE INVESTMENT
    Petrocci Freelance ............ $10.00
* ORDER ENTRY SYSTEM
    Mark Data ......................... $25.00
* CHECK LEDGER SYSTEM
    Computerware .................. $15.00
* DISK COLORCOM/E
    Eigen Systems ................... $10.00
* DATAPACK II: Cer-Comp ............ $20.00
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* THE LAST WORD (OS-9) ............. $20.00
* DATABANK MANAGER
    Computerware .................. $10.00
* OTERM:
    New World Technologies $15.00
* FLEX OPERATING SYSTEM
    Frank Hogg ....................... $30.00
* GRAPHICOM PART II
    Computerware ................. $10.00
* DISK COLORCOM/E V2
    Eigen Systems ................... $10.00
* COLORCOM/E ROM PAK V3
    Eigen Systems ..................... $ 5.00
* ELITE*WORD (PbJ Ver) ............. $25.00
* ELITE*COMM (PbJ Ver) ............. $10.00
* ELITE*WORD (OS-9 L1) ............. $25.00
* VIDTEX w/PERSONAL COLOR
    RADAR: CompuServe ..... $ 2.00
* FORMAKER 1.0
    Challenger Software ........ $10.00
* TRSCOPY (OS-9 L1) ..................... $10.00

* Contact, Ed Hathaway for all above sale items at 462-0694.
'ALL' items are original and the asking prices are ferm!

Continued from front page

surprise or two. This year should be no different.

The good news is the up-coming Club picnic on September 9th. This gathering will be held at the Schiller Woods Forest Preserve and a great family time is expected. We will be releasing more details to you during the July meeting and in future issues of CoCo~123s. Len Zielinski has started the ball rolling in locating a place for us, however, he cannot go it alone! If anyone would like to lend a hand in setting this gala event up, give either Len a call at 967-8791 or drop me a line at 462-0694.

The local OS-9 user group has some exciting news to share with us. Effective with June of '89, they will be meeting at the Glenside Public Library. They met at the Wood Dale Public Library for years but found that Glenside offered them a much more convenient location for their members. If you have any interest in learning about OS-9 this is the best place to start. You will no doubt see friendly faces in the attendance because a good number of Glenside members also belong to this group. They meet on the third Thursday of the month and start at 7:30 PM.

If we do not see you in the coming meetings, I hope you have a safe and wonderful summer. See you at the July meeting.



**SEPTEMBER Newsletter Deadline July 29th**

# COMPUTER GRAPHICS

By: Len Zielinski

Reading the article on Computer Graphics in the June issue of NATIONAL GEOGRAPHIC gave me a new insight into the world of graphics, not as we in the COCO community know and use it, but as it is used in the world of Science, Art and Medicine. Excerpted from the article, here are some of the areas in which impossible visions made are possible:

SIMULATION- Providing safe tests for human-machine interaction; avaluable tool for defense and other industries. F-16 fighter pilots are trained with computer simulations that can "fly" the trainee to any point on earth. Any weather condition can be selected along with any dogfight simulation, bombing mission, or missile lauching.

CAD/CAM- In computer-aided design and manufacturing, they afford unlimited freedom to explore alternatives. This technique accounts for more than half of all the money spent on computer graphics. Architects can view their creations from any perspective, in any light. A few keystrokes will reveal the structure's internal supports, glowing through transparent walls. Time is then freed for the creative side of design by minimizing tedious, routine work.

MEDICINE- Doctors use digitized image processing for a 3-D view inside the body for safer surgery. A computer-generated image of a patient's head is synthesized from a sequence of two-dimensional magnetic resonance images. Before even picking up a scalpel, a surgeon can rotate and view the 3-D image from any perspective. The size and location of brain tumors can be more easily located.
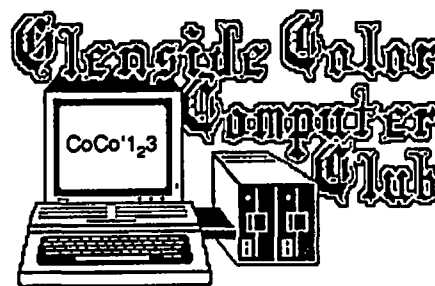
SCIENTIFIC VISUALIZATION- Complex mathematical equations translate into images that reveal new meaning to scientists. Reduced to visual imagery, vast amounts of abstract data can be conveyed inconcise and dramatic form.

ANIMATION- Widely used in the television and movie industry for creating special effects and designs. As in the flying logos that introduce TV movies. The breathtaking animations in the film Star Trek II were all computer generated.

ART- Graphics artists are discovering new links between geometry and nature, and create beauty through mathematics. With as many as 16 million colors in his electronic palette, an artist might re-color a composition in seconds. While changing its perspective and lighting with the touch of a key.

This is NOW; who knows where the future is taking us? At Los Alamos National Laboratory, where the atom bomb was created, now provides facilities for computer research. Scientists there can use the newest Cray "super-computers" to help unlock the mysteries of the fundamental laws of nature.

The article quotes a Japanese professor at the University of Tokyo: "We are in the middle ages in computer graphics and computers in general. We'll never catch up." According to a young American who started a software firm in Japan their culture itself is a barrier. No Japanese wants to stand out as an individual; in order to be a good programmer it is necessary to be a free-thinker and stand out. Yet lets not get complacent; if Japan ever targets computer graphics as a national priority they could be a power in short order. Right now, they seem content to make Walkmans, TVs, and cars. THREE CHEERS FOR THE RED, WHITE AND BLUE, and our free-thinking, free-spirited computer geniuses!

Glenside Color Computer Club

CoCo'1₂3

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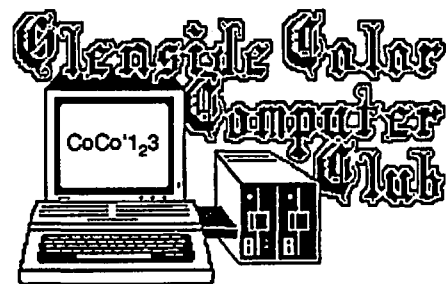
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Glenside Color Computer Club

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# OS-9 USERS COMMISERATE
## True Multitasking Environment Is Well-Kepy Secret

By: Randy Rendfeld - CompuServe On Line Today

Some computer users wonder what good multitasking is when it's all they can do to run one program at a time.

"Unless you've been exposed to multitasking, you probably don't realize what a boon it is," says Pete Lyall, associate administrator of CompuServe's OS-9 Forum (GO OS9). "But once you've had it, you can't gp back.

"Sometimes people run Microsoft Windows and say, 'This is 'multitasking,' but that's just suspending one program while the other one runs."

"If I had to wait while a program was running, I would probably go nuts," says Kevin Darling, also an OS-9 Forum associate administrator. "When you start a program, for example a download, why should you have to go get a cup of coffee and not have the use of your machine?"

Life is multitasking, according to Darling. "People don't really work one task at a time. If you're writing an article, looking up information, answering the phone or yelling at the cat, you're always doing several thinks."

But when a major software developer declares real multitasking couldn't be done with less than 4MB of memory, OS-9 users chuckled, because most of them have been multitasking for years with much less. And they almost never run out of RAM.

Yet OS-9 users are accustomed to being ignored by the computer mainstream. While their operating system has been obscured by the popularity of MS-DOS and Apple, they've enjoyed an environment that they insist inspires both users and programmers.

"If OS-9 stays the underground classic it is today, we won't mind," says Darling. "It's still too useful, powerful and sheer fun to work with for us to leave it.

"It goes against the ingrained concepts a lot of people have, such as that it takes a lot of memory to do multitasking or that you aren't safe running more then one program at a time."

OS-9 is small, and loading it takes about 40K of memory. Its kernel is machine language, which gives it speed. It can be burned into ROM and allows not only multitasking but also a multiuser environment. It has automatic record-locking on files being accessed by more than one program. It allows programs to be placed into memory and called instantly by name; and the same program can be called by any number of times or by several users simultaneously. These are all features missing in one way or another from MS-DOS, OS/2, AmigaDOS and Unix.

OS-9 was developed in the late 1970s by Microware Systems Corp. After 10 years, Darling says OS-9 remains state of the art.

OS-9 most often is used on Motorola 6809- and 68000-based computers, such as the Gimix, Atari ST and Radio Shack Color Computer. An OS-9 port recently was developed for the Amiga, and attempts are under way to move it to the Macintosh. Darling says some OS-9 Forum members are working with Microware to develop a graphics interface common to all OS-9 computers, starting with the Macintosh II.

Many OS-9 converts came through the Color Computer 3, a 6809-based computer that is expandable to 512K of RAM. Under OS-9, CoCo users can run multiple screens with multiple windows. Yet, the CoCo often doesn't get much respect.

Lyall, senior software developer for Comtel Corp., may be the quintessential OS-9 user. He runs OS-9 in his home on a Gimix 6809-based computer with 1MB of RAM. His set-up includes eight serial lines and four parallel lines, two modems, two hard drives and "a small army of floppies." It runs two terminals, has a line linked to an IBM PC-AT, another to a stand-alone Unix system, parallel lines to dot matrix and daisywheel printers, and lines to a voice synthesizer and a BSR X10 Powerhouse home controller. The X10 constantly monitors and controls his home's lights and appliances.

It's not unusual for Lyall to be working on a C language program at one terminal while his fiancee is reading electronic mail at another. Meanwhile, a friend may connect remotely, browsing through the hard drives. This simultaneous usage of his OS-9 system occurs with little or no slowdown.

"I always wanted a system that was integrated, that could be used by several people at the same time, that could be a communications tie-point. That's what this has evolved to," says Lyall.

Often OS-9 Forum members describe their set-ups in forum messages. One recently admitted he had so many windows opened at once that he discovered he was accidentally compiling the same program in two of them simultaneously.

Darling sometimes opens 14 windows on his 512K CoCo 3, loads 134 commands and still has 92K of RAM left. But he usually runs four 80-by-24 text windows, and flips through them with a hot key. Often he'll have an editor in one, a terminal program in another, and sometimes graphics or shell programs in the other two.

He also keeps an Atari ST and Amiga nearby. Darling has written a window driver for the Atari ST's version of OS-9 that allows the ST user to flip through windows via function keys.

Barry Bonds, an OS-9 Forum member, has connected terminals throughout his house to a 68000-based system. A running joke in the forum is asking

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him when he's going to install a terminal in his bathroom. His OS-9 system includes a database program that prints checks and mailing labels every morning for bills he should send out that day.

But Darling stresses OS-9's hardware independence. Often when a person switches computers, he must relearn a new system. But Darling envisions being able to compile an OS-9 program from an Amiga to a diskette or ROM, then run the same program on an ST, Mac II or possibly a NeXT computer.

The motto of the OS-9 Forum is: "There are no dumb OS-9 questions, except the ones you didn't ask." Forum members often find answers to their questions within a few hours, or sometimes minutes, of posting them.

"CompuServe is still the definitive support point for OS-9. It was the first, and it's where all of the mature talent has congregated." Lyall says.

Darling makes his living working with OS-9. "I wouldn't trade it for anything in the world. If I was smart, I would go learn the Mac, or IBM operating system and become rich. But once you get into programming on OS-9, the sheer modularity, the simplicity and beauty, and the way everything fits, you can't bear to program on anything else."

Darling says that despite its obscurity, OS-9 is being used by the National Aeronautics Space Administration, the US Postal Service, Kodak, AT&T, General Motors, Honeywell, Ford, Hughes and Boeing. It is used in some critical patient hospital monitors, in advanced music synthesizers, and Sony-Phillips chose a form of OS-9 for their home CD-I interactive video disk information units, which could be on the market this year.

And it has been the No. 1 operating system in Japan for years, Darling says.

Randy Rendfeld, formerly an education reporter, is a free-lance writer and bureau news reporter for The Muncie (Ind.) Star. His CompuServe User ID number is 76004,1470.

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Computer
Association