

Glenside

Computer

Journal

Articles

CoCo~123



GLENSIDE: THE OFFICIAL '90 RAINBOWFEST HOST CLUB

CoCo-123 Press Association
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GLENSIDE CLUB OFFICERS

Here is the list of 1990 club officers and how to contact them. The club has four strong SIGS, Tandy Color Computer 1, 2, 3 and OS-9. If you have questions concerning these computers or OS-9 call one of the officers. Area code C=312, S=708.

POSITION	NAME	PHONE	PRIMARY FUNCTION
President	Ed Hathaway	S462-0694	The buck stops here...
Vice-President	Len Zielinski	S967-8791	Meeting Planning, etc.
Secretary	Tom Wilson	S653-7651	Records and Reporting
Treasurer	Greg Pietrucha	S830-1855	Dues and Purchasing
Editor	Eddie Kuns	S820-3943	Newsletter coordinator

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CoCo-123

CoCo-123 Information

CoCo-123 is the newsletter of the Glenside Color Computer Club of Illinois. We are committed to put out at least four newsletters a year. For an annual fee of \$12.00 you can become a GCCC member with full membership privileges. Send your dues to :

GCCC Treasure Greg Pietrucha
1349 Whirlaway Lane
Hanover Park, IL 60103

The Glenside Color Computer Club of Illinois is pleased to exchange newsletters with other Color Computer user groups at no charge. If you desire to reprint any articles that appear here, please provide credit to the author and this newsletter.

We encourage your user group to copy this newsletter and distribute it at your regular meetings to your members free of any charge as we believe that this will encourage better meeting attendance. If you are a user group that feels as we do, please let us know in your newsletter so that we might do this for our members and keep our attendance up.

Articles appearing in this newsletter can be obtained by downloading this newsletter from our GLENSIDE WEST BBS. You may reprint it using this means if you wish.

CoCo-123 CONTRIBUTIONS

If you would like to contribute an article to the newsletter, upload a file into your GLENSIDE WEST account called GLENSIDE.ART. If you have an AD for the BBS and newsletter put a file in your account called COMPUTER.ADS. If you have NEWS to POST about your group, place

a file in your account called POST.NWS .

These files are gathered by the BBS computer and downloaded to the editor. If you don't have a GLENSIDE WEST account you may get one by contacting the SYSOP by E-MAIL, mail, in person, or by phone:

GLENSIDE WEST SYSOP
Bob Swoger
613 Parkside Circle
Streamwood, IL 60107

It is preferred that you call:
H708/837-7957 or W708/576-8068

CONTRIBUTORS TO THIS ISSUE

Sharon Begley
Gene Brooks
Mary Hager
Ed Hathaway
Bob Swoger, K9WVY

CLUB MEETINGS

The Glenside Color Computer Club of Illinois meets on the second Thursday of each month at the Glendale Heights Public Library in Glendale Heights, Illinois from 7:30 to 9:00 PM.

A social get-together always occurs afterward at a local restaurant.

DATA INTERRUPT

Sad news, folks. The Illinois Color Computer Club of Elgin tossed in the towel Thursday evening April 19, 1990. I was there. Tony Podraza informed me at the previous Glenside meeting that the meeting night for the Elgin group had changed to Thursday, so I was able to come.

There were 11 people present at the meeting, but most had migrated to MS-DOS. The cost of the meeting room had also

increased to \$30 a night and so the folks there (only three still were faithful CoCo users) called it quits.

At the last meeting of Glenside, I stood up and explained the things I had seen that would definitely cause the orphaning of a computer. After a manufacturer announces that he will no longer produce a machine, second party venders leave the scene. They were motivated by pecuniary interests from the start and their lively hood depends on a growing business. These two things are warning flags to alert us to get to work and keep our machines from becoming complete orphans and should not be taken as a death sentence to our machines.

There is no good reason to call it quits if hobbyists keep writing and publishing. As a Timex/Sinclair survivalist I am years ahead of you in standing by an orphaned computer. The BIG THREE orphan makers as I see it are these:

- 1.) Your supporting magazines die.
- 2.) Your club stops putting out newsletters.
- 3.) Your club Membership falls off and the club dies.

When the three steps have all occurred, you are truly out in the cold with your orphan.

How do you keep the club from dying? Make sure your club keeps its priority of getting out its newsletter and make sure that there is either one hardware or one software article in your newsletter. Make sure that your newsletter is sent to all known user groups in the country on an exchange basis.

How do you keep the magazine

publishers from dying? They need material to print. They need to know you are alive and reading. Make sure that the newsletter is sent to all known magazine publishers in the country. Make sure that new articles in the newsletter are submitted to the magazine in a form that they can re-print like 1's & 0's on disk.

Promote the subscription of those magazines to the membership. One member should take on that responsibility, preferably a retiree.

Forgive me, fellow Glenside members, but as you know, I am a Sinclair 2068 user. I joined this group because I have always felt that the CoCo was the best 'BAG for the BUCK' and would not let any owner down as it could perform all computing tasks given it. You all know me to be a real "salesman" for the CoCo. [The reason I have stayed with the Sinclair is because I am a BASIC programmer of 18 years and prefer Sinclair's BASIC but MOST Coco users DO NOT program and use the machine as an appliance. For this task the CoCo seems to be an unlimited work horse. I convey this information to my friends and they choose the CoCo above all other 8 bit machines.]

We Sinclair survivalists have been going on two years since our manufacturer, TIMEX, quit producing our machines at the end of 1988. Because we were orphans first, I will keep you informed as to how we are doing and how we are doing it. We are getting smaller in number but those of us who didn't want to give up have found that we don't have to.

One more thing, as long as you have second party software venders, identify their

products with your club software Librarian and don't pirate their software as long as it can be purchased from the owner. Patronize them!

FROM THE PRESIDENT'S DESK

Well HELLO from the vast waste land of non-published words! It has been quite some time since we last put out an Official Newsletter, I'm not sure where to begin... First I would like to thank Bob Swoger for taking on the task of putting together our newsletter. From all of us, THANKS BOB! As they say, "Big jobs require BIG people to accomplish them!" [Bob is certainly over 6'4" and certainly over 300 lb]

Secondly, I would like to thank Gene Brooks for taking on the job of the Disk-of-the-Month project. This activity, like the newsletter, is very important to the club and its great knowing that they are in 'Good Hands'... Thanks again, Gene.

Lastly, I would like to thank you, the membership, for 'hanging in there' during this transition time. The services that the club has established over the years have become far too much for just one or two people to handle. Thus the reason for the Newsletter absent and the Disk-of-the-Month delays. Thanks you for your understanding.

During this year and the up-coming years, Glenside and the CoCo will be undergoing some really aggressive changes. With the advent of the new machines, Glenside's job as a computer user group will take on a whole new meaning. It is the feeling of the experts in the CoCo field that these new machines have the potential to carry the CoCo community into

the future. The other advantage of these new machines is the positive effect they will create outside our community. As we discussed, it is not the intent of Glenside to go 100% over to the new machines. In summary, as the CoCo goes, so goes Glenside. Keeping this in mind, as the new machines go, so goes Glenside... Its a WIN-WIN situation.

We do have so more good news to pass along. By the time we hold our July meeting, Fullerton Avenue in Glendale Heights SHOULD be finished and opened for traffic. I know my wife will welcome this. It seems that a few of you have been sounding your horn as you round the corner of President and Stevenson. Believe me, it does not bother me, but then again, I'm one of the guilty!

In closing, thanks again for all your help and support throughout this past year or so. I know that the coming months will prove to be better.

Ed Hathaway, President
Glenside Color Computer Club

TREASURY NOTES

Greg is out of town during this reporting period. [A vacation on club funds? NO, not Greg!] The club treasury is in the BLACK. Greg will report next time.

Greg Pietrucha, Treasurer
Glenside Color Computer Club

SECRETARY'S NOTEPAD

Since this is the first newsletter of 1990, let me explain here what has happened in the club. We have somehow elected Greg Pietrucha to both the jobs of treasurer and secretary. He really can not be expected to do both jobs, we

have plenty of folks out there, lets hear from one of you to do this column.

I was at the RAINBOWFEST at the GLENSIDE CCC table when new folks signed up to become members of our club and we promised them newsletters! We did only three last year. To fall in such a situation could mean the downfall of our club and I brought this point up in the April meeting. We must put out the news of this club to all our members and exchange newsletters with other CoCo groups throughout North America or we will go under. Someone from the group must step forward and undertake this task.

February Meeting

Ed opened the meeting in a very dynamic way, he had just read articles in the 'COMPUTER SHOPPER' that got under his skin. First, the 'Shopper' stated that they were no longer going to publish articles about 8 bit machines, they were instead going to focus on 'mainstream' computers like IBM (and clones), AMIGA, ATARI and MACINTOSH (the computer for the functionally illiterate).

Second, an article by GATES of MicroSoft really lit Ed's fuse. Gates had stated in his article that in order to do the 3 M's (multi-tasking, Multi-user, and MIDI) you needed 2.5 MEG of RAM and \$4000 in hardware.

Ed promptly set up a CoCo and had it drive 2 terminals and 2 MIDI keyboards each playing different music! "Where is the \$4000?", he asked. There was maybe \$600 to \$700 up there at most. Then he turned to GATOR and asked, "How many ports do we have on the club computer and how many different tasks can be running?". GATOR replied, "8 ports, one can be

in the word processor, one in FORTRAN, another in BASIC, another doing 'C'.... "How much RAM is in the machine, GATOR?" "124K" was my reply. "K not MEG!"

Ed then told us that if someone writes something that is in error, they should be taken to task in writing. Too many folks read that stuff and are misled into believing it!

April Meeting

This meeting was about what had just taken place at the RAINBOWFEST. Ed informed the group that all had gone pretty well. The turnout of visitors was about 5000 for the three days. The number of vendors was down by three from last year, for the no shows in vendors there were new one to take their place in most cases. Computer PLUS was most missed as he has always in the past caused TANDY to lower their prices a bit. The lines to get into the FEST were long really early but GATOR and SALTY [Kirkpatrick] handed out the questionnaires that held up entree to as many in the line that would take them and all at once everyone seemed to be inside except GATOR!

Saturday morning was the breakfast and all said that it was great. The food was good and so were the speakers. Frank Hogg told all of the next generation machines and what they meant to the future of the CoCo. [Frank is almost as good a speaker as is Hathaway!]

The FEST on Saturday and Sunday went well with less crowding than on Friday evening. We had a few new members sign up from out of town and near by. Prices did not seem to drop as much on Sunday this year as they did last year. Seminars were so

plentiful that one ran into another which make it imposible for folks to make both.

It was mentioned that the local turn-out might have been better this year if we had done our job getting out the FEST info to our local RADIO SHACK stores.

At the end of the meeting GATOR took the floor and promised to help the group get out four newsletters per year and asked for help. Eddie Kuns, Gene Brooks and Tom Wilson offered to lend a hand. They will come out at the end of each season. Bob asked for someone to help communicate and exchange with other North American groups but at this meeting there were no takers.

May Meeting

Bob Swoger and Tony Podraza told of the demise of the Illinois Color Computer Club of Elgin. [See DATA INTERRUPT]

This was Mike Knutson's night. Mike gave us 'more MUZAK' from his OS-9 MIDI software that all could purchase at the second city table of RAINBOWFEST. Mike used two keyboards, both under \$200. The CASIO was the best sounding when reproducing various musical instruments. It has fewer features than the PS-480 YAMAHA which can often be found at SERVICE MERCHANDISE for around \$100. The PS-480 has more functions and reproduces stringed instruments very well.

The most important part of the MIDI package for the CoCo is the software and all think Mike's is the most versatile. See him if you are interested in MIDI.

Bob Swoger, GATOR
Glenside Color Computer Club

SYSOP'S TWISTED PAIR

It is time once again to inform you all how to log in to the Glenside West BBS.

Since our computer now hosts four organizations instead of just one, more folks will benefit from this dissertation.

First, set up your terminal program for 1200 baud or less and 8-N-1 protocol.

Second, call 708-576-7072 and hit your ENTER key until you get the > prompt. Then type:

LOG GLENSIDE/GUEST

From this point on, the BBS program picks up and you peruse the BBS in tree climbing fashion, that is, you go up one branch then down again before going up another branch from the main bulletin board.

To go up a branch choose a number from 1 to 9 on a board. To climb back down either choose 0 or just hit ENTER with no selection.

If you fall out of the BBS for some reason, you can get back in again by typing @BBS.

The biggest problem you will have is the mail mode (don't blame me, I did not write this utility). This is because you, like everyone else, do not READ! The utility always reminds you to terminate the letter> prompt, the to who? prompt and the reply> prompt with CONTROL Z but no one seems to read that. To terminate the different functions of mail you must sent CONTROL Z ! REMEMBER THIS! CONTROL Z ! When the mail utility asks you "To who?" it is looking to get from you the last name of the person you wish to send your mail to. It will keep asking "to who?" so

that you may send your mail to dozens of people. If you don't wish to send you mail to dozens of people, CONTROL Z!

If after reading your mail you see a "reply>" prompt, the utility is asking you for text strings to send back to the sender. It will keep taking strings of text and giving you the "reply>" prompt until you send CONTROL Z!

 If you hang-up on mail in either the send or receive mode, the machine will crash and will not come up again until the morning of the following work day.

I hope this will help you understand the problem. We will cover the fine points of MAIL in the next issue.

To leave the BBS, just hit ENTER at all the "ENTER your selection>" prompts and the system will drop back to the EXECUTIVE level giving you the > prompt. At this point type BYE and only after the machine tells you that you are logged off, hang-up the phone or you will be connected with the machine until you do hang-up. My friend Dan Turkisher in Kansas City found this out after he got is over \$100 phone bill after being connected over night.

!!! R E M E M B E R !!!
 We now have a 24 hour BBS and encourage you to exchange mail and contribute to the Download Section. Use it and have fun!

 * GLENSIDE WEST BBS *
 * 708/576-7072 *
 * Type at the > prompt: *
 * LOG GLENSIDE/GUEST *
 * BYE to log out *

ITEMS FOR SALE THROUGH THE CLUB

 Ed Hathaway is the chairman for the following:

MUSICA RAM DISK (CC3 Only)
 Speech Systems\$5
 COCO 3 MEMORY TEST
 Speech Systems\$5
 HARDCOPY (for DMP-105, DMP-200
 Gemini 10X or SG-10)
 Computerize\$10
 TERMTALK
 DelSoftware\$5
 REALESTATE INVESTMENT
 Petrocci Freelance\$10
 ORDER ENTRY SYSTEM
 Mark Data\$25
 CHECK LEDGER SYSTEM
 Computerware\$15
 DISK COLORCOM/E
 Eigen Systems\$10
 DATAPACK II
 Cer-Comp\$20
 THELASTWORD
 (OS-9)\$20
 DATABANK MANAGER
 Computerware\$10
 OTERM
 New World Technologies ..\$15
 FLEX OPERATION SYSTEM
 Frank Hogg\$30
 GRAPHICOM PART II
 Computerware\$10
 DISK COLORCOM/E V2
 Eigen Systems\$10
 COLORCOM/E ROM PAK V3
 Eigen Systems\$5
 ELITE WORD
 PBJ Version\$25
 ELITE COMM
 PBJ Version\$10
 ELITE WORD
 (OS-9 L1)\$25
 VIDTEX w/PERSONAL COLOR
 RADAR: CompuServe\$2
 FORMAKER 1.0
 Challenger Software\$10
 TRSCOPY
 (OS-9 L1)\$10

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

SPECIAL DEALS AND BUYS

CLUB POLICY

RECORDING SPECIAL PURCHASES

Each special buy will have a CHAIRMAN who will coordinate ALL ACTIVITY regarding a purchase. The CHAIRMAN will publicize the special buy through the newsletter and at the GCCC meetings. All inter-action will go through the CHAIRMAN and all checks will be sent to him, payable to the CHAIRMAN.

When the purchased goods arrive, the CHAIRMAN will see that they are distributed. All special buys must be PAID IN ADVANCE because the GCCC does not have enough funds to handle all of the buys without cash flow problems. So you MUST SEND A CHECK TO THE CHAIRMAN BEFORE THE DEADLINE or you will not be included in the special buy. The CHAIRMAN will contact the members on his interest list regarding deadlines and purchase price or alternately, it will appear in the CoCo 123 newsletter.

Greg Pietrucha is the chairman for the Glenside Disk of the Month Club (GDMC) which provides members only with one disk of assorted monthly Public Domain software on disk media storage. The member shall pay a total sum of \$12 for 12 disks before receiving their first issue. All issues of GDMC will be distributed at the start of each monthly Club Meeting. At no time will Glenside distribute, mail, or make available GDMC other than at monthly meetings. GDMC is a non-refundable program. Back issues of GDMC will be made available at the monthly meeting for a fee of \$1.50 per issue. Glenside reserves the right to edit, modify and/or

change the policies regarding GDMC providing that a 30 day advance notice is posted in this publication or at a meeting.

ARTICLES

VOYAGER'S INCREDIBLE JOURNEY

With
The *LITTLE COMPUTER* that *COULD*
by
Sharon Begley
and
Mary Hager
Condensed from *NEWSWEEK*
by
READER'S DIGEST

With nothing but a radio transmitter to herald its arrival, a gawky aluminum bird swooped over the north pole of the planet Neptune last August. Streaking through the remote reaches of the solar system, the unmanned spacecraft Voyager 2 sent stunning photos and data 2.8 billion miles to the Jet Propulsion Laboratory (JPL) in Pasadena, Calif., where astronomers eagerly awaited an encounter with the blue planet. Its main mission completed, Voyager turned Neptune's gravitational force into a celestial slingshot and sped toward a rendezvous with infinity.

For 12 years Voyager 2 has soared through the solar system, sending back spectacular photos of Jupiter, Saturn, Uranus and Neptune, along with more than five trillion bits of scientific data.

Voyager 2 has proved to be the most successful space probe ever launched. Yet when the 1819-pound craft rocketed from Cape Canaveral on August 20, 1977, and pointed itself toward

its place in history, the trip was one heart-stopper after another. A radio receiver malfunctioned, and then the backup became tone deaf, unable to lock onto a particular frequency. Controllers had to predict what Voyager could hear on the basis of the spacecraft's temperature, distance and motion. After the Jupiter flyby, a silicon chip failed, wiping out three percent of the computer's memory. At Saturn, the scan platform that holds the cameras and other instruments jammed; but the lubricant seeped back into the gears in time for the meeting with Uranus. Somehow the geriatric Voyager 2, arthritic and partially deaf, managed to reach Neptune.

Steering Voyager within 3000 miles of the planet's cloud tops, at 61148 m.p.h., required some of the most complicated engineering NASA has ever undertaken. For years flight jockeys at JPL, where the craft was designed and built, had fine tuned its trajectory. When Voyager finally reached Neptune, it was just 21 miles wide of where the scientists expected it to be - the cosmic equivalent of sinking a 2260 mile putt. "Not bad shooting," said project manager Norman Haynes.

Over the years, NASA's computer aces had radioed up so many improvements to the on-board computer that the craft had essentially received a long-distance brain transplant many times. [This was only possible because the 1977 vintage 8 bit "Little Computer that Could" had only 64K of addressable memory. Program managers stated that had the craft contained today's higher tech 16 or 32 bit processors, with all the RAM that they can address, their programmers would have had an

even more monumental task for, as programmers are given more space to write in, they feel compelled to use as much of it as they possibly can!]

As Voyager closed in on Neptune, JPL engineers worked round the clock to radio instructions. But they did not know the exact location of the debris encircling the planet. Since it takes over four hours for signals to travel between Earth and Neptune, there was no chance for last-minute fixes: a collision could have doomed the mission. Fortunately, Voyager managed to avoid the orbiting junk.

The data arrived on a radio signal so weak - a ten quadrillionth of a watt - that 38 giant radio antennas on four continents were used to catch Voyager's whispered message. And what a message it was. Neptune turned out to be a dynamic, stormy world. Cloaked in a thick haze of hydrogen and helium, the planet is streaked by 1500 m.p.h. winds that push clouds of frozen methane. A tremendous storm system, a countercyclone as big across as Earth and christened the Great Dark Spot, marks the southern hemisphere.

Voyager's view of Neptune was almost upstaged by the planet's largest moon, Triton, called the most curious thing we've ever seen" by Voyager geologist Laurence Soderblom. Already known as an astronomical renegade because it is the only large moon in the solar system whose orbit is in the opposite direction of its parent planet's rotation, Triton showed a face mottled like the finest Italian pink marble. Triton seemed to have a history like ice cream carried home in August: frozen, melted, then frozen again. Perhaps it once

was a planet, only to be drawn out of its solar orbit by Neptune's gravitational embrace. [Voyager 2 found signs of icy volcanism and rough patches perhaps caused by Tritons Quakes. It found six previously unknown moons around Blue Neptune bringing the known total to eight. The spacecraft also discovered at least four rings around the planet. Said Voyager geologist Laurence Soderblom: "What a way to leave the solar system!"]

The new finds came so quickly that trying to make sense of them all was like trying to drink from a fire hose. The solar system's violent history is nowhere more evident than in the rings and moons Voyager kept discovering, first around Jupiter and Saturn, then Uranus and Neptune. "Voyager focused our attention on the importance of collisions," says chief project scientist Edward Stone. Each cosmic crash, a potent sculptor of the solar system, would produce a different kind of ring, ranging from the luminous bands around Saturn to the 11 narrow, sharply bounded rings of Uranus.

The primary mission now completed, Voyager 2's cameras, infrared detector and photopolarimeter will be turned off later this year. The electricity conserved will power instruments that will measure the exotic fields and subatomic particles littering the route to interstellar space. By 2020, Voyager 2 will probably fall silent, its generators too feeble to power communications. In the year 40,176 it should come within 1.7 light years of the star Ross 248, a cool, red speck of twinkling gas. In the year 296,036, Voyager 2 will pass within 4.3 light of Sirius.

The chances are small, but one of these stars might have a planet with beings intelligent enough to detect the tiny, silent wanderer. If they retrieve Voyager, they will find, mounted on its side, a gold plated copper disc, complete with stylus and cartridge. If they figure out how to play it, they will hear greetings in 60 Earth languages and one whale dialect, as well as the natural sounds of the planet - thunder clapping, frogs croaking and a newborn baby crying.

If the craft encounters no one, it will float forever through the Milky Way, an emissary of the curious earthlings who launched it, hoping to make their mark in the vastness of cosmic time.

[I hope this article makes you owners of 8 bit machines a bit more reluctant to part with your trusty companions.]

GHOST BUSTERS BY ANONYMOUS

I like this little program because it shows how so little instruction code can produce a great picture on the CoCo.

This little program can be downloaded from GLENSIDE WEST so that you won't have to do all the typing. Use VIP TERM and follow the instructions.

Good luck, ---GATOR---

And now the program:

```
SWITCHING TO LO-RES FORMAT (MORE RELIABLE)4N
OPENING YOUR BUFFER NOW
0
10 PMODE4,1:PCLS1:SCREEN1,1:PMODE3:R=2:PCLS3
20 IFINKEY$<>CHR$(13) THEN20
```

30 PCLS4
 40 CIRCLE(100,40),20,1,.9,.46,.
 05:DRAW"C4BM100,24NU2R6DR2C1R4E
 R2M+6,-1R2L3H6L6G2L2G2LG2DR3"
 50 CIRCLE(100,62),30,1,.66,.41,
 .63:CIRCLE(100,62),30,1,.66,.9,
 .1:DRAW"BM-22,+24M+2,-4BR36M+2,
 +4F2BM-16,-20F4M-6,-3R2BL12BUG4
 BD4BRD4F2U8F2D5BR9BUNU4F2U8F2D5
 BD8BL4G2L4H2BD12BL2D6F2U10R2D10
 R2U10F2D6BD6BR2G2L8H2BL16BU2F4H
 2L6"60 DRAW"M-12,+10M-16,+10M-2
 4,-6L4G2D2R4M+10,+6NF2H2L6G2L2G
 4D2R4E2R4F2R4F2H2L4G2L4D4R4ER4M
 +10,+2R4NH4M+6,+8R4E2U2M-6,-8D2
 R4M+20,-10F2R4F2D"
 70 CIRCLE(138,80),30,1,.6,.69,.
 9:CIRCLE(136,112),42,1,.5,.25,.
 4
 80 DRAW"BM114,130M-18,+10"
 90 DRAW"BM166,100F4R2F2NE4G4D2F
 2R4M+9,-3F2R9E2M+24,+10R2U4M-12
 ,-8M+3,+2R4NDR2NDR8E2U2H2M-14,-
 2NDU4M+8,-4ND8M+8,-4U4H2L4G4L2N
 U4L4G2L4G2L12H2L2H2"
 100 CIRCLE(128,98),92,1,.85,.52
 .675:CIRCLE(128,98),92,1,.85,.
 74,.98:CIRCLE(128,98),92,1,.85,
 .05,.48
 110 CIRCLE(128,98),62,1,.85,.74
 .9:CIRCLE(128,98),62,1,.85,.05
 .39
 120 DRAW"BM68,110NU8M+104,-46BF
 20BD4BL4M-104,+46R2"
 130 PAINT(78,36),R,1:PAINT(134,
 24),R,1:PAINT(218,100),R,1
 140 PAINT(2,2),1,1:PAINT(134,50
),1,1:PAINT(72,106),1,1:PAINT(9
 2,136),1,1
 150 GOTO150

YOUR BUFFER IS CLOSED NOW

PRESS <CLEAR>-<SHIFT><9> TO
 RETURN TO HI-RES.

EXIT COMMUNICATIONS <SHIFT><@>
 AND SAVE ON DISK (MENU #9)
 TYPE 'DSFILENAME.BAS' TO
 SAVE

DON'T FORGET TO COME BACK HERE
 AND LOG OUT

CLASSIFIED ADS

 To put an AD in the Computer
 related section of the BBS, put
 a file in your account with the
 filename.filetype: COMPUTER.ADS
 !!! Our ADS are free !!!

AD BY: ???? ON 900313

 Commodore 64 w/DISK DRIVE,
 MONITOR, MODEM, 20 MANUALS,
 GEOS OPERATING SYSTEM. 20 GAMES
 (ALL ORIGINAL DISKS & MANUALS)
\$450 OBO
 CALL 708-213-3863 AFTER 6PM

AD BY: RICH ON 900313

 64K COCO W/FLOPPY DISK DRIVE,
 DMP-105 PRINTER, JOYSTICKS,
 SCRIPSIT, FLIPSIDE SOFTWARE
 CALL RICH 708-543-0335 AFTR 7PM

AD BY: AL MAHANNA ON 900222

 40 MB HARD DRIVE
 FOR COMPAQ 386 ZOE COMPUTER
 29 uS AVERAGE SEEK TIME
 BEST OFFER
 CALL AL MAHANNA H708/259-8349
 H708/392-2982 or W708/576-4515

AD BY: JIM PEULECKE ON 880205

 TANDY MODEL 100 PORTABLE
 COMES WITH BASIC AND THREE
 APPLICATION PROGRAMS BUILT IN.
 EXTRAS INCLUDE 32K OF RAM,
 PROTECTIVE 'SKIN' OVER FRONT,
 SOFT CASE, HARD CASE, AND OF
 COURSE, BUILT-IN MODEM.
 !!! LIKE - NEW CONDITION !!!
 . \$350.00 OR BEST OFFER.....
 CONTACT JIM PEULECKE
 W815-744-1545 or H815-886-4648

FOR SALE DEC-90

 Televideo 610 Communications
 Terminal; CRT excellent,
 manual, box, and works...\$75.00
 CALL Ray DuBiel X65862.

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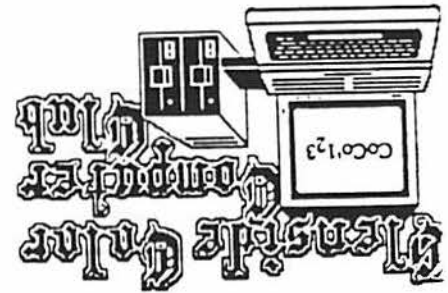


Location
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 Library
 Fullerton Ave.
 Glendale Hts. IL
 7:30 to 9:30pm

call: 462-0694
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Monthly meetings every **SECOND THURSDAY**

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