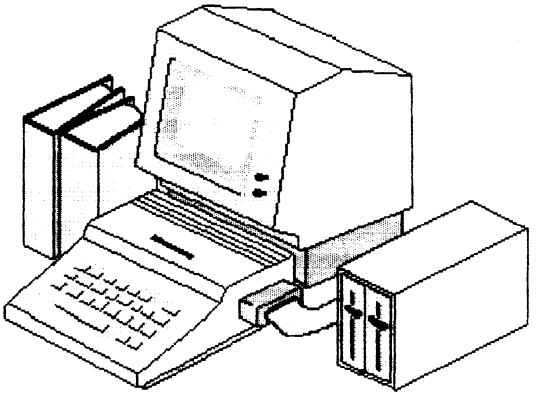
COCO~123

DECEMBER, 1996 VOLUME XVI, NUMBER 5



The President's /term

by Rob Gibons

Well another year comes to a close and it's time to welcome in the new Club Officers. Mike Knudsen will be President in 1997. Mike is a long time member of Glenside and author of the popular Ultimuse Midi program.

For our three Vice Presidents we have Tony Podraza, Justin Wagner and Jerry Jesky. Most of you known Tony, if not personally, at least by name, having been both President and Vice President many times before. Both Justin and Jerry are relatively new members and will be holding office for the first time.

We finally got Bob "Gator" Swoger to except an nomination! Bob is another long time member and will be Club Secretary. "Gator," as he's known to many of his friends, has done a lot of work in the background over the years, including hosting the club picnic, typing and uploading notes from meeting for the newsletter, and manning the Club booth at the FEST!

BY ACCLAMATION, George Schneeweiss was reelected Club Treasurer. George has been doing an outstanding job as Treasurer for a number of years and his outstanding work was and is well recognized. I am sure each will do an outstanding job and wish each of the new officers the best of luck (you know where to find me if you need help)!

At this time I would like to thank this year's officers, Tony Podraza, Sheryl Edwards, Eddie Kuns, Mike Knudsen (who stepped in for Eddie), Paul Knudsen, and, as always, George Schneeweiss for all their efforts on behalf of the membership of the club. I couldn't have made it through the year (and the FEST!) without you! Many thanks!

What I Am Up To

by William Rockett

I was glad to see a list of members in the issue and want ads. With the demise of CoCo Trader I haven't seen any want ads in a long time. ...my name and address and phone number is correct. I was surprised to see at least 25 members from Wisconsin listed. Also was surprised to see someone only 15 -20 miles from me - Richard Remer of Burlington. Looked up his name in the phone directory but he is not listed. I see that Victor Kellis of Menasha is listed twice - 2nd time as Victor Wells. Who is trouble? [see November roster, ED]

I have replaced the disc system I had 6 years ago that didn't work with one from Al Dages of Stone Mountain Georgia. The printer is working fine. Otherwise everything is going fairly well. I got back to the CoCo after a long break. Still belong to Adventurers Survivors. I didn't know what the situation is with Terry Simons.

Thanks,

William Rockett

W351S10247 Touhy Rd.

Eagle, WI 53119-1842

CoCo 123 Information

The Glenside Color Computer Club of Illinois is a not-for-profit organization whose members share an interest in the Tandy Color Computer ®. The CoCo 123 is the official newsletter of the Glenside Color Computer Club. The Glenside Color Computer Club of Illinois has no affiliation with Radio Shack ® and/or the Tandy Corporation ®. The opinions expressed by the authors of the articles contained within this newsletter do not necessarily reflect the opinions of the Editor, the Executive Officers, or the actual club membership.

We are committed to publishing a minimum of four issues and a maximum of twelve issues per calendar year. For a fee of $15.00, for January through December, you can become a GCCC member with full membership privileges. Send your dues to:

GEORGE SCHNEEWEISS
RR #2 Box 67
Forrest, IL 61741-9629

Here is a list of the 1997 Executive 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 these officers.

POSITION	NAME	PHONE	PRIMARY FUNCTION
President	Mike Knudsen	630-665-1394	The buck stops here
Vice-President	Jerry Jesky	708-449-2638	Meeting Planning, etc.
Vice-President	Tony Podraza	847-428-3576	" "
Vice-President	Justin Wagner	630-393-7072	" "
Secretary	Bob Swoger	847-576-8068	Records and Reporting
Treasurer	George Schneeweiss	815-832-5571	Dues and Purchasing
Editor	Carl Boll	773-735-6087	Newsletter coordinator
Telecom	David Barnes	847-587-9820	Club BBS SysOp
Printer	Dennis Devitt	630-629-2016	Newsletter Exchange
Advertising	Bob Swoger	847-576-8068	Newsletter Ads

CoCo 123 Contributions

If you would like to contribute an article, upload a file to the Newsletter Submissions section of the Glenside's Cup of CoCo BBS. Ditto for ads and news about your group. **Please include a name and an address or phone number.** If you would rather submit your article on diskette, they can be accepted in **ASCII** form and **unformatted** in the following formats:

RS-DOS 5-1/4" SSDD, 35 tracks
OS-9 5-1/4" SSDD, 35 tracks
MS-DOS Any standard format

Mail your articles to:

Carl Boll
6242 South Menard
Chicago, IL 60638

Submission deadline for the CoCo 123 is the 15th of each month. Articles submitted after the deadline will appear in the next issue.

CoCo 123 Newsletter Exchange

The Glenside Color Computer Club of Illinois is pleased to exchange newsletters with other Color Computer or OS-9 user groups at no charge. Send your newsletter to:

Dennis Devitt
21 W 144 Canary Road
Lombard, IL 60148

Reprint Policy

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 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 and send us your newsletter. We will then distribute it to our members and keep our attendance up.

Glenside Club Meetings

The Glenside Color Computer Club meets on the second Thursday of each month from 7:30 to 9:30 PM at the Glendale Heights Public Library. A social get-together always occurs afterward at the Springdale Restaurant.

Future meeting dates:

January 9, 1997
February 13, 1997

Editor: Mike Warns
Design, layout, graphics: Walrus House Enterprises

A special tip o' the hat to Dave Barnes and BARSoft Publishing, whose masthead page has been, uh, more than an inspiration for this issue's.

These are your BBSs. Please support them.

Glenside CoCoRama BBS
847-587-9837
At Least 9600 Baud

SandV BBS
630-352-0948
Maybe faster than before!

Glenside's Cup of CoCo
847-428-0436
9600 Baud

Chi-CoCo BBS
312-735-3355
14,400 Baud

Glenside East
847-632-5558
2400 Baud

I am going to miss trying to fill up this space!

The Editor's Corner

by Mike Warns

I am sad to say that this is my last issue as editor of the Glenside newsletter. Starting next month, Carl Boll will be taking over. Office and family commitments have made it so that I cannot even get out the few issues I managed to get out in the past. It has been a pleasure to be your editor (when I could) and I look forward to working with Carl to continue to bring you the best CoCo newsletter around. Thank you for your help, and your submissions. As proof that guilt works to motivate people...

What I Am Up To

by Bill Hochstetter

OK, You talked me into it. I, Bill Hochstetter, will write an article for the newsletter.

I really like to read the articles in the newsletter about other hobby users of the COCO. I have Several COCO3's, Drives and even a CM8 monitor. I put off getting a monitor for many years but really regret it. A CM8 works just fine as a word processing monitor with TW128.

I've been running on an old 1200 baud modem for years but finally saw a 2400 baud modem at a hamfest for $5 and couldn't resist. Then I found a 14.4k baud modem at another hamfest for $20 and found the software for it was for a Macintosh. It would also require a high speed RS232 pack which I can't seem to scratch up the cash for. Xmas is coming, so maybe I'll be able to horse trade with the wife for one. I can use the bit-banger port for DECB terminal programs up to 2400 baud but OS9 requires the RS232 pack.

I experimented for a while with the /t1 port on OS9 but that is absolutely the only thing the computer can pay attention to if you use it, even at 300 baud.

I really drool with envy over the hard drive setups. Too bad Syquest is a step behind Iomega in bringing new devices to market.

I also have a couple of COCO2's that I had planned to use with Tony DiStefano's weather station projects. I even obtained the thermistor for the temperature sensing, but never got a wire run outdoors to do any sensing.

Well, like most people, I guess I have more ideas than time. I sure would have liked to have someone who lived close to me to share this "micro experience". I'll just have to vicariously live the computer high life through the "COCO~123" and "World of 68 Micros".

Bill Hochstetter
1901 Pleasant Meadows
Portage, IN 46368

Meeting Minutes

November 14, 1996

Present were Rob Gibons, Gerald Jeskey, Scott Montgomery, George Schneeweiss, Tony Podraza, Richard Bair, John Chasteen, Bob Swoger, Tom Schaefges, Mike Warns, and Carl Boll.

Under old business, the club officers have mail out 83 contracts prior to November 9 to vendors of which 4 have now been answered to the affirmative.

An ad in the Daily Herald now runs periodically. The meeting location was left out in the first printing even though the paper was given the information.

Editor Mike Warns provided Volume 16, Number 4 issue of our newsletter in time to be handed out at this meeting. Along with a rather large ads section is the annual list of current Glenside Color Computer Club members. The club officers ask the membership to check the information relating to them. Gerry Jeskey was the first to discover that the club records had his name misspelled.

Tony and Rob announced that the Club CoCo 3 system is up and running with a Burke & Burke controlled Seagate 40 Meg hard drive.

Marty Goodman provided PAL for Multipak for John Chasteen's CoCo 3.

Nitrous O9 developer Alan Dekok was given monetary help for 6309 optimization.

A little levity was given to Windows 95 which runs on one of out favorite appliances/file servers. It seems that George Schneeweiss is the only person who hasn't found any of its bugs. He removed it from his machine and went back to MSDOS.

President Rob Gibons announced that he will be relocating to Largo Florida about April 30. For our upcoming December election, nominations were opened for club officers. For President, Tony Podraza, Richard Bair, Mike Knudsen. For Vice president, Tony Podraza, Richard Bair, Mike Knudsen, Gerry Jeskey, Robert Swoger. For Treasurer, George Schneeweiss. For Secretary, John Chasteen. Nominations were then tabled until out December meeting.

The meeting adjourned at 8:35 PM. As Brian Schubring was required to work this evening, our planned Amateur Packet Radio Demonstration had to be canceled. However, after a short break, Tony Podraza and Rob Gibons gave a demonstration of P51 Flight Simulator by TOM MIX Software recommended for review at a meeting by Bob "GATOR" Swoger.

Meeting Minutes

December 12, 1996

The meeting was called to order at 7:55 PM by President Rob Gibons. Also present were George Schneeweiss, Bob Swoger Tony Podraza, Scott Montgomery, Richard Bair, Gerry Jeskey, Brian Schubring, Mike Knudsen, Gene Brooke, Carl Boll, Justin Wagner, Eddie Kuns, Mike Warns and Dave Barnes. Treasurer George Schneeweiss reported that the treasury was at $1900 and that he would start collecting dues this evening for 1997.

Northern Exposure of Ontario seems to have disappeared into a black hole but Farna is handling some of Colin McKay's for sale products. Perhaps he can be reached through Ken Scales?

Brian Schubring showed the 6th Annual Last Chicago CoCoFEST Logo in the form of a flier for the newsletter, buttons and shirts for the fest. MIDI Music is the theme. The Logo is rather complicated. Suggestions were that it be make as large as possible for a small shirt or go on the back of the shirts. These questions will be decided by the Shirt Committee. Kudos to Brian for getting the job done! Dave Barnes, Brian Schubring and Bob Swoger will try to work out the fine points of the shirt buy.

The Cup o CoCo BBS is getting connected to Fido Net reported Tony Podraza, SYSop. Store and transfer of files between systems are the new benefits, but greater E-mail communication is the most notable benefit. Fido is available for CoCo RIBBS, OSK, MSDOS and other platforms.

The BBS sponsored by Motorola has changed its name. It has been referred to Glenside East in the past and now is called "The Club BBS" due to the fact that it supports not only the Motorola MicroComputer Club members, but also the Motorola Amateur Radio Club, Chicago Area Timex/Sinclair Users Group and Glenside Color Computer Club. Under the Bulletin section are sub-boards for the four separate groups. Available in the bulletin section is information on local Computer fests and Amateur Radio Fests. Also, there are separate mail sections for the different computer platforms. Users can contact Internet E-mail users all over the world by addressing their mail to "INTERNET EMAIL" and placing the recipient's e-mail address on the subject line.

Atlanta CoCo users had an October Picnic at Stone Mountain Georgia rather than the more conventional Computer Fest. This may be the trend for future Atlanta CoCo get-togethers.

There is a Pennsylvania fest planned in August.

Tony Podraza found a great place to get computer monitors repaired for flat rate and no charge if the item can't be repaired. They also repair Keyboards and power supplies. The fee for monitors is from $60 to $72, $45 for keyboards. They are:

Dynamic Electronics Services

599 N. York Road

Elmhurst, IL 60126

708-832-1983 708-832-1984 FAX

{Tony, the phone number to pass along to Dynamic for George Electronics in Harvey Illinois is 708-331-1983}

Mike Warns asked for relief of editorship of the club newsletter. Carl Boll volunteered to take on the task for a while.

Carl Boll made a motion to have an IDE hard drive controller for the CoCo as a club project. Someone he knows has a working prototype which handles an 80 Meg running under OS-9. Was this Jim Hathaway? The club voted unanimously to peruse the project.

Treasurer George Schneeweiss reported that the treasury was at $1900 and that he would start collecting dues this evening for 1997.

Reminding us that he is relocating to Largo Florida in the Spring, President Rob Gibons reopened nominations for 1997 club officers. Mike Knudsen has become our 1997 president with Vice Presidents Jerry Jeskey, Justin Wagner and Tony Podraza, Secretary Bob Swoger, and Treasurer George Schneeweiss. V.P.'s in order of waiting are Richard Bair, Gene Brookes and Carl Boll. Congratulations with our best wishes and thanks to those accepting these positions.

No Demo was given due to the length of the meeting. The Demo which was to be "The History of CoCo Flight Simulators" will be given next month. The meeting adjourned at 9:36 P.M..

Color Computer Shorties: Totally Not Serious Basic Stuff for the CoCo!

by Rogelio Perea

On my daily day to day computing needs, my CoCos get used for a w-i-d-e range of applications, as usually, the CoCo churns away numbers, letters, and an ocassional game or two. Then there are those times when I just sit down and start banging away at DECB, just to see what comes up, experiment with Basic statements, POKEs, PEEKs and the like. The following three short Basic programs are a product of such. These all can be typed quickly and should run on a minimum CoCo configuration of 16k RAM and ECB installed.

The first program does a couple of animation tricks on the lo-res text screen. This one appeared originally in a very old issue of Family Computing magazine as an Apple][program. A little editing here and there and it was ready for the CoCo. The inner workings are very simple as the program first sets up a series of animation "frames" in alphanumeric STRING$ filled up with CHR$(128) - the black space square. After setting up, it starts flipping each frame (out of two sequences or cycles) giving the effect of moving pictures. Here's the listing:

```
0 ' SIMPLE ANIMATION
1 ' ADAPTED FROM AN APPLE PROGRAM
2 ' BY JOHN JAINSCHIGG
3 '
4 ' JANUARY 1996
5 ' ROGELIO PEREA
6 '
10 CLS
20 PRINT@230,"PLEASE WAIT WHILE I"
30 PRINT@259,"SET UP THE PICTURE
FRAMES"
35 PRINT@325,"....ABOUT 30
SECONDS"
40 CLEAR 1000:DIM B(7),A$(2,5,8)
50 FOR I=0 TO 7:B(I)=INT(2^I):NEXT
I
60 FOR I=1 TO 2:FOR J=1 TO 5:FOR
K=1 TO 8
70 READ V:A$(I,J,K)="":FOR L=7 TO
0 STEP -1
80 IF V>=B(L) THEN V=V-
B(L):T$=CHR$(128) ELSE T$=CHR$(32)
90 A$(I,J,K)=A$(I,J,K)+T$:NEXT
L,K,J,I:CLS
100 FOR CH=1 TO 2:FOR CY=1 TO 10
110 P=1:FOR FR=1 TO
8:PRINT@128,"";
120 FOR LN=1 TO8:PRINT
TAB(12)A$(CH,P,LN)
130 NEXT LN:IF FR<5 THEN P=P+1
ELSE P=P-1
140 NEXT FR:NEXT CY:CLS
150 FOR D=1 TO 600:NEXT D:NEXT
CH:GOTO 100
160 DATA 48,48,8,28,122,24,174,65
170 DATA 24,24,8,28,60,24,28,100
180 DATA 24,24,8,24,24,60,8,60
```

```
190 DATA 24,24,8,24,60,24,24,100
200 DATA 48,48,8,30,122,24,174,65
210 DATA 7,14,110,168,28,14,1,0
220 DATA 0,0,111,172,28,14,1,0
230 DATA 0,0,96,160,31,14,1,0
240 DATA 0,96,160,28,30,17,12,0
250 DATA 0,96,160,28,30,29,12,6
```

So far, I have used this program as a "Got to go but I'll soon be back" screen saver routine at the office's tech bench where a CoCo 1 helps out maintaining a database (among other duties) of LTR frequencies.

Moving on to the second shortie, what could be shorter than a one-liner?. A tried and true programming tradition among the CoCo comunity, this one makes funny and weird sounds using a joystick. Plug a mouse or a joystick (Koala pad also?) and you'll be in control of two tones being generated alternately. The X-axis controls one and Y the other. While this program is very simple, I have found small children really like to make noise with the computer. Here's the listing:

```
0
A=JOYSTK(0):B=JOYSTK(1):SOUND1+INT
(A*4),1:SOUND1+INT(B*4), 1:GOTO0
```

That was short enough. Just sample the right port and offset each value read with a factor of 4 to cover the entire range of 1-255 available with the SOUND statement.

This particular one liner inspired yet another "Sound with a Joystick" program. While not a one-liner, this one can produce a greater range of tones thanks to octave shifting and volume variations available with the PLAY command. Sometimes I came up with sounds that could easily be taken for Avant Garde music....

```
0 ' AVANT-GARDE COMPUTER MUSIC
1 ' CONTROL OF PLAY STATEMENT
2 ' WITH THE JOYSTICKS.
3 ' -----------
4 ' RIGHT=DOES TWO NOTES
5 ' LEFT=VOLUME & OCTAVE RANGE
6 '
7 ' JANUARY 1996
8 ' ROGELIO PEREA
9 '
10 CLS:PLAY"L4T8"
20 A=JOYSTK(0):B=JOYSTK(1)
30  C=JOYSTK(2):D=JOYSTK(3)
40 N1=INT(A/5.5)+1:N2=INT(B/5.5)+1
50 VO=INT(C/4.5)+1:OC=INT(D/13)+1
60 PLAY STR$(N1):PLAY STR$(N2)
70 PLAY"V"+STR$(VO)
80 PLAY"O"+STR$(OC)
90 GOTO 20
```

You'll have to spring for a couple of devices in both joystick ports of the CoCo. Try setting up a mouse, koala pad or joystick on either, just don't attempt to plug in the high resolution interface because it just won't work. With the left joystick you can control the volume and the octave range of the tones. By using the PLAY command, we are listening to pure musical notes in contrast of the not defined SOUND tones; the end result of this is that the output is a bit richer (musically speaking). The formulas in lines 40 and 50 adjust the joystick ports input range of 0-63 to the permitted ones for the notes (1-12), volume (1-15) and octave (1-5).

Do you have any ideas for "Totally Not Serious Basic Stuff"? I can be contacted via E-Mail at:

rogelio.perea@class68.com

72056.1204@compuserve.com

Or via standard Mail at (absolutely no SASE required for reply!):

252 North Grand Avenue Apt 169

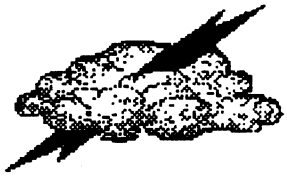
Nogales, AZ 85621-2637

Porfirio Diaz # 170

Colonia Centro

Nogales Sonora MEXICO 84000

Another Brainstorm from Rogelio!



Editor's Note: I can only assume that, since this was written for the MC-10, it must have been written by Rogelio Perea. On the other hand, it is unsigned, and nobody has ever accused Rogelio of not signing stuff!. But the program after it is also: an asteroid game, written for the MC-10, and signed by Rogelio, so I will continue with my assumption. Please correct Carl if I am wrong.

ASTEROID MADNESS REVISITED

The following program is designed to use as is with the MC-10. It is an arcade style game based on the well known scroll-up-the-text-screen technique, and it has been used in several programs around. So, another one?, yes, but with a few whistles added to spruce up the playing and using some tricks to speed up the game a little bit. The program first declares all variables and constants (well.... most of them) used by doing a jump to the end of the source code. How does this help us?. When BASIC runs through the source code, it does its stuff faster if most of the "action" is kept near the beginning of the program. Chalk one up for a dab of extra speed here.

By declaring (or assigning) all variables and constants, BASIC does not have to convert bewtween the number in the source code to a value the interpreter can use. After having a part of memory assigned to variables and constants, BASIC only has to reference a location in memory (already take care off) for a particular variable or constant. Chalk up another plus on the extra speed squeeze.

It may not be much gain, but when you want to speed up the FOR-NEXT loops, avoid using the form NEXT /variable/ and use simply and plainly NEXT. This helps BASIC somewhat, though it makes the program a little harder to read, for the user that is.

Now, on with the game: You pilot a ship thru a maze of asteroids using the W key to go left and the O key to move right. What fun can it be just to avoid smashing on them?. Not much, so the game gives us 6 different types of asteroids as follows:

Orange asteroids: Your all-day general purpose floating rock in space. Not good to smash in them so, avoid.

Red asteroids: Avoid also since they deprive you of energy.

Black asteroids: These cramp your score down removing your hard earned points.

Blue asteroids: Get face to face with them as they will give your ship an energy boost.

Magenta asteroids: Small and elusive, but if you smash at them you will get aditional score points up.

Tricky-Triple: Not actually an asteroid, but if you go directly thru the center part you'll get twice the points than with the magenta asteroids, now, if you miss and hit either side, your score WILL go down for twice as you could have gained.

It would be wise to keep in mind that if the energy level goes below zero, the game is over no matter if you still had any ships left. The game begins with 5 ships and they are eliminated if smashed by an orange asteroid. Since the colors are needed to distinguish the "game pieces", a color TV or monitor is needed to play.... I've tried with a B&W.... not too thrilled about my performance.

```
0 DIM A$(11):CLS:GOSUB 1000
1 FOR X=1 TO 1:E=E-.5
2 IF E<=C THEN 100
3 PRINT@C,E;:R=RND(R1)
4 PRINT@RND(R2)+PR,AS$(R)
5 PRINT@L,N$;
6 IF PEEK(PK)=LF THEN L=L-1
7 IF PEEK(PK)=RG THEN L=L+1
8 LC=PL+L
9 IF PEEK(LC)=A1 THEN 20
10 IF PEEK(LC)=A2 THEN
PN=PN+10:SOUND 250,1
11 IF PEEK(LC)=A3 THEN PN=PN-20
12 IF PEEK(LC)=A4 THEN E=E-25
13 IF PEEK(LC)=A5 THEN PN=PN-5
14 IF PEEK(LC)=A6 THEN E=E+50
15 IF PEEK(LC)=A7 THEN PN=PN+5
16 P=P+1:X=0:NEXT
20 SP=SP-1:IF SP=0 THEN 100
30 FOR D=1 TO 750:NEXT D:CLS
40 PRINT:PRINT:PRINT
50 PRINT TAB(5)"DISTANCE:";P/2
```

```
60 PRINT TAB(5)"SCORE :";PN
70 PRINT:PRINT TAB(5)"ENERGY
:";E:PRINT
80 PRINT"SHIPS LEFT:";SP
90 FOR D=1 TO 1000:NEXT D:CLS:GOTO
1
100 CLS 0
110 PRINT@230,"YOUR GAME IS
OVER!";
120 SOUND 1,10
130 PRINT@456,"DISTANCE :";P/2;
140 PRINT@488,"YOUR SCORE:";PN;
150 GOTO 150
1000 E=100:P=0:PN=0:L=15
1010 AS$(1)=CHR$(239)
1020 AS$(2)=CHR$(140)+CHR$ (131)
+CHR$(140)
1030 AS$(3)=CHR$(175)+CHR$(175)
1040 AS$(4)=CHR$(191)+CHR$(191)
1050 AS$(5)=CHR$(128)+CHR$(128)
1060 FOR I=6 TO 11
1070 AS$(I)=CHR$(255)+CHR$(255)
1080 NEXT I
1090 N$=CHR$(159)
1100 R1=11:R2=31:PR=480
1110 PL=16416:PK=49151
1120 A1=255:A2=131:A3=140:A4=191
1130 A5=128:A6=175:A7=239:C=0
1140 SP=5:LF=251:RG=253:RETURN
```

To adapt the game for use with a CoCo change the following lines as:

```
6 IF PEEK(LF)=PK THEN L=L-1
7 IF PEEK(RG)=PK THEN L=L+1
1110 PL=1056:PK=191
1140 SP=5:LF=343:RG=344:RETURN
```

Asteroid 64x64

by Rogelio Perea

After taking my MC-10 out of a drawer, I decided to rerun all those great programs I wrote and copied from different sources. One I came upon is particularly interesting, as I haven't seen any other application do as this one does:

The following is an MC-10 program that enables (sort of) a graphics screen of 64x64 resolution:

```
0 CLEAR 2000:DIM
L$(31):AI$=CHR$(157):AD$=CHR$(174)
:GOTO 20
1 CLS Z:POKE PP,SC:FOR X=U TO
U:PRINT@AT,L$(RND(R));:PRINT@L,N$;
:A=PEEK(KP) AND PEEK(DS):IF A=IZ
AND L>U THEN L=L-U
2 IF A=DR THEN L=L+U
3 IF (PEEK(L+L1) OR
PEEK(L+L2))<>CV THEN 5
4 P=P+U:X=Z:NEXT
5 FOR T=U TO CN:PRINT@L-T,EI$;:
PRINT@L+T,ED$;:FOR G=U TO FT:NEXT
G,T:SOUND ST,U
6 CLS:PRINT:PRINT:PRINT"SCORE:";
P;"POINTS":PRINT:INPUT"ANOTHER
GAME";J$:IF LEFT(J$,1)="Y" THEN
P=0:L=16:GOTO 1
7 CLS:END
20 FOR I=2 TO 31:FOR N=1 TO I-2
25 NI$=NI$+CHR$(128):NEXT N:Q=N-1
30 FOR N=Q TO
29:ND$=ND$+CHR$(128):NEXT N
35 L$(I)=NI$+AI$+AD$+ND$
40 NI$="":ND$="":NEXT I
45 L=16:PP=49151:SC=4:U=1:AT=480
50 R=31:N$=CHR$(169)+CHR$(150)
55 KP=17023:DS=2:IZ=49:DR=45
60 L1=16416:L2=16417:CV=128
65 EI$=CHR$(169)+CHR$(128)
70 ED$=CHR$(128)+CHR$(150)
75 FT=50:ST=230:CN=5:Z=0:GOTO 1
```

The program is based on the much used scroll-upwards screen effect of many, many games. The scenario is the usual one: pilot a craft through an endless stream of asteroids without getting hit. This time, the spacecraft resembles the Enterprise, of Star Trek fame.

After playing a lot with the MC-10 without any technical information on which to base my experiments I started POKEing here and there. Most of the time I locked up the computer, but then there were those moments when I found something useful. You were told that BASIC only could produce Lo-Res 64x31 graphics and that to achieve more ML had to be used...well, that's not entirely so!.

One location I found that produced strange effects was LOC# 49151. When you POKE a 4 in

there the screen garbles up, you can "see" something moving across when you type or list a program but that's that. After experimenting by printing the entire CHR$ set on that screen I came up with a hefty list of distinguishable characters (codes from 128 to 191) which correspond to the original TRS-80 Model I and III block graphics characters, though they do not have the same ASCII code.

What the program above does is declare all its variables, assign all constants to a variable name and build the asteroid field. The body of the program is in such a way that the main part of it is at the beginning of the program list.... to speed up things a little bit.

To play the game use the 1 and - keys and the Enterprise will move in the direction specified... watch out!! if you crash you actually see the ship split apart in two directions (nice huh?).

One thing that I couldn't clean up is a flashing bar on the bottom of the screen. This is due for two reasons:

a). When you print something on this screen the image unsettles a "bit". The asteroids are actually 31 STRING$ that include one asteroid in its particular position and the rest is filled up with black characters.

b). Did not have any technical info on the MC-10 (still don't) and this thing was "discovered" by me on a long cloudy evening....hacking on this micro.

If someone has a technical insight on this subject please share it with all of us (the CoCo Community). Yes, it has been a w-h-i-l-e since the MC-10 came upon but there are still a lot of CoCo users that want to know a little "bit" more of the CoCo family.

There is another file available with more information I prospected for in the MC-10, and it contains the conversion table for the 128-191 block graphics characters between the MC-10 and TRS-80 Model I & III computers and some info on RAM locations that can be quite useful.

Editor's note: Well, Murphy is known, but I forget his first name. There is no name on this file telling who wrote/assembled it, but these "laws" have, traditionally, not been copyrighted, so I feel safe publishing it. It is nice to have them all in one place.

Murphy's Laws and Other Observations

by Unknown

1. If anything can go wrong, it will.

2. If there is a possibility of several things going wrong, the one that will cause the most damage will be the first one to go wrong.

3. If anything just cannot go wrong, it will anyway.

4. If you perceive that there are four possible ways in which something can go wrong, and circumvent these, then a fifth way, unprepared for, will promptly develop.

5. Left to themselves, things tend to go from bad to worse.

6. If everything seems to be going well, you have obviously overlooked something.

7. Nature always sides with the hidden flaw.

8. Mother nature is a bitch.

O'Toole's Commentary on Murphy's Laws

Murphy was an optomist.

Ginsberg's Theorems

1. You can't win.

2. You can't break even.

3. You can't even quit the game.

Forsythe's Second Corollary to Murphy's Laws

Just when you see the light at the end of the tunnel, the roof caves in.

Weiler's Law

Nothing is impossible for the man who doesn't have to do it himself.

The Laws of Computer Programming

1. Any given program, when running, is

obsolete.

2. Any given program costs more and takes longer each time it is run.

3. If a program is useful, it will have to be changed.

4. If a program is useless, it will have to be documented.

5. Any given program will expand to fill all the available memory.

6. The value of a program is inversely proportional to the weight of its output.

7. Program complexity grows until it exceeds the capability of the programmer who must maintain it.

Pierce's Law

In any computer system, the machine will always misinterpret, mi- construe, misprint, or not evaluate any math or subroutines or fail to print any output on at least the first run through.

Corollary to Pierce's Law

When a compiler accepts a program without error on the first run, the program will not yield the desired output.

Addition to Murphy's Laws

In nature, nothing is ever right. Therefore, if everything is going right...something is wrong.

Brook's Law

If at first you don't succeed, transform your data set!

Grosch's Law

Computing power increases as the square of the cost.

Golub's Laws of Computerdom

1. Fuzzy project objectives are used to avoid embarrassment of estimating the corresponding costs.

2. A carelessly planned project takes three longer to complete than expected; a carefully planned project takes only twice as long.

3. The effort required to correct course increases geometrically with time.

4. Project teams detest weekly progress reporting because it so vividly manifests their lack of progress.

Osborne's Law

Variables won't; constants aren't.

Gilb's Laws of Unreliability

1. Computers are unreliable, but humans are even more unreliable.

2. Any system that depends upon human reliability is unreliable.

3. Undetectable errors are infinite in variety, in contrast to detectable errors, which by definition are limited.

4. Investment in reliability will increase until it exceeds the probable cost of errors, or until someone insists on getting some useful work done.

Lubarsky's Law of Cybernetic Entomology

There's always one more bug.

Troutman's Postulate

1. Profanity is the one language understood by all programmers.

2. Not until a program has been in production for six months will will the most harmful error be discovered.

3. Job control cards that positively cannot be arranged in improper order will be.

4. Interchangeable tapes won't.

5. If the input editor has been designed to reject all bad input, an ingenious idiot will discover a method to get bad data past it.

6. If a test installation functions perfectly, all subsequent systems will malfunction.

Weinberg's Second Law

If builders built buildings the way programmers write programs, then the first woodpecker that came along would destroy civilization.

Gumperson's Law

The probability of anything happening is in inverse ratio to its desirability.

Gummidge's Law

The amount of expertise varies in inverse ratio to the number of statements understood by the general public.

Zymurgy's First Law of Evolving System Dynamics

Once you open a can of worms, the only way to recan them is to use a larger can (old worms never die, they just worm their way into larger cans).

Harvard's Law, As Applied to Computers

Under the most rigorously controlled conditions of pressure, temperature, volume, humidity and other variables, the computer will do as it damn well pleases.

Sattinger's Law

It works better if you plug it in.

Jenkinson's Law

It won't work.

Horner's Five Thumb Postulate

Experience varies directly with equipment ruined.

Cheop's Law

Nothing ever gets build on schedule or within budget.

Rule of Accuracy

When working toward the solution of a problem, it always helps if you know the answer.

Zymurg's Seventh Exception to Murphy's Law

When it rains, it pours

Pudder's Laws

1. Anything that begins well ends badly
2. Anything that begins badly ends worse.

Westheimer's Rule

To estimate the time it takes to do a task: estimate the time you think it should take, multiply by two and change the unit of measure to the next highest unit. Thus, we allocate two days for a one hour task.

Stockmayer's Theorem

If it looks easy, it's tough. If it looks tough, it's damn near impossible.

Atwoods Corollary

No books are lost by lending except those you particularly wanted to keep.

Johhnson's Third Law

If you miss one issue of any magazine, it will be the issue that contains the article, story or installment you were most anxious to read.

Corollary to Johnson's Third Law

All of your friends either missed it, lost it or threw it out.

Harper's Magazine Law

You never find the article until you replace it.

Brooke's Law

Adding manpower to a late software makes it later.

Finagle's Fourth Law

Once a job is fouled up, anything done to improve it will only make it worse.

Featherkile's Rule

Whatever you did, that's what you planned.

Flap's Law

Any inanimate object, regardless of its position, configuration or purpose, may be expected to perform at any time in a totally unexpected manner for reasons that are either entirely obscure or else completely mysterious.

Editor's note: This was submitted a couple of years ago, but I never published it because I lost the author's name. Whoever wrote it, I apologize for both theloss and the delay. Please let Carl know who you are so he can credit you in the next issue.

MODEL RAILROAD CLOCK

Model railroad enthusiasts have need to accelerate the clock as an aid toward matching scale miles with scale time. This program allows 'time' to be speeded up by any chosen factor up

to about sixty times normal. This limitation is determined only by the time required for drawing the 'time' numerals on the screen.

In practical usage, one needn't dedicate a COCO to be a scale model clock, though it's one way to dust off an old 'shelf sitter' and put it to work again.It's also a good way to revitalize an unused cassette player again. However, in this day and age of VCR's, a practical approach is to use this program, but direct your COCO's output to a VCR. In this manner, scale time can be recorded for up to six real hours. If a scale factor of six is used, this means that up to 36 'hours' of scale time can be recorded on a six-hour VCR tape. If the tape counter is indexed, it then becomes easy to find any desired starting time from which to begin operations.

As set up, this program provides two lines at the top of the screen for the railroad logo. These can be personalized by altering A$ and if necessary, the draw starting point, in lines 1000 and 1010.

The scale time is shown near center screen in large numerals, which appear about two inches high on a 13 inch screen. Below the numerals, in smaller letters, is the AM or PM designation.

As a matter of personal choice, the AM or PM designation doesn't change until 12:01. If you want to change this, change line 1260 so that it reads:'IF H=12 AND M=0 THEN.....', and then the AM/PM will change right at noon or midnight instead of one minute after.

This program relies on the use of DRAW strings to produce the numerals, which makes the listing look complicated. The large numerals permitted by this method makes them visible at greater distances from the monitors used.

In casting about for a way to get larger characters on the screen,one of Bill Bernico's programs called "ROMAN" looked good for the text characters, so it was incorporated in this program, and new, larger numerals were developed, in order to be read at greater distance from the 'clock'.

The larger numerals also required a large space and a large colon to go with them. At this point it was decided that the railroad's logo might never require either a semicolon or a percent symbol, so the ASCII code for these were 'borrowed'. The ASCII semicolon now appears as the 'numeric' colon, and the ASCII percent now appears as the 'numeric' space character.

Using the program is very straightforward:- Just RUN it, and answer the questions and directions as listed on the screen.

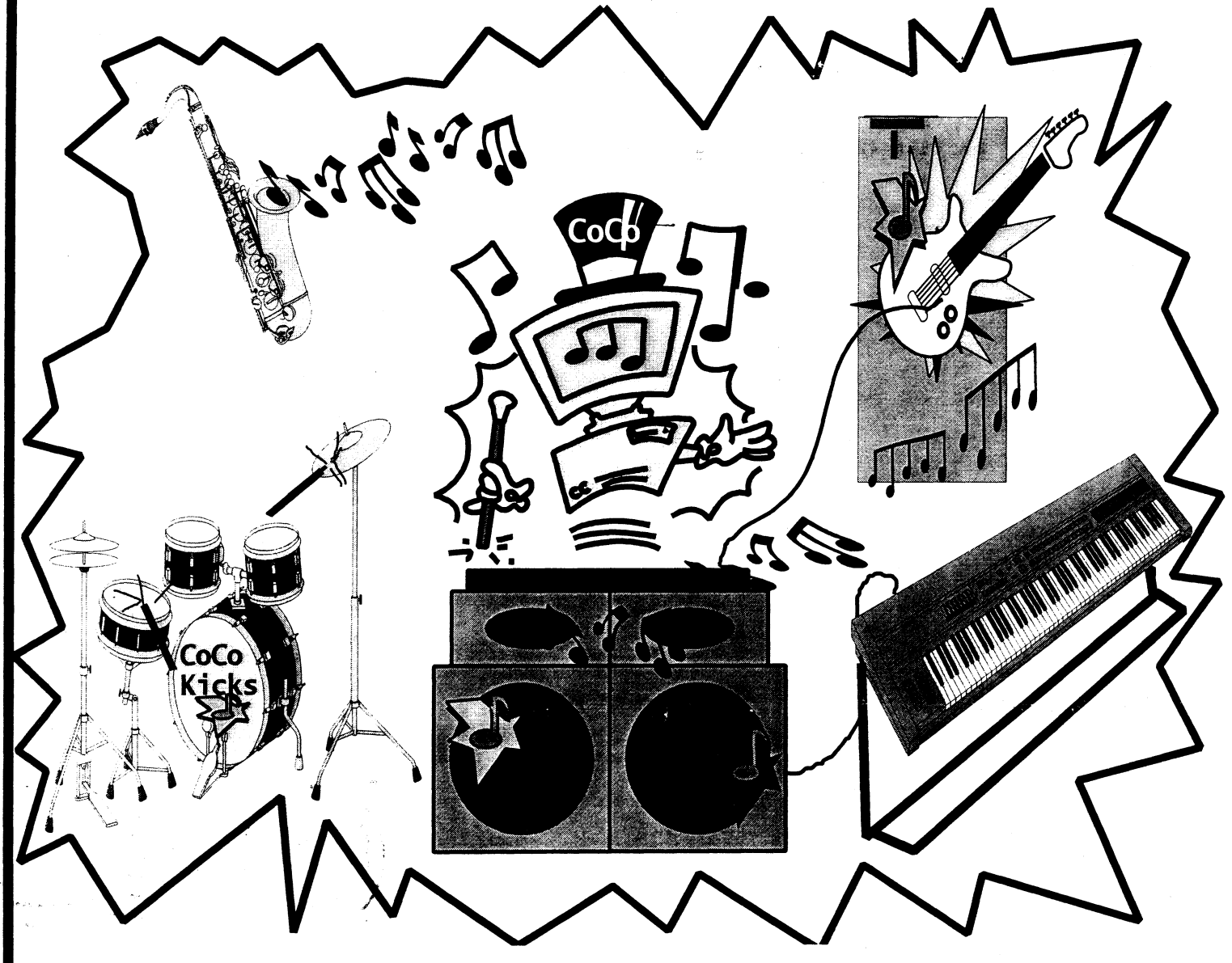
Have fun!

```
10 'SCALE MODEL RAILROAD CLOCK-
RUNS FASTER THAN REGULAR CLOCK,
ACCORDING TO FACTOR ENTERED AT
PROGRAM REQUEST.
11 INPUT "TYPE IN TIME SCALE
COMPRESSION FACTOR"; F
12 INPUT "WHAT IS STARTING HOUR";
H
13 INPUT "WHAT IS STARTING
MINUTE"; M
14 INPUT "TYPE 0 FOR AM, 1 FOR PM.
"; P: CLS
15 PRINT "WHEN INITIAL SCREEN APPE
ARS, PRESS ANY KEY TO START CLOCK.
"
16 FOR X = 0 TO 5000: NEXT
17 DIM A$(90):PMODE4,1:SCREEN1,1:P
CLS1:COLOR0,1:A$(37)="BR24
75 A$(32) = "BR8"
76 A$(33) = "D9BD3DRUBU3U9BR3"
77 A$(34) = "D3RU3BR3D3RU3BR3"
78 A$(35) = "BR3D7L3UR8DLNU7LNU5D2
LU2L3D2LU2EU4LDR3NU3R5UL5R4U2BR4"
79 A$(36) = "BR3D13U2NR2L3U2RDR5U3
LND4L4HNR5U3END5R5D2LUL4R2U3BR6"
80 Z$ = "BD12R7UL7UR7UL7UR7UL7UR8B
L8UR36UL36BUBRR34BUBLL32BUBRR30BUB
LL28BR24BD6R8DL7DR7DL7DR7DL7DR7;BD
36L7DR7DL7DR7DL7DR7DL8BR8BDL36DR36
BDBLL34BDBRR32BDBLL30BDBRR28;BU6BL
24L8UR7UL7UR7UL7UR7UL7;"
81 Z8$ = "D13BD5D18LU19BU3U14LD36L
U36LD36LU36LD36LU36BLBD11D8BU19"
82 Z7$ = "D13BD5D18RU19BU3U14RD36R
U36RD36RU36RD36RU36BRBD11D8;BU19;"
83 Z0$ = "D36RU36RD36RU36RD36RU36
RD36RU36"
84 Z6$ = "U20BUBLD21LU22BUBLD23LU2
```

```
4LD24LU24LD24BU18LBUL20UR20UL20UR2
0UL20UR20;"
90 A$(38) = "BD8D2FNU4R3UR3DRH3DER
L3UL3EU3ED5E3UNG4LUL2BU2BR8"
100 A$(39) = "D3RU3BR3"
110 A$(40) = "BD2D11F4LH2NEU15NFE2
RG2BR5"
120 A$(41) = "BU2F2DFD11GDG2RE2UEU
11HUNH2BR4"
130 A$(42) = "BR3D3ND3NL3NR3NG2NF2
NH2E2BUBR4"
140 A$(43) = "BD7R3ND4NU3R4DL3NL4D
3U7BU4BR6"
150 A$(44) = "BD12DED2GBU15BR4"
160 A$(45) = "BD7R6DL6BU8BR9"
170 A$(46) = "BD12DRUBU12BR3"
180 A$(47) = "BD12DRU3FU3FU3FU3FU3
FU3FUBR3"
190 A$(48) = "XZ$;BU36XZ0$;BR22;XZ
0$;BU12BR8"
200 A$(49) = "BD4D4U5RUD6RU7RUD56R
U56RD56RU56RD56RU56RD57R4L13DR13DL
13DR13BU60BR8"
210 A$(50) = "BD11R7UL7UR7UL7UR7BU
BRL8UR36UL36BUBRR34BUBLL32BUBRR30B
UBLL28BD6BR25R7DL7DR7DL7DR7DL7DR7D
L7DR7DL7G29D16RU16E30RG30D16RU16E3
0RG30D16RU16E30DG30D15RU15E30DG30B
D14R29UL29UR29UL29UR29UL29BR29U6LD
6LU6LD6LU6LD6LU6BR6BU49BR8"
220 A$(51) = "XZ$;BU36BR36XZ8$;BD1
2BLL13DR13DL13DR13DL13DR13DL13;BU3
0BR30"
230 A$(52) = "BR25G25D11RU11E25RG2
5D11RU11E25RG25D11RU11E25RG25D11R1
8UL18UR18L18UR18UL18BU5;BE19BU3D51
RU52BUBRD53RU54BUBRD55RU55BRD55BR4
BDL15DR15DL15DR15BU24U4LD4LU4LD4BU
36BR12"
240 A$(53) = "R36DL36DR36DL36DR36B
L36D19RU19RD19RU19RD19RU19RD19R20F
3D28NLDL22NULU6LD7R25;U29H4L19UR19
F5D30L26U8LD9R28U31;H6L19UR19F7D32
L30U10LD11R32U33H8L19UR19F9D33BL34
U11BU49BR44"
250 A$(54) = "XZ$;U36XZ0$;BD36BR29
XZ6$;BU25BR17"
260 A$(55) = "BD5R36UL36UR36UL36UR
36UL36BD6BR29R7DL7DR7DL7DR7DL7DR7D
L7DR7DL7G29D16RU16E30RG30D16RU16E3
0RG30D16RU16E30DG30D15RU15E30DG30B
R37BU45"
270 A$(56) = "XZ$;BU36XZ7$;BR28XZ8
$;BD12BLL19DR19DL19DR19DL19DR19DL1
9;BU30BR36"
280 A$(57) = "XZ$;BR29BU36XZ0$;BL3
6A2XZ6$;A0;BU36BR36"
290 A$(58) = "BD4NRDRBD4DLUBU9BR4"
300 A$(59) = "BD16D8BD8D8RU8BU8U8R
D8BD8D8RU8BU8U8BU16BR8"
310 A$(60) = "BD7E4RG4F4LH4BU7BR8"
320 A$(61) = "BD5R6DL6BD3R6DNL6BU1
0BR3"
330 A$(62) = "BD3F4G4RE4H4BU3BR7"
340 A$(63) =
"BRNR5D3LU2R7D4G3DBD3DLUBU3U2NE3DE
3U4BR4"
350 A$(65) = "BR2NR5D12RDL3URU11R7
D11RDL3URU5L5UR5U6BR5"
360 A$(66) = "NR7DNR8RD11NR7LDR7NU
7EU5HL5NU5ND6UR5NU5EU3HBR4"
370 A$(67) = "BRNR6D12R5U2RD3L6HU1
1R6D2RU3BR3"
380 A$(68) = "NR7DRNR7D11NR7LDR2NU
13R5NU13EU11HBR4"
390 A$(69) = "R7D2LUL6RD11LDR7U3LD
2L4U5R3UL3U6BR8"
400 A$(70) = "NDR8D3LU2L6D11LDR3UL
U5R3UL3U6BR9"
410 A$(71) = "BRR6D3LU2L6D11FR6U7L
3DR2D5L5U12BR9"
420 A$(72) = "NDR3DL2D11LDR3ULU6NU
5R6DNL6NU6D5RDL3URU11NR2LUR3BR3"
430 A$(73) = "NDR3DLD11RDL3URU12BR
5"
440 A$(74) = "BR2NDR3DLD11GL3UR3U1
2BR5"
450 A$(75) = "NDR3DLD11RDL3URU12D8
E7L2UR4DLG5F6RDL4UR2H6BU6BR10"
460 A$(76) = "NDR3DLD11R5U2RD3L8UR
U12BR10"
470 A$(77) = "NDNR13RD12LDR3ULU11R
5D11LDR3ULU11R5D11LDR3ULU11HBR5"
480 A$(78) = "NDNR7RD12LDR3ULU11R5
D11LDR3ULU11HBR5"
490 A$(79) = "BDD11FNU13R5ENL7U11H
ND13L5DR6BUBR3"
500 A$(80) = "NDR7FND5L7D11LDR3ULU
```

```
5R5NU6UL5U6BR9"
510 A$(81) = "BRNR5D13NR5HNU12R5D2
R2DL2U2R2U12LND11L5UBR9"
520 A$(82) = "NDR7FL7D11LDR3ULU11D
5R5FD5RDL3URU5NL5U7FND4HBR5"
530 A$(83) = "BRR6D3LU2L6D5FR5D5L5
ULD2R6EU5HL5U6BR9"
540 A$(84) = "NR9D3RU2R3D11LDR3ULU
11R3D2RU3BR3"
550 A$(85) = "NDR3DL2D11NR7FNU12R5
NU12EU11RL3UR3BR3"
560 A$(86) = "NDR3DL2D3EUD5EUD5EUD
5RU5FDU5FDU5FDU3RL3UR3BR3"
570 A$(87) = "NDR3DL2D3EUD5EUD5EUD
5RU5FDU5FDU5RD5EUD5EUD5RU5FDU5FDU5
FDU3RL3UR3BR3"
580 A$(88) = "NDR4DL3FDED3ED5HD5NL
3RUL4REUE3UF2LFLF2UD3NL2R2UL4EU3HU
3FU3FU2R2L4UR4BR3"
590 A$(89) = "NDR3DL2D2ED3ED3ED6LD
R3ULU6FU3FU3FU2RL3UR3BR3"
600 A$(90) = "NR7D2RUR6G2UFG2UFG2U
FG2UFG2UFG2NR7UR7HRBU11BR3"
1000 A$ = "ARLINGTON, MIDDLETON":
DRAW "BM20,0": GOSUB 1030
1010 A$ = "& FURNACE MTN. RY.": DR
AW "BM32,18": GOSUB1030
1020 GOTO 1040
1030 FORX=1TOLEN(A$):Y=ASC(MID$(A$
,X,1)):DRAWA$(Y):NEXT:RETURN
1040 IF H < 10 THEN H$ = "%" + RIG
HT$(STR$(H), 1) + ";" ELSE H$ = RI
GHT$(STR$(H), 2) + ";"
1050 A$ = H$: DRAW "BM40,60":
GOSUB 1030
1060 IF M < 10 THEN M$ = "0" + RIG
HT$(STR$(M), 1) ELSE M$ = RIGHT$
(STR$(M), 2)
1070 A$ = M$: DRAW "BM120,60": GO
SUB 1030
1080 IFP=0 THEN P$="AM" ELSE P$=
"PM"
1090 A$ = P$: DRAW "BM110,145": GO
SUB 1030
1100 K$ = INKEY$: IF K$ = "" THEN
1100
1110 IF P = 0 THEN P$ = "AM" ELSE
P$ = "PM"
1120 A$ = P$: DRAW "C0BM110,145":
GOSUB 1030
1130 TIMER=0
1140 IF TIMER < INT(3600 / F) THEN
1140: '1 SCALE MINUTE LOOP
1150 M = M + 1: IF M > 59 THEN
1160 ELSE 1230
1160 A$ = M$: DRAW "C5BM120,60":
GOSUB 1030
1170 A$ = H$: DRAW "C5BM40,60": GO
SUB 1030
1180 M = 0: H = H + 1: IF M < 10
THEN M$ = "0" + RIGHT$(STR$(M), 1)
ELSE M$ = RIGHT$(STR$(M), 2)
1190 A$ = M$: DRAW "C0BM120,60":
GOSUB 1030
1200 IF H > 12 THEN H = 1
1210 IF H < 10 THEN H$ = "%" +
RIGHT$(STR$(H), 1) + ";" ELSE H$ =
RIGHT$(STR$(H), 2) + ";"
1220 A$ = H$: DRAW "C0BM40,60":
GOSUB 1030: GOTO 1260
1230 A$ = M$: DRAW "C5BM120,60":
GOSUB 1030
1240 IF M < 10 THEN M$ = "0" +
RIGHT$(STR$(M), 1) ELSE M$ =
RIGHT$(STR$(M), 2)
1250 A$ = M$: DRAW "C0BM120,60":
GOSUB 1030
1260 IF H = 12 AND M = 1 THEN 1270
ELSE 1130
1270 A$ = P$: DRAW "C5BM110,145":
GOSUB 1030
1280 P = P + 1: IF P > 1 THEN P =
0
1290 GOTO 1110
```

The 6th Annual "Last" Chicago *CoCoFEST!* April 26 & 27, 1997



Music, Midi & Mayhem!
Fun For Everyone!

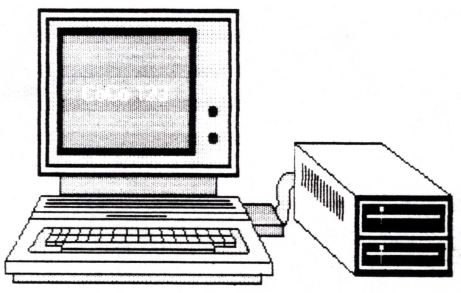
Meeting Location:

Glenside Public Library
25 West Fullerton Avenue
Glendale Heights, Illinois 60172

Directions:
The Library is on Fullerton Avenue, about one-half mile West of Bloomindale Road. Fullerton is about one mile South of Army Trail Road and about one mile North of North Avenue (Route 64). Bloomingdale Road is about two miles West of Route 53/I-355/the North-South Tollway.

Next Meeting Date
January 9, 1997
February 13, 1997

Glenside Color Computer Club
31 South Edgewood Avenue
Lombard, IL 60148



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