CCCC, Inc.

Tucson, Arizona

BASIC MONITOR

BASIC COMPUTER

HEY, BUD... YOU'LL BE NEEDIN' ONE OF THESE LIL' JEWELS TO GO WITH ALL THAT STUFF...

Pat Jenkins

April 1992   **Vol. 10, No. 4**

AMIGA   C64/128   MS-DOS

Classified Ads

Prez Sez

by Tom D'Angelo, CCCC

Spring has sprung and it signals that we as CCCC members have to start considering the upcoming nominations and election of officers for the club.

Nominations for the seven officer positions will be taken at the May 16th meeting; the voting to take place at the next meeting on the 20th of June.

This year, to make the ballots more secret, the voter's name will not appear on the ballot as it did in the past, only their member number. Even the absentee mail-in ballots will be this way. This change has been made to further reduce the member's objections to the voting procedure.

For anyone who wants to get more involved in the running of the club, now is the time to start considering what you would like to do. Have someone nominate you at the next meeting and then start to campaign for votes to elect you at the June meeting.

Julia Richardson, the leader of the MS-DOS section of the club, has had to relinquish that post due to other obligations. She has done a fine job of organizing our MS-DOS public domain (PD) library.

By the way, PD donations are welcome at any of the CCCC's three libraries. If you have a PD program which you think others in the club would like, your donation of that program to one of our libraries would be greatly appreciated. Remember the club is what we all make it.

Jeff Bishop, a former member of the CCCC, heard our request for MS-DOS help that was made on Dave Mason's Computer Talk Show on KNST radio, and is going to become involved with the CCCC again. Jeff earns his living writing MS-DOS programs and is well qualified to be the focal point for the new members of the MS-DOS section. He will be able to provide assistance and share his extensive knowledge with you regardless of your experience level.

To all you MS-DOS'ers out there; if you have tried us and found us lacking, here's an opportunity to give us another try. We're still trying; you can, too. Have patience, we're getting better all the time. Don't forget that your efforts can make us better, also.

I made reference to a computer talk show above. If you haven't heard it, you should give it a try. It's on every Saturday morning from 11 AM to 12 Noon at 940 KHZ on the AM dial. It's mainly MS-DOS oriented, but there are good discussions on printers and other topics that are germane to other computers.

Executive Board Meeting
February 11, 1992

Secretary's Report by Bob Holdcraft, CCCC

The meeting was held at Devon Gables Nursing Home and called to order at approximately 7:40 p.m. by Vice President and C64/128 Newsletter Editor Steve Martin.

Others present were:

Dennis McCormick - Treasurer
Rob McConeghy - Membership Chairman
Ollie Plimpton - Member at Large
Leila Joiner - Member at Large & Newsletter Editor
Bob Holdcraft - Secretary

Bob Holdcraft gave copies of the secretary's report.

Dennis McCormick gave copies of the treasurer's report.

Membership chairman Rob McConeghy reported 168 members.

The board voted to accept the reports.

The lack of interest in the MS-DOS SIG was discussed with no action taken at this time.

The publication of a membership list was brought up by Rob McConeghy. The methods, privacy considerations will be investigated.

Coverage for fire and theft insurance on the club's equipment was discussed and will be checked into and reported at the next meeting.

The meeting was adjourned at 8:40 p.m.

THE COMPUTER
~~HOTLINE~~ →

The CCCC is hoping to reestablish an old tradition of publishing the names, phone numbers, and areas of expertise of those members willing to make themselves available to others in need of help. If you are able to share some of your knowledge or experience with computers (hardware, software, programming, etc.), please call Leila Joiner at 327-0540 to be listed in this column. I'd like to give special thanks to our first volunteer:

AMIGA
Imagine: Evan Baran, 323-7325 or 888-2824

C64/128
BASIC Programming: Steve Martin, 744-3071
Disk Recovery: D avid Byrum, 795-2928
Sequential & Relative Files: D avid Byrum, 795-2928
Spreadsheets: D avid Byrum, 795-2928
Superbase: Steve Martin, 744-3071
System Configuration: Steve Martin, 744-3071
The Write Stuff: Steve Martin, 744-3071
Hardware/Hdwr. Hacking: Gary Sterling, 293-5219

COMMUNITY CORNER

by Leila Joiner, CCCC

The Volunteer Center coordinates volunteer services in Tucson. Each month we will be publishing a list of (somewhat) computer-related volunteer positions available. If you have time and knowledge to spare, please look through this list and call or visit the Volunteer Center, 877 S. Alvernon between 8 AM and 5 PM, Monday-Friday, 327-6207 to offer your help.

BASIC TYPING and data entry volunteer wanted for office of national health organization, twice/week.

CAMPUS SETTING, increase skills: Data entry volunteers wanted for specific programs/projects.

DATA ENTRY volunteer needed by agency to accurately enter names/addresses, weekdays or nights.

MACINTOSH FRIENDLY? Re-employment agency seeks office volunteer for light clerical/data entry.

NEWSLETTER EDITOR volunteer sought for organization promoting volunteerism among business people.

If you volunteer for any of the items you see listed in this column, I'd like to hear about your experiences. Please call Leila Joiner at 327-0540.

Treasurer's Report
by Dennis Mc Cormick, CCCC

INCOME/EXPENSE STATEMENT
January 1992

	This Month	Year to Date
INCOME:		
General:		
Membership	330.00	470.00
Ads (ABO, $160)	110.00	275.00
Other (refund from Tom)	0.00	24.50
Amiga:		
Disk	108.00	223.00
Raffle	0.00	0.00
Other (tax)	5.00	15.00
C64/128:		
Disk/TWS	75 .00	75.00
Raffle	0.00	0.00
Other	0.00	0.00
MS-DOS:		
Disk	15.00	15.00
Other	5.00	5.00
TOTAL INCOME	648.00	1102 .50
EXPENSES:		
Newsletter:		
Printing	161.04	368.08
Postage	92.56	94.81
Club Buy	0.00	0.00
Administrative (P.O. Box fee)	0.00	49.00
Membership	0.00	0.00
Postage	0.00	12.61
Copies	0.90	4.70
Other (Ballots)	0.00	2.71
Amiga:		
Disks, blank	40.62	81.24
Downloads, 3	0.00	54.00
Equipment/SW	0.00	0.00
C64/128:		
Disks, blank	0.00	0.00
Equipment/SW	0.00	0.00
TWS	0.00	0.00
MS-DOS:		
Disks, blank	0.00	0.00
Equipment/SW	0.00	0.00
PD Disks	0.00	0.00
TOTAL EXPENSES	295.12	667.15
PROFIT OR (LOSS)	352.88	435.35

C-64 Basic Doodles II

By: Paul R. Machula, CCCC

We are going to tackle a big subject this month: high-resolution screens on the Commodore 64. This will be in preparation for plotting and analyzing our data. Please realize that I cannot go into a detailed description of how a hi-res screen is developed. The architecture of the C-64 is somewhat complicated and the commands to set up the screen are only manageable in BASIC through POKEs and PEEKs--very awkward indeed. It is not terrible necessary to understand how these routines work. Just know that they create a hi-res screen. The lack of an easy method to control C-64 graphics is one the reasons that the C-128 was developed. That machine has a set of very nice graphic commands. Not so on the C-64. So, anyway, here we go. Add the following line to our current program (DATAMAN2). It sends us to our hi-res routines.

```
85 GOSUB 700
```

In order to set up the hi-res screen (with color) we have to use 9216 bytes of memory. 8192 bytes are needed for each pixel on the screen. 1024 bytes are need for the color. We actually have to POKE (that is, place into a memory location) every single byte we desire. This can be slow and quite cumbersome. But we also have to PROTECT that memory from being clobbered by other parts of the computer. (Many memory locations in the C-64 are dynamic. They change while a program is running. We can't let this happen to the memory we set aside for our screen.) The portion of memory we are going to use for our basic hires screen will run from 24576 to 32575. The color will be placed in 23552 to 24575. By the way, these are the same locations used by the excellent C-64 drawing program "Doodle."

By placing our color screen at 23552 we are limiting our BASIC program to about 23K. That is not too much of a problem considering what we are trading for it.

Let's begin with first things first. Let's protect our hi-res memory. Remember this will limit BASIC. Don't worry if you don't understand the commands. Just get the basic idea. Enter:

```
2 POKE55,250:POKE56,91:POKE643,250
  :POKE644,91:POKE51,250:POKE52,91
```

Now let's set up our hi-res screen:

```
699 REM HIRES ROUTINES
700 SA=24576:REM STARTING ADDRESS OF
    HIRES SCREEN
702 POKE53280,1:REM MAKE BORDER WHITE
703 POKE56578,PEEK(56578)OR3:POKE56576,6
    :REM SET VIDEO TO BANK ONE
704 POKE53272,PEEK(53272)OR8
    :REM VIDEO AT SEC. HALF OF BANK
```

Next, we have to set up our color memory. Enter:

```
705 CM=7:POKE53272,(PEEK(53272)
    AND15)OR(16*CM):REM COLOR MEMORY
    AT 1ST HALF OF BNK
```

Next, we need to turn on our hires. Enter:

```
707 POKE53265,PE(53265)OR32
    :REM TURN ON HIRES
```

Finally, we have to clear the screen and erase the color also from anything that was there previously. Enter:

```
708 FORI=SATOSA+7999:POKEI,0:NEXT
    :REM CLEAR BITS OFF HIRES SCREEN
709 FORI=23552TO24575:POKEI,3:NEXT
    :REM FILL HIRES COLOR WITH LIGHT
    BLUE
```

Before we continue we will need to have a special routine that will allow us to calculate the proper pixels we will activate on our screen. This routine is complicated. Just realize that it calculates the bits for our pixels.

```
799 REM BITS FOR PIXEL ROUTINE
800 CH=INT(PX/8)
810 RO=INT(PY/8)
820 LN=PYAND7
830 BY=SA+RO*320+8*CH+LN
840 BI=7-(PXAND7)
850 POKEBY,PEEK(BY)OR(2^BI)
860 RETURN
```

Now that our screen is set up we can write on it. But we cannot be very successful if we don't understand the current COORDINATES of the screen. (Well, no one said this would be easy.) The actual coordinates we have are somewhat weird. The Y-values start at the UPPER left hand point of the screen at 0 and increment to the LOWER left hand point of the screen at 199. The X-values begin at the upper left hand point at 0 and increment to the upper right hand point at 319. Well, we can handle the X-axis fine; we are used to that. It really doesn't matter, if we consider it as beginning at the upper left and incrementing to the upper right. It's really the same as if it were lower left to lower right. BUT, this business of the Y-axis beginning at the top is weird. Normally, graphs begin at the lower left hand point. So, in order to reverse this we will have to remember that anytime we plot on the Y-axis we will have to SUBTRACT the Y-value from 199 to make it reverse the direction of the axis.

We're not going to plot our data yet. Let's just get used to the idea of reversing the Y-axis. Let's plot a single point at X=160 and Y=50. If you can visualize this: the X-value will be halfway across the screen. The Y-value will be one-quarter the way from the bottom. Enter the following lines:

C-64 Basic Doodles II

(continued from page C1)

```
720 PX=160:PY=50:REM PX IS X-VALUE.
    PY IS Y-VALUE
721 PY=199-PY:REM TO PROPERLY PLOT
    PY WE MUST SUBTRACT FROM 199
730 GOSUB800
740 POKE23552,16:REM PRINT BLACK
    SQUARE IN UPPER LEFT TO INDICATE
    FINISHED
750 GOTO750
751 RETURN
```

You will also need to add the following line to keep our programming tidy:

```
83 PRINT#1:CLOSE1
```

When you now run the program first your printer will print out the normal data manipulations we have already worked with. But, your computer will then go really crazy. First, your screen will have a colorful display of bytes on it, splotched with black splotches here and there. Then your screen will fairly slowly erase the black splotches. (The computer is clearing the screen of the random bits it had in those memory locations when it was turned on.) All this is cause by line 708. Then, the screen colors will be wiped off and be replaced with light blue (line 709). Then, you'll see a tiny pixel turned at our properly plotted location (X=160,Y=50). Finally, a black square will be printed at the upper left hand corner of the screen. This indicates the program is finished. Look at line 750. That line causes the program to loop endlessly while you gaze at the hires plotting you have just accomplished. Please note, also, just how slow everything is. This is because our program is in BASIC. If we "compiled" our BASIC program, it would be vastly improved. I will talk a little about compiling in the last article of this series. For now just put up with the snail's pace.

To put your computer back to normal hold down the RUN-STOP key and firmly tap on the RESTORE key. Your computer will then be back to normal. You can then type LIST and SAVE your program or whatever else you wish.

The program we have developed in this article is available on Disk of the Month with the name of "DATAMAN3".

I'M TIRED

By: Tom D'Angelo, CCCC

Yes I'm tired. For several years I've been blaming it on Middle age, iron poor blood, lack of vitamins, air pollution, water pollution, saccharine, obesity, dieting, under arm odor, yellow wax build-up, and a dozen other maladies that make you wonder if life is really worth living.

But now I find out, tain't that. I'm tired because I'm OVERWORKED.

The population of this country is 260 million. Ninety six million are retired. That leaves 164 million that could work. There are 92 million in school, which leaves 72 million that could possibly work. Of this total, there are 36 million employed by the federal government. That only leaves 36 million available to work. Four million are in the Armed forces, which leaves 32 million possible workers. Take from that the 12 million who are with State and local Governments and that leaves 20 million that might be working. 19,500,000 are on welfare. That leaves 500,000 who may be working. There are 350,000 in hospitals so that leaves 150,000 potential workers. There are 149,998 people in prisons, and that just leaves two people to do the work. You and me. And your sitting there reading this. No wonder I'm tired.

CONFESSIONS OF A COMPUTER AMATEUR

By: Bruce Morrison, CCCC

Well, here I am, my first article ever! In fact, this is the first computer club I've ever been a member of. You see, I've been working 12 hour night shifts ever since I can remember. I've forgotten what it's like to be a "normal" person. As a result, I've been somewhat of a recluse, never able to keep the same hours as my friends! Let me tell you how I got started with computers. I became interested in computers from watching science fiction movies when I was a young boy. As I grew up, the science caught up with the science fiction, and the home computer appeared on the scene. I remember watching a very strange cartoon with a character named Scott McCloud, I can't even remember the name of the series, but it was called "Space Cargo" or "The Adventures of Scott McCloud" or some such thing. I also watched other cartoons such as "The Jetsons" and "Johnny Quest". Can any of you remember the puppet characters of "The Thunderbirds" or "Fireball XL-500"? I vaguely remember them. But one thing that stands out in my mind is that whether cartoon or movie, they all had one thing in common: They all had some type of computer in them! So I had wanted a computer long before they became available to the public! I didn't get to have one until I was 32 years old! That was in January of 1985. My first computer was a C-64 and a supposedly "compatible" disk drive called the Commander II by Laser Micro-Systems. The drive is compatible with the 64 as long as there

CONFESSIONS OF A COMPUTER AMATEUR
(continued from page C2)

is no copy protection of any kind on the software. It's actually a very good direct drive considering it's limitations, and I still have it today! I paid $200.00 for them from my next door neighbor, and he sort of helped me get started on it, too! However, I was basically self taught and learned most of how to use my computer from several magazines dedicated to the 64, such as Compute's Gazette, Run, Commodore, Ahoy!, etc. I especially liked the type-in programs! I never had a monitor, just a small 9" B&W TV. When the 128 came out, or I learned of it (I'm not sure which came first), I decided to buy the 1571 drive as my first "real" drive to add to my 64 in hopes of eventually stepping up to the C-128. As the years went by, I had several different drives and 64's and even had a 128D at one time! I had also stepped up to a 13" color tv and finally to a 12" amber monitor in 1989! My first monitor! I was ecstatic! It was shortly after that, I saw my first AMIGA! It was an AMIGA 500 and I was in love! I HAD to have one, so I took out a loan from the bank and bought the Amiga 500, the 1084 monitor, and a CA-880 disk drive! It was the first time I ever had a complete computer system bought all at once! At first I used both computers at the same time, and I was in computer heaven! But I had to give up part of my 64 system as a result of moving to Tucson. I was sad, but told myself that someday I would have a 64/128 system again. I used my Amiga system for the next couple of years and loved it mostly for it's fine graphics for game playing. But I found myself longing for the simplicity of the 64/128 and all the FUN I used to have with it! For as fancy as the Amiga is, I still enjoyed my 64 better and used it more often. Well guess what, folks? I no longer own an Amiga and I'm as happy as I can be! Why? Because I now have a C-128 system, and I am learning the computer all over again! Don't get me wrong! The Amiga is a fine machine, but the 128 is more my style! I enjoy it! I USE it! I want to become what they call a 128 "POWER USER". Owning a 64/128 today is probably the best time to ever own one! Why? Because now the cost has come way, way down. You can now take your machine to heights never heard of in the 64/128 world. Hard drives for the 64 are now AFFORDABLE! There are ROM chip upgrades available to make your lowly 64 system faster, ram expansion units allow you to work with up to 16 Mb's of memory. There's even a CPU Accelerator to make your 64 run at 4.09 MHz! You can finally be up there with the "Big Boys"! So be proud of your 64/128 computer! I feel that it's time has come! And before you think about switching up to another computer system, ask yourself if you really need to switch or can you expand your present system to do the same thing? I, for one, will try the expansion method first! And don't forget that your Commodore computer club is there for you. Be a part of it! Will the 64/ 128 fade away? I don't think so. It will if we let it, though. Here's something to think about. Right now, we are lucky to have some dedicated and knowledgeable 64/128 people in our club. What happens when they leave the club or are no longer able to share their knowledge? It's up to the new members and the non-participatory members to become active and either learn or share their knowledge to keep the 64/128 section alive. So are you doing anything with your free time, or are you just watching TV? Let's MAKE time for our club! If we don't, we're in danger of going the way of the dinosaur. But unlike the dinosaur, we have a choice!

NYBBLES & BYTES

By:*Thomas D'Angelo*, CCCC

JOY CHECKER

Here is a program that I wrote that will let you test both joystick ports and the joysticks themselves. You can switch the test between the different ports by pressing "o" (oh) for port one and "t" for port two at any time. The program starts with port one selected. As you move the joystick, the screen will indicate which of the eight different positions the joystick is in. The screen will show F--I--R--E when the Fire button is pressed.

Type in the program as shown. Items that are underlined and bracketed [xxx] are not typed, nor are the brackets or underlining, but instead are executed. For example, [WHT] is the color white and is done by pressing the CTRL key and "2" key at the same time. What will appear on the screen should be a reverse video letter or graphic symbol since you will be in quotes mode. That is OK, just make sure that you push the keys indicated in parenthesis below.

You do not have to type in the REM notes if you don't want to. I put some typing help in the notes also.

Other "do" things are;
[RVON] is reverse on (CTRL & "9")
[RVOFF] is reverse off (CTRL & "0")
[CLR] is clear (Shift & CLR/HOME)
[DOWN] is (Cursor Down)
[3 SPACES] means press the space bar 3 times.

```
1 POKE53281,1:PRINT"X"
5 RESTORE
10 FORK=0TO10:REM SET UP DIRECTION
   STRING
20 READDR$(K):NEXT
30 DATA"","N","S","","W","NW"
40 DATA"SW","","E","NE","SE"
```

JOY CHECKER
(continued from page C3)

```
45 W=1:PRINT"[CLR][DOWN][DOWN][DOWN]
   [3 SPACES]PORT 1 SELECTED.
47 PRINT" PRESS [RVON]O[RVOFF]NE
   OR [RVON]T[RVOFF]WO[SPACE]ANYTIME
   TO CHANGE PORTS"
50 PRINT"[DOWN][DOWN][DOWN]GOING...";
60 GOSUB100:REM READ JOYSTICK
65 IFDR$(JV)=""THEN80:REM CHECK IF A
   DIRECTION WAS CHOSEN
70 PRINTDR$(JV);" ";:REM OUTPUT WHICH
   DIRECTION
80 IFFR=16THEN60:REM CHECK IF FIRE
   BUTTON WAS PUSHED
90 PRINT"--F--I--R--E--!!":GOTO60
100 GETX$:IFX$="O"THENW=1:REM ITS AN
    OH NOT ZERO IN QUOTES
102 IFX$="T"THENW=2
105 JV=PEEK(56322-W):REM GET JOYSTICK
    VALUE.
110 FR=JVAND16:REM FORM FIRE BUTTON
    STATUS
120 JV=15-(JVAND15):REM FORM DIRECTION
    VALUE
130 RETURN
```

If you have any difficulties getting this program to run properly you can call me at (602) 296-5076. I will call back if you leave your number on the answerer and your not long distance.

[editor note]: When typing out this program to your computer screen DO NOT wrap the program lines as above!! This was done to fit in the column!!

NYBBLES & BYTES
By: *Thomas D'Angelo*, CCCC

WRITE PROTECTION & A CAUTION!

There are several ways of protecting a disk or file from being written to on Commodore 1540/1541/1571 disk drives. Normally most users use the write protect tabs to cover the notch that is cut out of the side of the disk. When it is covered with an OPAQUE tape, photocell circuitry inside the drive does not allow the drive to write to the disk. There are other ways to protect a disk or files from being written to though. There are utility programs that can electronically "lock" one or more files or a whole disk.

In the next newsletter I will have a simple program that you can type in and save that will electronically "lock" the whole disk until you use the same program to unlock it.

While on the subject of write protection, I would like to caution members about a hardware modification that some users have made. It involves putting a switch in the write protect circuit of the drive, so that the write protect tab doesn't have to be removed, or so that the back side of the disk can be written to without having to "notch" it. It is not hard to install this switch, but it poses a very real danger that can result in losing valuable data and programs.

Most users are aware of one function of the photocell circuit which is to prevent writing to the disk when there is a write protect tab in place. There is another function that is less well known, but extremely important to the "health" of your data. The photocell circuitry also keeps track of when a disk is exchanged in the drive. It "notices" the disk swap and requires that the drive, on its next operation, update the drive memory with a new map of which sectors of the new disk are free and which are used. If the drive doesn't know that there has been a disk exchange it will write data to disk sectors that were unused on the earlier disk, but may well be in use on the disk that is now in the drive that it doesn't know was swapped. The result, is programs that no longer load and run properly and crosslinked files. A word processor file that shows the beginning of one letter and then the ending of another is an example of a cross linked file. Many times cross linking will not even allow a file to load. Many Commodore drives, other than the 1540/1541/1571/1581, require the drive to be initialized every time a disk is exchanged. Having the write protect photocell circuitry also noticing disk exchanges, has made disk drive use much easier than with older Commodore disk drives. It is less likely that the user will make a mistake and have data destroyed by forgetting to initialize the drive each time a disk is exchanged. So beware about circumventing the write protect circuitry, its there for your benefit and risky without it.

HELP!   HELP!   HELP!   HELP!

I need to borrow a working copy of the VORPAL UTILITY DISK by Epyx. The company has gone bankrupt and Ted Seitz and I both have disks that track 18 has gone bad on. We may be able to get our disks working again if I can copy a good track 18 onto our bad ones. Can you help. If so, please call Tom D'Angelo at (602) 296-5076
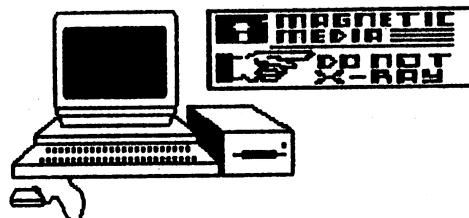
WHATZ HAPPENIN'
By: *Steve Martin,* CCCC

To those of you who attended the Saturday meeting, you may have noticed that we (the 64/128 section of the CCCC) have established a new format to the Sat. meeting. The meeting is open to the public as well as to the general membership starting at 10:am for equipment setup. At 11:am a talk or discussion concerning a variety of topics will be held until approximately 12:noon. After which our help day will begin. Any of you who have ideas or subjects that you would like to be discussed or elaborated on, please feel free to give either myself or Tom D'Angelo a call before the date of the meeting. This months topic will consist of a talk and demonstration on the ability of The Write Stuff's sorting, searching and replacing capabilities.

Once again election time is closing in on us for the Board of Directors. If you are interested in nominating someone to one of the offices, be sure to attend the May 16th meeting at Madonna Hall.

The Write Stuff adds another support program into its arsenal. The program is called The Illustrator, composed by Hugh McMenamin. As its name suggests or you may have guessed, it gives you the potential to add graphics to your letters and documents. Refer to my review of this addition in the November, 1991 edition of the CCCC Newsletter.

BEGINNER'S CORNER
By: *Bruce Morrison,* CCCC

At one time or another, most of us have probably wished we knew a little bit more about the computer and it's languages. The C-64/128 has it's own version of a programming language called BASIC built into it. Not all computers have a built-in programming language installed. Let's just say it's a bonus for all of us Commodore owners! BASIC stands for "Beginner's All-purpose Symbolic Instruction Code", and was created at Dartmouth College in the early 1960's for the purpose of teaching beginning computerists to program. Commodore's version of basic is not a full Basic language, and because of it's smaller size, is easier to learn for the beginner. However, there are a few programs, either cartridge or disk-based, that extend Commodore's Basic. Some of these are: Simon's Basic, Super Expander 64, and Cardco's S'More, to name a few. In addition to Commodore's Basic, there are several other popular languages available.

Here's a list of some alternate languages:

ASSEMBLY: Although a brother to machine language, since the code they produce are exactly the same, assembly language allows the programmer to have access to many tools that machine language lacks.

COMAL: (Common Algorithmic Language), created in the early 1970's by Borge Christenson of Denmark. Developed as a first language for home programmers.

PROMAL: (PROgrammer's Micro Application Language), created by Systems Management Associates. It is similiar to C and Pascal.

ADA: Used by the Department of Defense.

PILOT: Developed in 1968 by John Starkweather.

C: Created in 1972 by Dennis Ritchie. It's major advantage is it is easily transportable from one computer to another.

PASCAL: Named for the French mathematician Blaise Pascal, created in the 1970's by Niklaus Wirth of Switzerland, it is a highly structured language used extensively for business and scientific programs.

FORTH: Developed in the 1960's by Charles Moore, Forth seperates programming into structured modules much like Pascal.

LOGO: Developed by a team of computer scientists headed by MIT professor Seymour Papert in the 1960's.

COBOL: (Common Business Oriented Language), created in the 1950's.

FORTRAN: (Formula Translator), also created in the 1950's.

I will cover the availability of everything in this article and a little bit more about them in future issues of the newsletter, along with any I might have missed. In closing, remember that your C-64 or C-128 is a very good and inexpensive tool for information and education. It's up to you to take advantage of it!

DESERT HOUND

TOLL-FREE NUMBERS

courtesy Redbook

Airlines:
Air Canada - 800-422-6232
American Airlines - 800-322-7300
Braniff - 800-272-6433
Delta Airlines - 800-221-1212
Mexicana Airlines - 800-531-7921
Northwest Orient - 800-225-2525
(International, 800-447-4747)
PanAm - 800-221-1111
TWA - 800-221-2000

Appliances:
General Electric Answer Center - 24-hr
info, 800-626-2000
Whirlpool Cool-Line - 800-253-1301

Consumer Safety:
Chemical Referral Center - safety info on
chemicals, household products, disposal of
dangerous chemicals, 800-262-8200
Consumer Product Safety Commission - 800-
638-CPSC
Major Appliance Consumer Action Panel -
800-621-0477
US Nat'l Highway Traffic Safety/Auto
Safety Hotline - 800-424-9393

Credit Cards:
To report lost cards:
American Express - 800-528-4800
Diners Club/Carte Blanche - 800-525-9150
MasterCard - 800-826-2181
Visa - 800-336-8472

Medical Help:
Air Ambulance - 800-245-9987
Alzheimer's Disease Nat'l HHQ - 800-621-
0379
American Diabetes Assoc - 800-232-3472
American Trauma Society - 800-556-7890
Arthritis Medical Center - 800-327-3027
Cancer Hotline - 800-422-6237
Epilepsy Info Line - 800-426-0660

Living Bank - Organ donation info, 800-
528-2971
Nat'l Center for Prevention of SIDS -
800-638-7437
Office of Disease Prevention & Health
Promotion - 800-336-4797
Second Surgical Opinion Hotline - 800-
638-6833

Retirement:
Nat'l Assoc of Retired Persons - 800-527-
6277

Speech and Hearing:
Hearing Helpline - Better Hearing
Institute - 800-424-8576
Nat'l Assoc For Hearing and Speech Action
- 800-638-8255
Nat'l Center for Stuttering - .800-221-
2483
Nat'l Hearing Aid Society - 800-521-5247

Telephone Companies:
Sprint - 800-521-4949
MCI - 800-444-1000
AT&T - 800-555-8111

MS-DOS SECTION

High Speed Modem Info for PC users

By: *Mike Bena*, Jan 91, revised Feb 91

Shopping for a new modem? Thinking about error control? Want to go to 9600? Confused by all those 'standards' out there? Read on... Hopefully I can help to reduce your confusion.

Because of the confusion people seem to have related to all the new advances in modem technology I thought it was about time that somebody compiled the relevant information into a single article. I have now done so with this article in the hopes of clearing up many of the mysteries and misconceptions about modems which operate using MNP and V.42 style protocols.

First of all, a short glossary might be in order to clear up the most common terms:

cps : Characters per second (usually used to measure the effective throughput from the source computer, through the modems, and into the receiving computer). In the end, this is the only number you should really care about.

bps : Bits per second (usually used to describe the raw data link between two modems or between the modem and computer). Note that this is <u>not</u> the baud rate.

baud : The single most often misused word in telecommunications. Most people really mean 'bits per second' when they use this term. For example 2400bps modems only run at 600 baud and 9600bps V.32 modems run only at 2400 baud. If you don't know what a baud is then you should probably be using 'bits per second' instead.

V.xx : An international standard as specified by the CCITT. This is an important designation because it gives all the manufacturers a single document to look at when trying to implement a particular modem feature. Some examples are V.22bis, V.32, V.32bis, V.42, and V.42bis.

Next, you can probably forget most of what any salesman has told you; most PC salesmen do not fully understand this stuff either. Don't blame them however, they usually have the disadvantage of having read sales literature from the manufacturers which was designed to be misleading in the first place. Your best bet is to read this article and then go to the store and test the hardware you think you want to purchase.

Modulation Techniques

In trying to explain how the various modems communicate I will start at the lowest layer you care about: the modulation technique. These techniques describe the methods which modems use to talk to each other; they have nothing to do with error correction or data compression. Note that there are many other techniques in use but it is unlikely that you will encounter them in day to day PC use.

The rates described in the modulation technique descriptions are often called the 'link rates'; they are not necessarily the same as the rate between the modem and the computer.

Bell 103: 300bps (This applies to most 300bps modems in North America).

V.21: 300bps (Similar to Bell 103 - used mostly overseas). This technique is not compatible with Bell 103, therefore most new modems support both.

Bell 212A: 1200bps (This applies to most 300bps modems in North America).

V.22: 1200bps (Similar to Bell 212A - used mostly overseas). This technique is not compatible with Bell 212A, therefore most new modems support both.

V.22bis: 2400bps (This applies to most 2400bps modems). Normal V.22bis (i.e. without MNP or V.42) is capable of a maximum sending rate of approx. 240cps in both directions at the same time. The V.22bis specification includes fallback to V.22 and Bell 212A.

V.32: One of the 9600bps standards. It is not compatible with the HST protocol. V.32 modems can send at full speed in both directions at the same time. Most V.32 modems come with MNP and/or V.42.

V.32bis: The upgraded V.32 standard which runs at 14400bps in both directions at the same time. It also features faster link negotiation and will speed up and slow down as the connection quality changes. The V.32bis specification requires that a V.32bis modem can talk to a V.32 modem. V.32bis is newly emerging and consequently there are very few V.32bis modems available right now. Within 6 months you can expect many more manufacturers to be announcing the V.32bis modems.

HST9600: The U.S. Robotics 'High Speed Transfer' protocol. It offers 9600bps in one direction and 300bps in the opposite direction. It is only available from USR in their Courier HST and Courier Dual Standard modems. The USR Courier HST9600 modems are no longer for sale from USR (they only sell the 14400 models).

High Speed Modem Info for PC users
(continued from page M1)

HST14400: The upgraded HST9600 standard which runs at 14400bps in one direction and 450bps in the other. Again, it is only available from USR in their Courier HST and Courier Dual Standard modems. These modems are still compatible with HST9600 modems but not with any others in HST mode. Note that the HST 'standard' is proprietary (it is _not_ a CCITT standard) and it is not likely that any manufacturers other than U.S. Robotics will ever build HST modems. The HST technique is only called a 'standard' because there are so many HST modems out there.

None of the above techniques are compatible with FAX machines.

Error Correction

Once two of these modems get talking to one another they may try to establish an error free connection. There are basically two things you may see on modem packaging: MNP4 and V.42.
V.42 is not itself an error correction protocol but rather is an international standard which says that the modems should first try to make a LAP-M connection (for link Access Protocol for Modems) and if that fails, they should try to make an MNP4 connection.
There are other protocols out there as well but LAP-M and MNP-4 are by far the most common.
Both the LAP-M and MNP4 protocols perform asynchronous to synchronous conversion which allows them to avoid sending start and stop bits. In general this increases throughput for all data (even compressed files) by about 20% (25% increase due to not sending the start/stop bits and approximately a 5% decrease due to error correction and sync data). There is only a slight difference in throughput between these two protocols with MNP4 coming out just barely ahead of LAP-M on clean lines but because of the default internal packet sizes (256 bytes for the MNP4, 128 bytes for the LAP-M), LAP-M is likely to perform much better than MNP4 on noisy phone lines (Isn't that why you bought an error correcting modem in the first place?)
It should also be noted that these two protocols are not compatible with each other which is undoubtedly the reason the V.42 specification says the modem manufacturer must support both. Remember, if the modem says 'V.42' then you know it comes with both MNP4 and LAP-M support.

By getting two MNP or LAP-M modems talking together you can expect to get throughputs such as these:

LinkRate, W/O MNP4/LAP-M	MNP$	LAP-M
2400bps	240cps	287cps	285cps
9600bps	960cps	1138cps	1124cps
14400bps	1440cps	1707cps	1686cps

Data Compression

The next layer of standards which can be added is data compression. The two most common data compression protocols are MNP5 and V.42bis (not to be confused with V.42 which is an error correction protocol).
Data compression works similarly to programs like PKZIP except that they compress 'on-the-fly' as you send the data to the modem. In general, if you are sending files which are already compressed with a program such as PKZIP then there is no advantage to turning on data compression in your modem. In fact, if you are using MNP5 then you should disable data compression (go back to MNP4) before sending compressed files, because it will actually take longer to send with MNP5 than with MNP4. V.42bis on the other hand is smart enough to realize that it can't compress the data any further and it turns itself off until it decides that it will be useful again.
Data compression has its biggest advantage when you are reading text which may repeat itself frequently (e.g. ANSI codes and menu boxes have a lot of redundancy and consequently they compress very well). Because different types of data have different amounts of redundancy, I've broken the throughput table into several types of data:

A) Compressed data (e.g. .ZIP, .ARC, .SIT etc. files)
B) Regular text (e.g. this article)
C) Typical BBS Menus.

Typical throughput table for MNP5 and V.42bis (in cps):

Protocol: MNP5

Link Rate	Data Type:	A	B	C
2400bps		254	489	636
9600bps		1013	1956	2552
14400bps		1520	2934	3828

Protocol: V.42bis

Link Rate	Data Type:	A	B	C
2400bps		285	768	813
9600bps		1124	3072	3252
14400bps		1686	4608	4878

As you can see V.42bis does a better job than MNP5 for all types of data and has the advantage that you can always leave it on (even if you are going to be doing file transfers of compressed data).

Amiga News

April Came Early This Year

By Steve Jess

The much-feared Michelangelo virus that threatened IBM computers turned out to be a dud, but about the same time a different sort of virus was spreading through the Amiga world. It was an information virus -- a bogus text file that was spread quickly from one bulletin board to another, first by those who knew it was a joke, then by others who thought it was serious.

The text file contained detailed descriptions of a half-dozen new Amiga models. First was the "Amiga 600," with a 14 MHZ

AMIGA 600 - The real thing

processor, 2 mb of chip ram, and a high-density 1.4 MB disk drive. Next, the author described the Amiga 2200, a souped-up but scaled down 2000, featuring a 68020, SCSI interface, and de-interlaced video, but with a smaller case and no Bridgeboard slots. Finally, the file described several new top-of-the-line Amigas, 4000-series "AmigaStations" with 68040 processors, 10MB of ram standard, 24-bit video, 16-bit audio, and so on.

Any Amiga enthusiast would be forgiven for salivating a little over these specifications, at least until he or she read the last line of the file:

"Had you going there, didn't I?"

Very funny. Unfortunately, that last line, which was part of the original posting on the Usenet network, was dropped by the time the file was uploaded by others to networks such as Genie.

Whether practical jokes like this do any real harm is debatable. Since the file was quickly revealed as a hoax, there is little chance of

DISK-OF-THE-MONTH

NAG -- A simple but effective nag program, reminds you of events for five days prior.

SpeechToy2 -- Allows access to improved speech capabilities of AmigaDos 2.0.

PC-TaskDemo -- Another IBM XT emulator. Tested lightly at the sig meeting. Apparently will run any XT-compatible programs which run within 640K.

SuperSpell -- Checks spelling as you type in any window, flashes the screen or puts up a window when you type any word not in the dictionary.

Virus_Checker -- An up-to-date virus check program.

AIBB -- A benchmark system to compare your Amiga with various other models.

April - *continued from page A-1*
another "Osborne syndrome" (i.e., sales of current Amigas dry up as buyers wait for better models.) Some people might argue that descriptions of "dream machines" give Commodore a better idea of what the people want; but Commodore allegedly has marketing and product-development departments doing that already.

The only sure result was confusion, especially since Commodore was introducing a real Amiga 600 model at the German CeBit show about the same time the bogus file appeared *(see photo.)*

New Amiga 600 Model

The 600, which is going on sale in Europe and may or may not make it to these shores, was described by Max Schmitt on CompuServe:

"- CPU 68000, 7.14 Mhz (NTSC), 7.09 Mhz (PAL) - 1 MB of chip RAM - Denise 8373 - Fat Agnus 8375 (up to 2MB of chip RAM) - Paula 8364 - Single chip processor 8570 (keyboard) - Kickstart ROM 2.05 (37.300) / Workbench 2.05 - 2 x CIA 8520 interface chips - FBAS Logic to connect VCRs and TVs via SCART or cinch connectors - built in HF modulator for connection of TVs via antenna jack - Flash Memory Card port - NEW Gayle Chip - Built in IDE bus.

"The A600 is very compact and small. It lacks the numeric keypad. Instead of the usual expansion port of the A500 there is a flash memory card slot on the left side. It will hold cards with up to 128MB. All of the components, except the Kickstart ROM are SMDs (editor's note: SMDs are surface-mounted devices, a different physical type of integrated circuit.) That means no flicker fixers or any other cards that use chip slots cannot be use in the A600. Since there is no expansion port, nothing that uses the old A500 expansion port can be used.

"The Memory port of the A500 is also missing. The Gayle chip is the only new custom chip. It combines the functions of the former Gary with the logic for the new flash memory port and the IDE bus interface.

"Kickstart and Workbench 2.05 are, according to Commodore, only offered in the A600. The machine is compatible to the A500+. The A600HD includes 2 1/2" hard disks from 20 to 180 MB. The price of the A600 will be about the same as for the A500+.

"The A600 was shown in detail in the maga-zine, inside and out. So at least that system has passed the "rumor" status.

"Greetings, Max"

Maybe they should call it the Amiga 64?

The March Meeting

No one can say Amiga users are just interested in games, at least not after the March Amiga sig meeting.   Several games went begging in the monthly raffle. Maybe most of us are just interested in other things.   Maybe we've heard too many stories of games not working on this or that kind of system.

Alan Hoskins, who showed some of his video productions at a sig meeting several years ago, returned with a collection of his latest works. Alan uses Hi-8 camcorders, and an Amiga system with two different kinds of genlocks to produce his tapes, some of which have won awards.

While Alan Hoskins is doing amateur video art, cartoonist Pat Jenkins is producing animations for local commercials -- on an Amiga 500, no less. Pat showed off some of his latest work. Look for commercials for Cummings Plumbing/Rheem water heaters, and Sun Mark safety products.

Pat says his *piece de resistance* is still in the works -- a 64-color, "heavily storyboarded" cartoon animation that has consumed 70 floppy disks so far. Sort of like the ceiling of the Sistine Chapel, done on an Amiga.

Ken Weaver of Computer Y's stole the show with a demonstration of NewTek's Video Toaster 2.0. From Ken's description, there wouldn't seem to be any part of this video-effects package that hasn't been updated. My favorite is the wipe effect that uses a city skyline to transition from one video source to another.   It looks like you're flying straight into the widow of a high-rise building.

New "organic effects," based on actual video, include a dancer (NewTek's Kiki Stockhammer) twirling in front of the camera, a player throwing a football toward the screen, and windshield wipers literally wiping one image off the screen, replacing it with another. NewTek's latest demo tape, shown at the meeting, demonstrates many of these effects beautifully.

$20,000 In Prizes For 3rd Annual Animation Video Contest

Peterborough, NH - (March 10, 1992) The editors of AmigaWorld Magazine announce over $20,000 in prizes to be awarded in the 3rd annual AmigaWorld Animation contest. State-of-the-art style and technique is the theme of this year's contest. Entries must be 2-D or 3-D animations produced on any Amiga computer. Winning animations will be produced on videotape and distributed worldwide through TechMedia Video in 1993.

The First Prize winner will receive the "Ultimate Commodore Amiga 3000 System" featuring an Amiga 3000 with 5MB, 100 MB hard drive ($4146), Amiga 1950 multisync monitor ($695), G-force 040 accelerator ($2799) and Impact Vision 24 video/graphics board ($2199) from Great Valley Products, Personal single frame controller from Nucleus Electronics ($425), and Caligari Broadcast 2.1 3-D animation and rendering software from Octree ($1995).

The First Prize winner will receive the "Ultimate Commodore Amiga 3000 System"

The Second Prize package includes the Harlequin 2000 32- bit Frame Buffer from the Amiga Centre Scotland ($2100), TVPaint from Tecsoft, France ($1500), V-Lab video digitizer from MacroSystem, Germany ($450) and Will Vinton's 3-D Animation from Cineplay ($499.95).

The Third Prize package is Digital Creation's DCTV ($499.95) and Progressive Peripheral's 3-D Pro 2.0 ($399.95). In addition the First, Second and Third place winners will receive Virtual Reality Lab's VistaPro 2.0 with MakePath and TerraForm landscape generators ($149.95) and Progressive Peripheral's Animation Station utility software ($49.95). The next ten winners will receive: DevWare's 25 best Video/Graphics public domain disks ($98.75), Progressive Peripheral's Diskmaster ($49.95) and the AmigaWorld 3-D Library ($89.95).

Contest entries should be directed to: Tim Walsh, AmigaWorld Magazine, 80 Elm St,
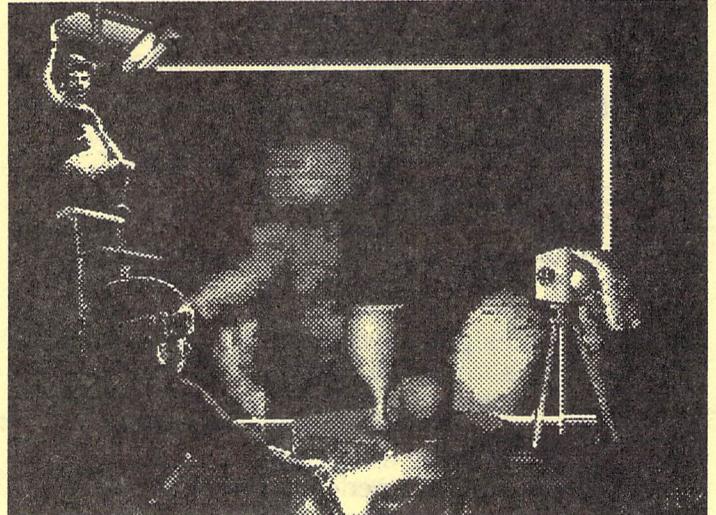
Peterborough, NH 03458. Entries must be submitted on floppy disk with full loading instructions and a 1/2" or 3/4" review copy, preferably NTSC. Animations will have a maximum length of 3 minutes. They will be judged on a basis of content and technical expertise. Deadline for entries is October 15, 1992. Winners will be announced in the February 1993 issue of AmigaWorld.

Animation Video Volume One and Volume Two, compilations of earlier contests, are available through TechMedia Video. According to Lynn Lagasse, Video Products Manager, "These videos display some of the most unique animations created by the most talented and well-known Amiga artists and in turn, will fascinate, entertain and inspire viewers." TechMedia Video will produce Animation Video Volume III at its new state-of-the-art, in-house production facility.

Work is currently being completed on the first of a three part video series, "How To Animate I", scheduled for release in March 1992. This will be followed by the release of "The History of the Amiga" in April 1992. TechMedia also distributes animation, instruction and tutorial videotapes for third party vendors such as Miramar and Razza Video USA.

TechMedia is a division of IDG Communications, the world's leader in information technology. IDG publishes over 150 publications in 50 countries, including such titles as AmigaWorld, MacWorld, PC World, ComputerWorld and InfoWorld.

CONAN, The Cimmerian

A Game Review
by Bernie Joiner, CCCC

Just when I was ready to purge the name Virgin Games from my mind and wallet after having to abandon yet another one of their games (this last one was CORPORATION) to the "This Interface Is Dogmeat" pile, they finally came up with a winner in CONAN, THE CIMMERIAN. Conan is out to destroy the evil Thoth Amon who killed Conan's woman and is now busy bringing all Hyborea under his rule. Hmmmm... That's about the extent of it.

Gameplay takes place on three levels: 1) World Level, which is an aerial map of all Hyborea from which Conan can move from city to city as they are revealed. 2) Street Level, which is a three-quarter looking down perspective of the streets, buildings and pedestrians of the city Conan is presently exploring. 3) Scene Level, which is a full from-the-side framed scene in which Conan inspects the interior of buildings or does battle with nasty foes.

PLUSES: Great graphics! Lots of stuff to explore! Earn money by stealing! Need a map? Buy one! Lots of shopping!! Need a key? Buy one! More shopping!!! Need to improve valuable fighting skills? Pay for it! Desperate for money? Pawn stuff! Once you've finished a quest, you don't have to go through the hassle of walking all the way home! Need information? Bribe somebody or visit one of many local fortunetellers! Receive handsome compensation by helping any of the numerous religious cults in recovering lost or stolen artifacts! Gosh! It's almost like real life! Screw up and die? The storyteller by the campfire will tell you where you went wrong!

MINUSES: I had a problem with this game crashing a lot. Only one save file, so I had to do some swapping in order to get multiple saves. The composer should be dragged through the streets for creating that incredibly annoying combat sequence music! (The other, softer tunes in the game were, however, good.) Bizarre little "bugs" occurring, like walking into a scene and finding my opponent floating in the air, and not on purpose. And finally, the one thing that I found the most annoying... Slaying a foe only to have him resurrected as soon as I return from inspecting some room or building!

In spite of the minuses, I had a great time playing CONAN, THE CIMMERIAN. It was especially satisfying after spending months hacking and slashing my way through BANE OF

THE COSMIC FORGE. It's simple yet very satisfying in its graphic adventuring grandeur and something fun to do while sitting around waiting for EYE OF THE BEHOLDER II and CRUSADERS OF THE DARK SAVANT.

CONAN, THE CIMMERIAN from Virgin Games... One meg required. One meg of chip ram recommended. Hard drive recommended. Off-disk protection. Four disks and a map of Shadizar included. Mouse and/or keyboard driven.

AmigaDos 2.1? SHHH!

In response to someone posting a preliminary description of the next AmigaDos update, Sysop Steve Ahlstrom posted this warning from Dr Allan Havemose, Technical Direction AmigaOS, Commodore-Amiga, Inc., on CompuServe's AmigaUser forum:

"We have recently been advised of several postings of a Beta release of Workbench 2.1 software and would appreciate any information which anyone may have with respect to the source of these postings. We wish to advise anyone seeing such postings that the information contained therein is copy righted and has not been published or otherwise authorized for release by Commodore. Any such postings, therefore, are violations of the U.S. Copyright Law, and, depending upon the postings, the law and regulations of other countries. Such violations are subject to legal action. We ask that proprietors of any bulletin boards containing the posting of the Beta software immediately remove the same.

"Furthermore, any downloading of any such software also violate such laws and regulations. If you have already downloaded the software, we ask that you immediately destroy any such copy. We would further advise that such Beta release may contain errors and omissions consistent with its Beta stage of development and any use thereof will not only be a legal violation, but may also present the potential of damage to your system."

So there.

Adventures of a Desktop Publisher

Or, you can't get there from here!

By Steve Jess

I decided to take advantage of one of those magazine offers. You know, get one free issue, cancel the subscription if you don't like the magazine, and keep your free gift. In this case, the magazine was MacWorld, and the free gift was a sample of clip art from T/Maker. I figured I could always convert the clip art to Amiga format. Stop that snickering.

Not one but two issues of MacWorld came, A while later, my free clip art disk arrived. Then the fun began.

Since I work at the University of Arizona, which has a lot of Macs, I figured I could use one to convert my disk to IBM format. I have the MSH software, which works like Cross-Dos to read and write MS-DOS disks transparently, so this was all I needed.

Here's where I went, and what they told me:

Computer Lab, Engineering Building: "We can't do that here, you'll have to go to the lab in the ECE building, on the first floor."

Computer Lab, ECE Building (actually on the 2nd Floor): "(Laughing...) We don't even have any Macs here. Go back to the Engineering building. I'll call them and explain what you want."

Computer Lab, Engineering Building: "Okay, we can try to convert that. It says your files are in Word Perfect format...you want them converted to Microsoft Word? *Binary?* I don't know how to do that." (20 minutes later...with half the files converted) "Sorry, it crashed our machine."

Next Day: Computer and Technology Store, Student Union: "What? Let *you* use one of *our* machines to convert a file? We can't do that. You'll have to go to the Help Desk at the Computer Center."

Help desk, at the Computer Center: "Sure I can do that...oh, it's a *commercial* disk? Sorry, no, that would violate the copyright. No it doesn't matter if it's your own disk, and you're copying it for your personal use. If it's in the Mac world, it can't be copied to the IBM world without breaking the copyright. Sorry, I just can't do it."

Eventually, I asked a friend with a MacIntosh Classic if I could use her machine for a while. Apple File Exchange converted the files with no problem, once I figured it out. The disk held about 24 bitmap images, which I converted to IFF at home using MacView, and 15 Encapsulated PostScript Images in Adobe Illustrator format, the kind that PageStream can display and edit on screen. The quality is great -- just look at the detail in the parrot's feathers. If you're looking for clip art, I heartily recommend T/Maker.

But do yourself a favor. Buy the disks in IBM format, not MacIntosh.

April - *continued from page A-2*

The only trouble with the Video Toaster is that many people never even know when they've seen one in action, including the thousands of basketball fans watching the new, giant TV screens at McKale center this year.

NewTek plans to add to the market potential of the Toaster with a PAL (European video) version now under development, according to Ken.

New BBS in Town

Troy Jennings says his bulletin board system, "The Realm of the Shadow Dragon", has 100 megabytes of storage available for uploads. Troy hopes to collect Amiga as well as IBM-compatible files. The system uses a 25Mhz '386 system, so it should be plenty fast. Call 293-2689 to access it.
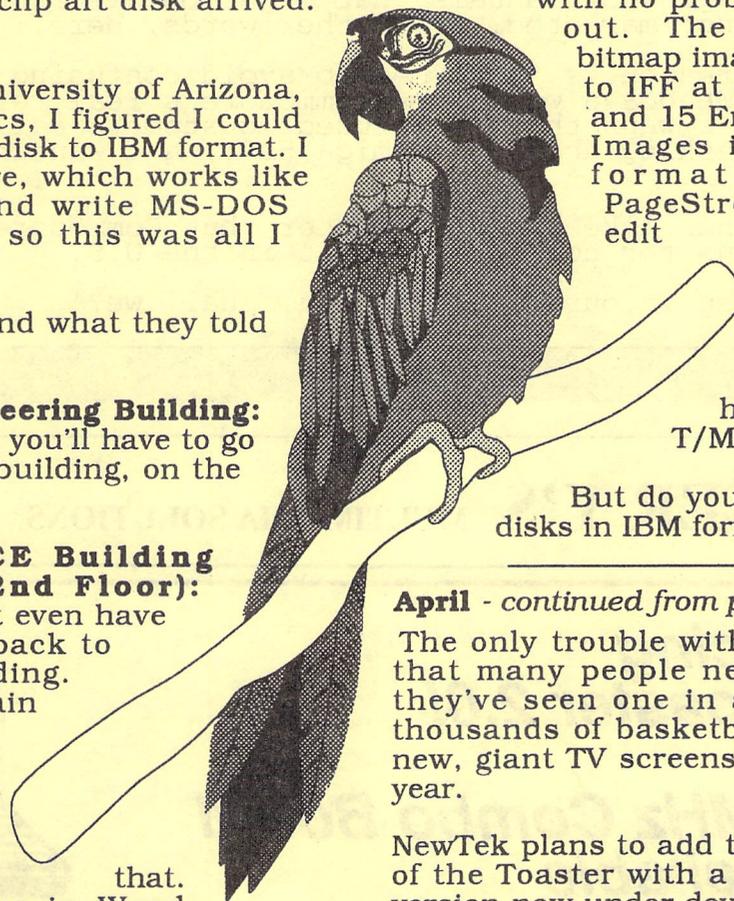
/eof...*unusual news of the Amiga*

Now It Can Be Told

There's an Amiga 500 model with features beyond the normal 500
you and I can buy...and Commodore doesn't want you to know
about it. The A500+ features AmigaDos 2.04 built-in, the
Enhanced Chip Set, 1 meg of chip RAM, and expansion capability
for 2 meg of chip RAM.

So why's this nice machine a secret? Well, it's not, really,
it's just that the A500+ is sold only in Europe. Why? Ask
Irving Gould.   Anyway, Commodore recently sent a notice to
all registered developers, advising them not to mention the
A500+ in packaging or manuals that might be distributed where
the A500+ is not marketed.   In other words, here.

The official reason is "in order to avoid confusing
customers." Whaddaya wanna bet Commodore's real reason is
that it doesn't want those "confused" customers calling it or
its dealers, asking about the Amiga 500+, and wanting to buy
one.

The A500+ sounds like a neat computer, but Commodore certainly
has its reasons for not marketing it in the U.S.

Let's just keep it our little secret, shall we?
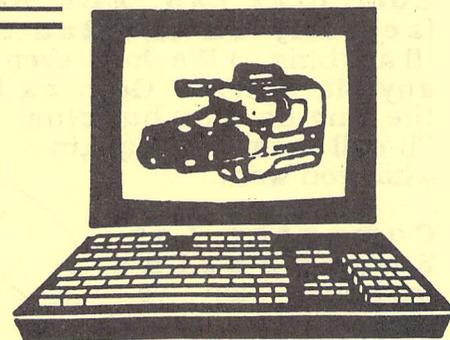
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Please submit copy to the
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Tucson AZ 85716
(602) 327-0540

For Meeting Info See Back Cover

Original Cartoons by Pat Jenkins

Call Pat at 578-2972 with your cartoon ideas!!

ELECTIONS IN JUNE
NOMINATIONS IN MAY
THINK ABOUT RUNNING FOR OFFICE!!

We'd like to thank Julia Richardson for helping out the MS-DOS SIG as MS-DOS Editor, SIG Leader and PD Librarian. She is no longer able to fulfill these duties, but we may have a volunteer waiting in the wings.

Steve Martin, our C64/128 Editor, was kind enough to put together an MS-DOS section for the newsletter this month.

Don't forget, we can always use input for the newsletter, so if you have a favorite program, a new program, a problem area, whatever--contact the appropriate Section Editor. We'll be glad to print your contributions.

Leila Joiner,
Editor

SIG MEETINGS

AMIGA*C64/128*MS/DOS
plus Saturday Help Day

Saturday, April 18, 1992
St. Peter & Paul Madonna Hall
Southeast Corner of Campbell & Adams
10 AM - 2 PM

Executive Board Meeting
All Members Welcome

Tuesday, April 13, 1992
Devon Gables Home
6150 East Grant Road
7:30 PM

Catalina Commodore Computer Club, Inc.
P.O. Box 32548
TUCSON, ARIZONA 85751-2548

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