Happy Valentine's Day!

C.U.G.S
MONITOR

In this Issue:

Meeting Place

AGENDA:

PRESIDENT'S COMMENTS - Richard Maze

FAVOURITE GRAPHICS PROGRAMS - PART I - R. Maze

USING GRAPHICS (and commercial programs)
B. Bircher.

*******coffee****visiting****disk-picking***********

CONVERTING GRAPHICS PROGRAMS - PART II - G. Rezansoff/K.
Danylczuk

EDITORIAL:

This year, your club executive is turning its attention
to the "USER" part of our title. We hope to make our
club membership more effective USERS of their machines.
Every club has a variety of "types" (see back issues of
this editorial!), from true HACKER to amateur USER.
This makes the job of a club executive interesting ...
one might even say frustratingly difficult. Each of you
has his or her own reasons for owning a Commodore 64 or
128. We find a variety of USES for our computers.

Starting with our January meeting, we embarked on what
will hopefully be a USEful year for you and your 64/128!
We had the beginning of a major series of articles on
programming disk files from Richard as well as reviews
of current USEFUL applications! This issue the disk
files article continues, and we begin a look at one of
the 64's most significant features, its graphics! When
the 64 first appeared (8 years ago!) it was up against
some pretty stiff home-market competition in the Apple,
the TI-99A and the Atari (400). Two things (besides
price) set it apart from all the competition - its sound
(synthesizer) chip and its superb graphics.
Unfortunately, in its desired to keep costs to an
absolute minimum, Commodore made a decision to provide
superb graphics power with a pitiful control language
(an old BASIC). What this meant to early Commodore
users is that the full graphic capabilities of the
machine were hidden or undecipherable by mere mortals.
Only dedicated computer nuts and "hackers" had the
patience and took the time to decipher this marvelous
machines graphic magic!

It took over 2 years before a really effective graphic
package for the 64 appeared (DOODLE and KOALA PAINTER -
about a month apart!), but, unless you were willing to
learn ASSEMBLER or ML, doing anything but creating
pictures with a commercial program was impractical.
Most users simply contented themselves with admiring the
many pictures created by commercial software, with
little hope of practical application. Starting with
this issue and meeting, we hope to give you some simple
tools by which you can begin using some of the available
picture (and later, sound) material in your own
programming. There's nothing neater than a flashy
screen at the start of a program to give some pizzazz to
your programs!

By the way, you might be impressed by the gorgeous
pictures generated by the AMIGA, but, pound for pound,
byte for byte and $ for $, the 64/128 is still the BEST
GRAPHIC MACHINE ON THE MARKET!

ERRATUM!

ERRATUM (which, for those not versed in Latin
scholarship is the singular of ERRATA, or "goofs"). In
the last issue of the MONITOR, I cleverly printed a
listing of the prize draw program we're using at the
meetings (first draft). Also, cleverly (and in my usual
frugal manner), I managed to squeeze it onto ONE PAGE by
ELIMINATING MOST OF THE 'REM' STATEMENTS.
Unfortunately, this managed to erase most of the target
lines for the various GOSUBs or GOTOs in the program,
making it a real nightmare to read. Anyone wanting a
full and proper listing is welcome to one. The program
will be revised and (hopefully) made more efficient
through this club year - your suggestions and rewrites
are MOST welcome. The program was NOT meant to be an
example of superb programming style. Rather it was
intended to spark interest in seeing exactly how one
might create or "spruce up" a similar program. Starting
next issue I'll take a short bit of the paper to examine
the thinking and changes that go into the MANY rewrites
that result in a finished product (by December?).

February Feelings:

A Message from the President

Welcome to our second meeting of 1988. I would like to thank Ken for the excellent presentation he gave last month on the "innards" of the disk drive and the hints and tips he gave for cleaning and caring for the disk drive.

This month's meeting is going to focus on graphics. The first part of the meeting willl be a look at three commercial graphics programs. The remainder of the meeting will examine the changing of pictures from one program to another and the "how to" incorporate pictures drawn using these programs into your own BASIC program.

For the March meeting we will have two separate presentations. Ken, our sound and music expert, will look at how you can incorporate music or sound into a BASIC program. In the second half of the meeting, Earl will give a presentation on his excellent income tax program. He is updating his program now to have it ready for distribution for March. Those of you who have used his program in the past will appreciate the time and effort Earl's program saves when tax preparation time comes around.

This month also brings COMPUTERFEST. I expect that this year's show will be even bigger and better than the very successful first COMPUTERFEST held last year. I hope that each of you will be able to make it over to the Vagabond on Sunday. At our display, we are going to have both a C64 and a 128 up and running with various programs throughout the day. We will be selling CUGS memberships this year, which we didn't do last year.

I would like to take this opportunity to congratulate our vice-president, Barry Bircher, and his wife on the birth of their son, who gained instant fame by being Regina's New Year's Baby. Congratulations Barry, wife and son.

Club Adoption Notice:

CUGS NOW OWNS A 128

At the last executive meeting, the CUGS executive decided to start the process of upgrading our computer hardware. We have purchased a 128 computer. This will allow for much more flexibility in the presentations that can be made at our meetings. It should also help make our club more relevant to all the members who own 128 computers. Future plans when we have sufficient funds are to add a 1571 disk drive and a suitable monitor.

We have also purchased a power bar and extension cord to facilitate the set-up at our meetings.

A third purchase we made was to buy a number of C64 and 128 INPUT disks. We will have these incorporated into our disk library in the near future.

GEOS 128 - A Review

by Barry Bircher

I have recently purchased Geos 128 and will attempt to give you some idea of what you can expect from it. Those of you who have GEOS 64 will feel right at home with the 128 version, as it is almost identical. The program is actually a new "Graphic Enviornment Operating System", thus it's name - GEOS. The program comes in the form of 2 "flippy" disks (formated in 1541 ss on both sides). Disk 1 is the system disk (side A), Quantumlink Terminal program on side B. Disk 2 has a backup system on side A and application programs on side B.

----The "do likes"----

I like using the Geos operating system, as it enables my wife to use the system with relative ease (and it HAS to be easy). It loads quickly and easily, has 80 columns (what-you-see-is-what-you-get) screen. It has double the disk storage capability when used with the 1571 or 4 times with the 1581, compared to the 1541. It is able to access RAM expanders for instantaneous access. The system operates in either the 80 or 40 columns. In 80 colomn mode the sytem switches in the 2 MHz clock making the system twice as fast. Both GEOPAINT and GEOWRITE (both come with the package) can use the 80 columns, however, you have only 2 colors in Geopaint due to (Berkeley says) the 80 column chip. (I think there will be be some advances in programming to allow 80 colomn graphics, BASIC 8 by Patach for one).

In Geowrite you have access to 6 fonts at a time for doing your writing, just as the 64 version does. (More fonts are available separatley (FONT PACK I and II). They allow you to liven up you documents to your heart's content. A nice feature available in Geowrite allows you to include drawings you make in Geopaint tacked onto your document. This allows not just text but bit-mapped graphics on the same page (a nice touch!). Geowrite, on the whole, allows you to write a letter in different fonts and include graphics, but it lacks some of the more advanced features of a full-blown dedicated programs like PAPERCLIP, WORDPRO, SPEEDSCRIPT, PAPERBACK WRITER, etc. These features are probably in abundance on the GEOWRITE WORKSHOP DISK available separatley. It would have been nice if Berkeley had included at least the "search and replace" feature in the package.

GEOPAINT is one of the nicest graphics drawing tools I have seen. It enables you to draw with KOALA PAD (if you have the driver - NOT included) , 1351 mouse (driver included) and the ever popular joystick (driver included). After using the joystick for a while, I soon got to appreciate the 1351 mouse as an input device. This little devil works well in GEOPAINT and allows you to freehand your drawing as if with a pen or brush. Inside GEOPAINT you have at your disposal several colors, brushes, air brushes, paint options, copy, mirror imaging, rulers to measure distances, lines, rays, circles, filled circles, boxes and filled boxes to name several. A nice feature in GEOPAINT, complementing the feature in GEOWRITE, is that you can print characters for instuctions or descriptions onto your drawings wherever you wish. There is a print feature to print out your drawing (without color). One drawback of the printout is that the printed drawings seem a little "squeezed" as if squashed down (one might say stretched horizontaly).

The DESKTOP is the main menu, where everything in the package comes together. In DESKTOP you have several desk accessories available to you under the GEOS file heading. eg- 40/80 column switch, alarm clock, a calculator, a notepad, photo book, text manager and preference manager. Most of the accessories are self-explanitory and work as you would expect

----The photo book is a collection of drawings you have made. It is a way of collecting them all together and viewing them when you want.

----The text manager is another book for collecting text documents.

----The PREFERENCE MANAGER is an accessory to set screen, character, and border colours, set the clock and date. It allows you to modify the pointer shape. Several limitations exist in the 80 column mode compared to the 40 colomn version: In the PREFERENCE MANAGER, the pointer cannot be modified in shape and is able only to be the same color as the character color preasently selected (only two colors are allowed at one time in the current version). Also, the border can only be toggled between the character colour and the background color. In GEOPAINT, again, only two colors are allowed, so it is useful to draw out your drawing in full 80 column width, then switch to 40 columns to color it.

From the DESKTOP you are able to run just about any program on your work disk including some NON-GEOS programs. To veiw your letter to Mom, all you do is double click on the "letter to Mom" icon and, several seconds later, the DESKTOP has loaded GEOWRITE complete with the file you selected ready for editing, or printing. The same goes for the drawings you made. Just double click on the file icon you want to work on and the desktop takes it from there to display your drawing. To print out either GEOPAINT or GEOWRITE all you do is click on the file you want then click on the "ghost" icon and drag it to the printer icon in the lower right corner. DESKTOP takes over for you and loads GEOPAINT or GEOWRITE accordingly and procedes to print out your selection. Of course, you can load it all yourself and do it manually but, why bother if it's just a click away.

----The "don't likes"----

The DESKTOP V1. 4 has a few bugs in it that I have come across after several hours of playing around with it. The most notable of the bugs is the character colors of the DESKTOP after you have exited the GEOWRITE word processor. The bug does not come up all the time; only after a save is made, I've noticed it to crop up. It usually shows up in the following scenario:

Click on the GEOWRITE icon to enter the processor (or double click the text file icon of a previously created file) and do some writing. GEOS automatically 'ate stamps the files as you save them (provided you have updated the date and time). As you write, it is desirable to update (save) the document so that power outages will not erase your work (or a 2 year old son/daughter decides to play blackjack on the powerbar switch). GEOS provides a preference file for such things as character color, background color, border color, date, time, joystick/mouse speed and accelleration characteristics, and pointer shape. So, here you are, in the middle of your document and it's 11:30 pm. You decide to shut it down for the night, so you want to update the file, but before you do, you want to make sure that the DOS stamps your file with the right time and date.

To do this, all you need to do is click on the GEOS main menu and click on the PREFERENCE MANAGER icon. Up pops the PREFERENCE MANAGER and you proceed to enter the date and time (while still in GEOWRITE). You save the file by clicking on the save box and then exit the PREFERENCE MANAGER back to your document. Click on the file menu and select the update option on the file submenu and the file is saved. All fine and dandy until you exit the GEOWRITE and enter the DESKTOP. It seems that a couple

of bytes are altered when you've saved the preference file from within GEOWRITE as the character colours change to blue (in my case) and the background to yellow. Even though my colours have been previously saved in the PREFERENCE MANAGER from within the DESKTOP that have loaded several times without any hint of a problem.

Another less obvious bug or programming error is the fact that, if you remove the work disk you're working on for any reason and forget to put in another one, the first time the program tries to access the disk you, are greeted with a system error on $xxxx. This message will stick to the screen like suckers to blankets. No amount of waiting, keypounding, crying, kicking, screaming, swearing, cursing, or throwing your silicon chips at the wall will make the message go away. You have no choise but to reboot. The short-term solution is to make sure that there is a work disk in the drive. As a programmer myself, I know all too well how hard it is to get the perfect working program to work without a flaw the first time around. However, I believe every possible system error should be handled in such a manner that the user has a chance to correct his error before the program decides to make friends with you and the reset switch.
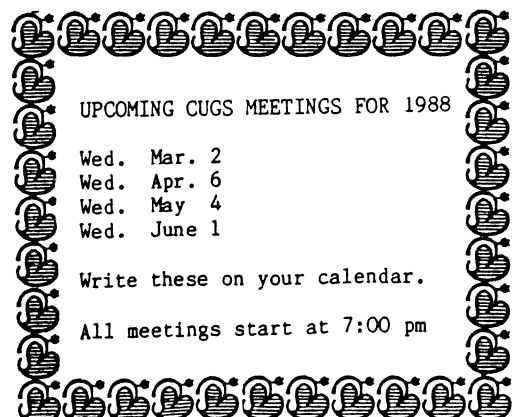
In order to copy several files from one disk to another, you must swap from source disk to destination disk for each and every file you want transfered (with one drive system only). As of this writing I have sent a letter to Berkeley Softworks detailing the bugs. I hope they will work on eliminating these bugs and hopfully send out an upgrade.

----In conclusion----

What inspired me to buy GEOS 128 was Berkeley's obvious desire to support it's product. This is seen on Quantamlink and Magazines answers and reply's to and from Berkeley in support of user questions. In the Mouse package I got for Christmas there was an upgrade program on the flip side of the mouse utility and demo disk. This upgraded GEOS 64 V1.2 to a GEOS V1.3 with mouse , lightpen, and Koala pad drivers , a newer version of DESKTOP, GEODEX, GRABBER, and MERGE. In the documentation they mention that anybody who owns GEOS (legally) is able to use this to upgrade their version a no cost. With this kind of support, how can you go wrong? I am sure we'll see upgrades to GEOS 128 as with the 64 version and will see the above bugs squashed. I personally will not use GEOWRITE as my main word processor but I will use it as the situation arises for graphic-type layouts. GEOPAINT will get a lot of use as it is a lot of fun to use. I would like to get GEOPROGRAMMER 128 if it comes out, as I would like to program in this kind of environment. In the future, the prospect of purchasing other GEOS accessories is good. They will allow me to get the most out of this system.

I give this program a " B- ", with the bugs corrected an " A "

Future Meetings:

UPCOMING CUGS MEETINGS FOR 1988

Wed. Mar. 2
Wed. Apr. 6
Wed. May 4
Wed. June 1

Write these on your calendar.

All meetings start at 7:00 pm

Sir Richard's BASIC: Creating and Using Disk Files

Last month's article was the start of an examination of sequential files. In this article, I will look at some programming techniques involving sequential files.

The following program willll take some simple data and store it on the disk in three files. In each of these files, the data is stored slightly differently. In a program, you would probably not use separate variables but rather an array and a loop to write the data.

```
100 rem writing seq. file demo
110 :
120 REM READ DATA
130 :
140 :    READ A$,B$,C,D,E,F
150 :    DATA RICHARD MAZE,RJM,22,33,-44,-55
160 :
170 REM CREATE FILE WITH RETURNS
180 :
190 :    OPEN2,8,2,"FILE 1,S,W"
200 :    PRINT#2,A$
210 :    PRINT#2,B$
220 :    PRINT#2,C
230 :    PRINT#2,D
240 :    PRINT#2,E
250 :    PRINT#2,F
260 :    CLOSE 2
270 :
280 REM CREATE FILE WITH COMMAS
290 :
300 :    OPEN2,8,2,"FILE 2,S,W"
310 :    PRINT#2,A$,B$,C,D,E,F
320 :    CLOSE 2
330 :
340 REM CREATE FILE WITH SEMICOLONS
350 :
360 :    OPEN2,8,2,"FILE 3,S,W"
370 :    PRINT#2,A$;B$;C;D;E;F
380 :    CLOSE 2
390 :
400 END
```

You should note that the three files are identical except for the separator between the individual variables. The effects of this difference on the data on the disk can be determined a sector editor. Looking at the files on the disk would show the following:

FILE 1 - RETURNS: (Note: * = carriage return - chr$(13))
RICHARD MAZE*RJM* 22 * 33 *-44 *-55 *

FILE 2 - COMMAS
RICHARD   MAZE   RJM   22   33
-44   -55   *

FILE 3 - SEMICOLONS
RICHARD MAZERJM 22 33 -44 -55 *

Note that file 3 is the most compact storage method.

Also note that files 2 and 3 store the data on the disk in the same way that the print statement would print it. File 1 is the easiest to use because it can be read with the INPUT# statement. The carriage return marker marks the end of each data item and each data item will then be read up to the next carriage return. Files 2 and 3 can be read as one variable if they are less than 255 characters in length. You can then look for the comma or semicolon to separate the data as you want. If the data is more than 255 characters, it can only be read one character at a time using the GET# statement. If you try to read this data with an INPUT# statement, you will get a string too long error.

An interesting aspect of storing data on the disk is that once it has been stored on the disk as numbers or strings, it may be read back into string variables. This is exactly the same as normal variable usage. This permits the use of very compact programs for reading data. For example, file 1 could be made ready for a program using the following:

```
100 REM DEMO TO READ FILE 1
110 :
120 :    DIM A$(6):REM ARRAY TO HOLD DATA
130 :    OPEN3,8,3,"FILE 1,S,R":REM ,S,R CAN BE
OMITTED
140 :    FOR I = 1 TO 6
150 :        INPUT#3,A$(I)
160 :    NEXT I
170 :    CLOSE 3
```

The data is now available for use. The val(function can be used to change the string variables into real numbers when they are to be used for calculations.

An interesting sidelight of this process of writing and reading sequential files is to make the following change to the program to write the file. Change line 190 to read:

```
190 :    OPEN2,8,2,"FILE 1,U,W"
```

Note that the ,S,W has been replaced by ,U,W. On the disk directory, the file will be classified as USR which will confuse a number of people and may prevent them from trying to read the file. The data is stored EXACTLY THE SAME as for a sequential file. To get this data into your program, change the ,S,R to ,U,R when you OPEN the file (or omit this altogether).

The BASIC keyword ST is used to determine the status of a file. For a file on disk there are only two values of ST that are important. A value of 64 indicates the end of the file has been reached. A value of 0 indicates everything is OK. If a data file of unknown length is to be read into the computer from the disk, ST can be used to properly stop the process at the end of the file. This must be used with the files created using commas and semicolons and read with GET#. For example, the following program segment could be used to read and store file 2:

```
100 REM DEMO TO READ FILE 2
110 :
120 :    DIM A$(6):REM ARRAY TO HOLD DATA
130 :    OPEN3,8,3,"FILE 2,S,R":REM ,S,R CAN BE
OMITTED
140 :    I=1:REM SET COUNTER
150 :    GET#3,X$:REM GET CHARACTER
160 :    S=ST
170 :    IF S=64 GOTO 210:REM DONE
180 :    IF X$="," THENI=I+1:REM NEXT DATA ITEM
190 :    IF X$=CHR$(32) GOTO 150:REM DON'T SAVE
SPACES
200 :    AS(I)=A$(I)+X$:REM STORE WANTED CHARACTERS
210 :    CLOSE 3:REM ALL DONE
```

One further aspect of working with disk files is error checking. In BASIC 2, on the C64, the only way to check for disk errors is to access the command channel and get the error message from the command channel. The command channel is accessed using a secondary address of 15. (ie) OPEN 15,8,15. The statement INPUT#15,EN,EM$,ET,ES will get the error message from the command channel. EN = error number, EM$ = error message, ET = track error is on, and ES = sector error is on. A value for EN of 20 or more indicates that something has gone wrong. This can be simply checked by a statement: IF EN>19 THEN .... There is one caution with using the error check that must be followed. Open the command channel before any other files are opened. Close the command channel LAST - after all other files are closed. Closing the command channel while another file is open may confuse the computer into thinking the file being accessed has been closed resulting in data not being read properly.

Sequential files are commonly used in the following situations: 1) When putting data into data statements and then reading it into variables would take up too much memory; 2) When data is changed from one use of the program to the next changing data statements and then scratching and resaving the program creates much extra work and greater chance for error; 3) When the data is to be "hidden" so it can't be discovered by listing the program.

One last note on sequential files - many word processing programs permit working with sequential files. When making a program, it is often easier to create the data file using a word processor rather than to write a separate program to create the file.

In the next article, I will examine relative files.

BASIC QUICKIES – BY

RICHARD MAZE!

Getting a key pressed in a program can sometimes create a problem. For example, if you have a number of screens of instructions and you use a statement like "PRESS SPACE BAR TO CONTINUE". A person using the program could miss a screen by pressing the space bar twice (rolling your thumb on the space bar). To prevent this, put POKE 198,0 into the get statement line:

```
100 POKE 198,0:GET X$:IFX$<>CHR$(32) GOTO 100
```

Location 198 contains the number of keys currently in the keyboard buffer. By poking 0 in this location extra characters will be removed before the GET statement is entered.

Want to fancy up your screen display? Try some of the following:

```
100 A$="GROUP OF WORDS"
110 A$="            "+A$:REM TRY CHANGING NO.  OF
SPACES HERE
120 FOR I = 1 TO LEN(A$)
130 :   PRINT MID$(A$,LEN(A$)-I+1,I);"CRSR UP"
140 :   FOR DELAY = 1 TO 25:NEXT DELAY
150 NEXT I
```

```
100 A$="GROUP OF WORDS"
110 FOR I = LEN(A$) TO 1 STEP-1
120 :   FOR J=1 TO 25-LEN(A$)+I
130 :       PRINT TAB(J)" "MID$(A$,I,1);"CRSR UP"
140 :   NEXT J
150 NEXT I
```

```
100 A$="GROUP OF WORDS"
110 X=(40-(40-LEN(A$))/2)+1
120 FOR I = 1 TO LEN(A$)
130 :   X=X-1
140 :    PRINT  TAB(39)MID$(A$,I,1);"SPACE  2  CRSR
LEFT";
150 :   FOR J = 1 TO X
160 :       PRINT MID$(A$,I,1);"SPACE 3 CRSR LEFT";
170 :   NEXT J
180 NEXT I
```

```
100 A$="GROUP OF WORDS"
110 PRINT TAB((40-LEN(A$))/2-1)A$;
120 FOR DELAY = 1 TO 500:NEXT DELAY
130 FOR I = 1 TO LEN(A$)
140 :   PRINT CHR$(20);
150 :   FOR DELAY=1 TO 75:NEXT DELAY
160 NEXT I
```

```
100 A$="GROUP OF WORDS"
110 PRINT TAB((40-LEN(A$))/2-1)A$
120 PRINT "CRSR UP" TAB((40-LEN(A$))/2-1);
130 FOR DELAY = 1 TO 500:NEXT DELAY
140 FOR I=1 TO LEN(A$)
150 :   PRINT CHR$(32);
160 :   FOR DELAY=1 TO 75:NEXT DELAY
170 NEXT I
```

```
100 A$="GROUP OF WORDS"
110     X=LEN(A$):IFX/2<>INT(X/2)     THEN     A$="
"+A$:GOTO100
120 FOR I = 1 TO X/2
130 :   PRINT TAB(21-I)LEFT$(A$,I)RIGHT$(A$,I)
140 :   PRINT"CRSR UP";
150 :   FOR DELAY=1 TO 75:NEXT DELAY
160 NEXT I
```

Memberships!

Memberships for 1988 are now available.
Cost: $10.00
Benefits: access to our disk library
           funds used to update disk library
                       purchase hardware for the club
                       carry out special activities
           discount at Software Supermarket (note: only
new 1988 membership cards will be accepted)
           eligible for 'special prize' draw.

See the treasurer, Harry Chong, or any other executive member.

PRIZE DRAW:

PRIZE DRAW - CUGS 1988

At each CUGS meeting during 1988 there will be a computer generated draw for a winner of a prize.

RULES:

Paid up members for 1988 only will be eligible.

Draw will be made at the end of each meeting.

The winner must be present at the meeting to claim the prize. If the drawn member is not present, further draws will be made until the prize is distributed.
All prizes must be accepted as is - no substitutions permitted.
The membership list will be updated at break during each meeting so that new members will be included in the draw.

Prize for February draw - your choice of any 3 disks from the CUGS library.

January winner was - Steven Szlavkovszky

So isn't a 128 just a 64 with more memory?
- THE 128 WINDOW -

Those of us who have invested some bucks in "up-grading" to a 128 or 128D could get REALLY excited about a statement like that! Hopefully, this short column will help those who do and those who DON'T own a 128 understand the machine a little better.

I don't intend to dwell on the usual "hype" about 3 computers in one or double screen displays. Rather, I'll make comparisons between the 128 and its forefather, the 64. First comparison: YES, the 128 IS a C64 - if you WANT it to be (and most 128 users DO). But once you own one for a year or so, and have the time to figure out some of the IMMENSE manuals that came with it, you begin to see the other faces of the 128, and THEY ARE FASCINATING.

The 64 has always (and still is) promoted as a superior graphic machine, and it is. Its unfortunate "handicapped" BASIC has been its only Achilles heel. The 128 has the BASIC the C64 should have had! For the 128'ers in the crowd, and to give the 64 owners something to think about, try these 3 short graphic programs with some of the pictures you probably have on your 64 graphic disks. They allow (with enviable ease) the 128 owner to load and display artwork screens from programs such as DOODLE! or KOALA PEN or PAINTER with just a few lines of BASIC. Sorry, they're not originals, but are extracted from a couple of articles in a May '86 issue of AHOY! magazine.

```
1  REM LOAD A HI-RES BIT MAP SCREEN AND DISPLAY IT
10 GRAPHIC1
20 BANK0:BLOAD"<PICTURENAME>"
30 A=(PEEK(8168))+1
40 COLOR4,A
```

```
1  REM LOAD A MULTICOLOR BIT MAP SCREEN  AND  DISPLAY
IT
10 GRAPHIC3,1
20 BLOAD"<BITMAP NAME>",B0,P7168
30 BANK15
40 POKE(DEC("D01A")),PEEK(DEC("D01A"))AND 254
50 POKE1,PEEK(1)AND254
60 BLOAD"<COLORMEMORY MAP>",B16,P55296
70 POKE1,PEEK(1)OR1
80 POKE(DEC("D01A")),PEEK(DEC("D01A"))OR1
90 BANK15:A=(PEEK(8168)AND15)+1
95 B=(PEEK(8169)AND15)+1
99 COLOR0,B:COLOR4,A
```

```
1  REM CONVERT A KOALA PICTURE FOR USE BY THE
2  REM MULTICOLOR LOADER (ABOVE)
10 PRINT"INSERT DISK WITH PICTURE FILE - PRESS SPACE"
20 GET K$:IFK$<>" "THEN20
30 BLPOAD"?<PICTURENAME>",B1,P24576
40 BANK1
50 FORVM=0TO999:
60 POKE23552+VM,PEEK(32576+VM)
70 NEXT VM
80 POKE24554,(PEEK(34576)AND15)
90 PRINT"NOW, INSERT DISK TO SAVE  ... PRESS RETURN"
93 GETK$:IFK$<>CHR$(13)THEN93
95 BSAVE"<NEWNAME>.BMP",B1,P23552TOP32575
97 BSAVE"<NEWNAME>.CMM",B1,P33576TOP34575
99 REM - BMP=BITMAP   CMM = COLOR MEMORY MAP
```

HAPPY GRAPHICS!
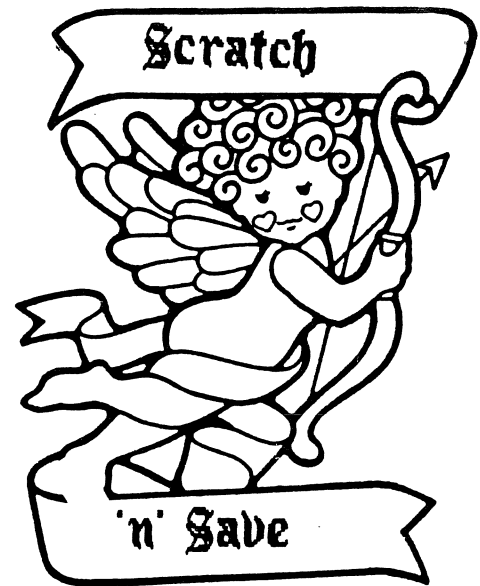
Scratch 'n' Save
by Earl Brown.

This is the big month of February. Well.....29, instead of, 28 days. Along with our regular monthly meeting a lot of us will be attending COMPUTERFEST at the VAGABOND MOTOR INN this coming Sunday. Over 1500 people attended the event last year. It was much heralded by all and rightly so. Unfortunately, I didn't have any extra loot to take advantage of the good prices on books and software that were available last year. This year I managed to put a few bucks aside. How about you?

Two new disks are added to our library this month: GRAPHICS - 7 and COMMUNICATIONS - 4. The listing for these two disks are found elsewhere in this issue of MONITOR. I have also just completed the 1987 Income Tax Program for the 64/128 computers. I've run the programs a few times and, for the average user, all bugs seem to be eliminated. I have backed the odd copy for those who are earlybirds. However, next month will be the actual release, so if any of you pick up a copy today and find a problem with it, I'll be happy to replace it next month (or even earlier - just give me a ring at 543-2068).

I am awaiting the arrival of twenty more INPUT disks for the 64 and 128. The programs from these disks will eventually wind up in our library. However, any of you that would like some direct duplicates before then may contact me and I will back them up at our regular club price ($3.00 each). I am also in the process of typing in CALCAID 64 (a spreadsheet) from the November 1986 issue of RUN. If any of you out there have a copy of this program, please advise me so I can quit entering (it's a looonng program!).

I ♥ CUGS!
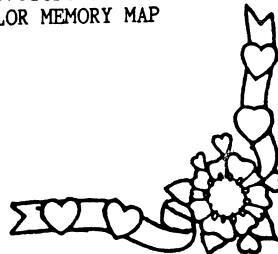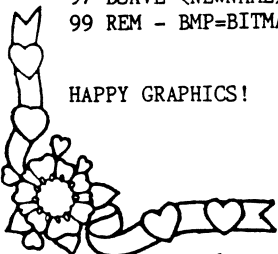
New Club Disks

DISK# GG   GRAPHIC 7

52	HI-RES LISTING 1	PRG
5	LISTING 2	PRG
5	LISTING 3	PRG
10	LISTING 4	PRG
9	HIRES	PRG
5	CHAR DISPLAY.C	PRG
2	QUILT SQUARES	PRG
24	QS.BAS	PRG
31	XMAS SCENE.C	PRG
7	HI-RES SKETCHING	PRG
3	MULTICLR HR SCRN	PRG
3	ANIMATOR	PRG
4	ANIMATOR.49152	PRG
6	LOVE DATA FM	PRG
8	CUBE DATA FM	PRG
27	LOVE.DATA	PRG
27	CUBE.DATA	PRG
3	RASTER INTERRUPT	PRG
7	FILL.BOOT	PRG
21	FILL-64	PRG
11	FILL/DEMO	PRG
2	FILL/PLAYER	PRG
7	BAR CHARTER	PRG
11	VIDEO SETUP	PRG
1	MEDIUM RES.BOOT	PRG
2	MEDIUM RES	PRG
5	MEDIUM RES DEMO	PRG
1	DUMP3-BOOT.C	PRG
4	DUMP3-BASIC.D	PRG
3	DUMP3-M/L.D	PRG
15	DUMP3-SRC.D	SEQ
32	C-64 PICTURE.D	PRG
37	RON HEADROOM	PRG
27	BOB JOGS	PRG

5	COMMODORE LOGO.C	PRG
3	CIRCLES.C	PRG
10	CSLIDE6	PRG
24	SELF HELP	PRG
14	PRESIDENT MAX	PRG
37	DDDAVIDWILLIAMS	PRG
40	?PIC L PEANUTS	PRG
37	DDBLOOM COUNTY	PRG
40	?PIC C GIRL	PRG
14	PRESIDENT MAX	PRG
37	DDBLOOM COUNTY	PRG

DISK# XD COMMUNICATIONS 4

8	TERMINAL.C1 V2.C	PRG
8	TERM.C1 V2	PRG
72	KERMIT	PRG
26	TERM MITEY MO 3	PRG
9	TERM.BL	PRG
100	HALSET	PRG
17	HAL.ML	PRG
132	HAL	PRG
14	TERM SLAVE10.C	PRG
7	TERM.64	PRG
18	TERM HOST8	PRG
31	UNIVERSAL MODEM	PRG
7	TERM.C1	PRG
7	TERM.64.NEW	PRG
1	POLE BOOT.C	PRG
8	INSTRUCTIONS	PRG
102	PHONEPOLE	PRG
11	PP LOAD INST	SEQ

so isn't a 64 just a 128 with less memory?

O.K. O.K. - Stop your whining! After 64 users read the
128 WINDOWS article, they were probably snivelling about
doing the same thing on the 64. So, for all you 64
fans, here's two programs, one (with a little ML) to
show KOALA PAD pictures from BASIC, and the other to
display DOODLE! pics! Have an artistic month!

(P.S. If you're not sure which format your picture uses,
try BOTH - one may work!)

```
10 IFA=1THEN90
20 FORQ=49154TO49317:READI:POKEQ,I:NEXT
30 A$=CHR$(129)+<PICTURENAME>: REM NB***KOALA PICNAMES HAVE
40 FC=PEEK(53281): CC=PEEK(646):              TRAILING SPACES!
70 A=1:PRINT"              LOADING":LOAD A$,8,1
80 END
90 SYS49154
100 WAIT653,1:WAIT653,1,1:REM PRESS SHIFT TO QUIT PICTURE
110 POKE53265,PEEK(53265)AND223
120 POKE53272,(PEEK(53272)AND240)OR4
130 PRINTCHR$(147);:POKE53281,FC:POKE646,CC
140 END
200 DATA 173,17,208,41,239,141,17,208
210 DATA162,127,160,64,32,156,192,162
220 DATA4,160,0,32,161,192,162,131
230 DATA160,39,32,114,192,162,131,160
240 DATA40,32,156,192,162,216,160,0
250 DATA32,161,192,162,135,160,15,32
260 DATA114,192,173,16,135,141,33,208
270 DATA173,17,208,9,34,141,17,208
280 DATA 173,22,208,41,223,9,16,141
290 DATA22,208,173,24,208,9,8,141
300 DATA24,208,162,96,160,0,32,156
310 DATA192,162,32,160,0,32,161,192
320 DATA162,127,160,63,32,114,192,173
330 DATA 17,208,9,16,141,17,208,96
340 DATA142,1,192,140,0,192,160,0
350 DATA177,251,145,253,165,252,205,1
360 DATA192,208,8,165,251,205,0,192
370 DATA208,1,96,230,251,208,2,230
380 DATA252,230,253,208,227,230,254,76
390 DATA122,192,134,252,132,251,96,134
400 DATA254,132,253,96
```

```
10 IF A=0THENA=1:LOAD"<PICTURENAME>",8,1
20 POKE55,0:POKE56,92:CLR
30 GOTO100
40 POKE53265,59
42 POKE53272,120
45 POKE56576,PEEK(56576)AND254:POKE198,0
46 GETK$:IFK$=""THEN56
48 RETURN
50 POKE53265,27
53 POKE53272,21
55 POKE56576,PEEK(56576)OR1:POKE198,0
56 GETK$:IFK$=""THEN56
58 RETURN
PRESS 'D' TO SEE DRAWING"
PRESS 'N' TO RETURN TO NORMAL SCREEN"
PRESS 'Q' TO QUIT"
130 GETK$:IFK$="D"THENGOSUB40
140 IFK$="N"THENGOSUB50
150 IFK$="Q"THENGOSUB50:END
160 GOTO130
```

Next Meeting -

WEDNESDAY MARCH 2

7:00 pm

North-West Leisure Centre

New Members Welcome!

COMPUTERFEST

COMPUTERFEST - FEB. 7, 1988
(sponsored by - Apple II user group)

Vagabond Motor Inn (Spanish Ballroom)

11:00 am - 5:00 pm

Displays by major retailers of computer hardware and
software.
User groups will each have their own display.
A "flea market" of computer items.
No admission charge

COME AND VISIT OUR CUGS BOOTH AT COMPUTERFEST THIS
SUNDAY.

If you want to sell something at the "flea market"
(computer hardware, original software, books etc.), it
must be registered before noon. The Apple II user group
will take 10% or $1.00 (whichever is more) of the sale
price. Money or unsold items can be picked up between
5:00 and 6:00 pm.