

C.U.G.S.

MONITOR

SPECIAL SUMMER ISSUE - VOL. 3 #7/8



THE ULTIMATE "HOME" COMPUTER:



G.U.G.S. Disk Library Order Form - 1988/89

Use an 'x' or checkmark to indicate the disk(s) you wish to order (or use the number you request if ordering more than one copy). Please see that full payment (\$3.00/disk picked up; \$4.00/disk mailed) accompanies your order. When a number of new disks are added throughout the year, a new order form will be printed. Until then, keep your copies of the MONITOR. Any disks added to the collection will be outlined in the monthly paper. More forms are available on request from the librarian.

ARCADE GAMES	AA		COMPUTER UTILITIES	CA		SOUND	SI	
ARCADE GAMES	AB		COMPUTER UTILITIES	CB		SOUND	SJ	
ARCADE GAMES	AC		COMPUTER UTILITIES	CC		SOUND	SK	
ARCADE GAMES	AD		COMPUTER UTILITIES	CD		GRAPHICS	GA	
ARCADE GAMES	AE		COMPUTER UTILITIES	CE		GRAPHICS	GB	
ARCADE GAMES	AF		COMPUTER UTILITIES	CF		GRAPHICS	GC	
ARCADE GAMES	AG		COMPUTER UTILITIES	CG		GRAPHICS	GD	
ARCADE GAMES	AH		COMPUTER UTILITIES	CH		GRAPHICS	GE	
ARCADE GAMES	AI		COMPUTER UTILITIES	CI		GRAPHICS	GF	
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TEXT GAMES	TC		DISK UTILITIES	DG		128 DISK	02	
TEXT GAMES	TD		DISK UTILITIES	DH		128 DISK	03	
TEXT GAMES	TE		DISK UTILITIES	DI		128 DISK	04	
TEXT GAMES	TF		GENERAL PROGRAMS	MA		128 DISK	05	
TEXT GAMES	TG		GENERAL PROGRAMS	MB		128 DISK	06	
TEXT GAMES	TH		GENERAL PROGRAMS	MC		128 DISK	07	
TEXT GAMES	TI		GENERAL PROGRAMS	MD		128 DISK	08	
BUSINESS	BA		GENERAL PROGRAMS	ME		128 DISK	09	
BUSINESS	BB		GENERAL PROGRAMS	MF		128 DISK	10	
BUSINESS	BC		GENERAL PROGRAMS	MG		128 DISK	11	
BUSINESS	BD		GENERAL PROGRAMS	MH		128 DISK	12	
BUSINESS	BE		GENERAL PROGRAMS	MI		128 DISK	13	
BUSINESS	BF		GENERAL PROGRAMS	MJ		128 DISK	14	
BUSINESS	BG		GENERAL PROGRAMS	MK		128 DISK	15	
BUSINESS	BH		GENERAL PROGRAMS	ML		128 DISK	16	
BUSINESS	BI		GENERAL PROGRAMS	MM		128 DISK	17	
BUSINESS	BJ		SOUND	SA		128 DISK	18	
COMMUNICATION	XA		SOUND	SB				
COMMUNICATION	XB		SOUND	SC				
COMMUNICATION	XC		SOUND	SD				
COMMUNICATION	XD		SOUND	SE				
COMMUNICATION	XE		SOUND	SF				
COMMUNICATION	XF		SOUND	SG				
COMMUNICATION	XG		SOUND	SH				

Make requests in person at club meetings, or by phone or mail to:
 Earl Brown (543-2068)
 727 Rink Ave.

EDITORIAL:

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THE MONITOR is published monthly by the COMMODORE USERS' GROUP OF SASKATCHEWAN (CUGS), Regina, Sask., Canada. CUGS meetings are held at 7 pm the first Wednesday of every month (unless otherwise noted) in the North-West Leisure Centre, corner of Rochdale Boulevard and Arnason Street.

Anyone interested in computing, especially on the C64, 128 or 64C, is welcome to attend any meeting. Out of town members are also welcome, but may be charged a small (\$5.00) mailing fee for newsletters. Members are encouraged to submit public domain software for inclusion in the CUGS DISK LIBRARY. These programs are made available to members. Any member is entitled to purchase DISKS from our public domain library for a nominal fee. Programs are 'freeware', from computer magazines, or the public domain. Individual members are responsible for deleting any program that he/she is not entitled to by law (you must be the owner of the magazine in which a particular program was printed). To the best of our knowledge, all such programs are identified in their listings. Please let us know if you find otherwise. Contact Earl Brown, 737 Rink Ave.

CUGS is a non-profit organization comprised of C64, 64C, C128, and 128D users interested in sharing ideas, programs, knowledge, problems and solutions with each other. The more members participate, the better the variety of benefits. Membership dues are pro-rated, based on a January to December year.

In This Issue:

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128 WINDOW	- Summer neat quickies!
CUGS CARTOON #1	- Compu-chuckle!
WOW (WORDS OF WISDOM)	- News/Info for members!

Meeting place:

Agenda:

CUGS Disk Library (new updated catalogs available to members)

1750 RAM EXPANDER - Barry Bircher

Questions/Problems/Hints etc.

Prize draw - 3 library disks
(winner's choice)

June winner - Shaun Hase

Welllllllcome back - soon, anyway. I hope your summer went (lucky ones can read "is still going") slowly and enjoyably. Mine, unfortunately, has gone far too quickly, but busily. In fact, most of our executive has been busy (see several columns inside!). Also unfortunately, I spent far less time with my beloved 64 than I planned or hoped!

I spent my summer investigating and even learning several computer languages, particularly those implemented on several machines - Forth, Pascal, C programming language, 6510 and 68000 Machine Language, Logo and ... BASIC!!!

My first acquaintance with a computer was with Applesoft BASIC in 1977. I can't say it was "love at first sight", but it hooked me on computers and gave me my first real taste of the power of this thing called a computer. When I committed my time and resources (financial and physical) to learning Commodore equipment, I learned very quickly the thrill of a good BASIC and the pain of a thinner one. I had opportunities to use machines with the powerful Microsoft BASIC 4 and my own machine had the poor cousin, BASIC 2!. I won't get distracted into a tirade about Commodore's incredible decision to include with their most powerful colour and sound machine a BASIC with NO STANDARD COMMANDS TO MAKE USE OF THE POWER.

BASIC's beginnings as a simple language intended for computer beginners seemed to "damn it" to the realm somehow less of a functional language than the others that began to appear. In fact, little was done to upgrade BASIC for a time, while all the other now-popular languages developed and refined. Original BASIC, intended for use on mainframes with printer terminals, did not deal easily with graphics and sound, was a simplistic language which moved slowly, sacrificing speed of execution for clarity of instruction. The newer languages were developed to do what BASIC wouldn't allow or did poorly to be done more quickly and efficiently usually for some dedicated purpose. (COBOL was developed for business calculation; FORTRAN for scientific research; Forth for dealing with data manipulation; Logo for dealing with graphic manipulation; LISP for dealing with language semantics, and so on.)

BASIC tended to be considered "OK for beginners, but ..." or "just TOOoooo slow!". I'm here, after a summer of much reading and learning to tell you that it JUST AIN'T SO!

Even working with BASIC 2.0, you can accomplish much that would take the inevitable ML critic two weeks to THINK about in a half-hour in front of your beloved keyboard. I'm here to say: BASIC programmers UNITE! SPEAK OUT! FIGHT BACK! but how??

BASIC has "come a long way, baby" since good ol' BASIC 2.0. If you can, invest in one of the new BASIC's available for the 64/128 like SIMON'S BASIC, ULTRABASIC, or BECKER BASIC. Even COMAL, available as a PD disk from our library, provides a refreshing look at a

structured BASIC-similar language. All these extensions or improvements make BASIC more versatile, quicker and a much more powerful language than you might believe.

Even if you want to keep pluggin' along with BASIC 2.0, consider one of several available compilers now available for BASIC such as the simpler ones on our utility club disks, or professional ones like PETSPEED or FASTBASIC. Compilers by nature don't like any really fancy bit-diddling to compile, which makes BASIC 2.0 a natural for creating your source program. Compiled BASIC runs on any machine, without any extensions loaded, at several times the speed of BASIC.

So, most of the "hacker" objections to using BASIC as a true programming language can be eliminated by the use of one or both suggestions - compilers speed things up; extended BASIC's speed things up A LITTLE and make accessing the sound and graphics in your machine remarkably easy.

The newer BASIC's include all the "goodies" Pascal, Forth and COBOL programmers brag about - direct memory access, speed, stand-alone programs, library calls, more powerful loops, modularity, and something else for YOU to brag about - probably the MOST READABLE code around. Don't be afraid or ashamed to strut your stuff in BASIC. More on doing just that next month!

This issue is packed with good stuff for you. Richard (remember him, the Prez?) starts a new series on using a word processor. Earl gives an insight into the new ROMs for the 1571 and the C128. There's a little humour and a lot of history from Barry and a little hinting and prodding from me, your ed.!

Enjoy the issue. In coming issues this year yet we'll talk about languages in more detail, our new soon-to-go BBS for club members, more history, more word processing, and - who knows - maybe we'll hear from some of the rest of our 47 members! It looks like a good year - why don't you join us - Sept. 7, 7 pm, North West Leisure Centre - Arnason and Rochdale - don't be late!

Maze Meanders:

This summer I had two possible choices of activity. I could sit in front of my C64, in air-conditioned comfort, and write all those programs I have been planning this past year OR I could paint my house, ... and garage, ... and fence. I made the decision that only someone placed in this situation could make.

I am not a painter. I don't even try and pretend to be one. I have painted before which generally means I can recognize the equipment needed and I know what process is involved. One nice thing about painting is that you don't have to think while you are painting or if you do decide to think, you can think about whatever you want. I managed to plan out some articles for 'The Monitor' which will appear in the coming months. I planned how to spend my lottery winnings if my 1 in 14 million chance comes through. I also noticed a number of fascinating phenomena about paint and painting (or life in general) which I would like to share with you:

- 1) Preparation ALWAYS takes twice as much time as estimated.
- 2) The best piece of equipment for removing old paint is a roller covered with new paint.
- 3) Preparation days are always beautiful. Painting days are freezing cold or boiling hot and ALWAYS windy.
- 4) Paint stores have only one employee working at any time and there will always be at least three customers ahead of me.
- 5) If a paint store employee answers a question with "Ya, that should work!" - it won't.
- 6) One coat covers all - never does.
- 7) Drops of paint flying off a roller defy ALL laws of science.
- 8) The amount of paint that splatters is directly proportional to the contrast between the paint color and the color of surrounding surfaces.

- 9) Drop sheets are too short — or — paint drops have guidance systems that allow them to find uncovered spaces.
- 10) People watching you paint are the only ones who can find the places you missed. It is their duty to point these places out to you.
- 11) If someone volunteers to help, he will probably need the ladder just when you do.
- 12) The harder something is to reach, the better it will turn out. It is the easy, visible areas that will be messed up the most.

Welcome back from summer!

Richard Maze

C.U.G.S Meetings - 1988

September 7
October 5
November 2
December 7

Meeting time: 7 - 9 pm

Room #1 N-W Leisure Centre

SCRATCH 'N' SAVE

by Earl Brown

Well, after months of waiting, I finally picked up the new ROM fix for my 1571 disk drive. If you have one of the earlier 1571 drives (info about this new ROM is listed elsewhere in the MONITOR) and want one of them as well, SOFTWARE SUPERMARKET has now got them in stock, priced under \$20. If more of you want them than he has in stock, Bart suggests they are now readily available. They are real easy to replace. Unscrew the four screws that attach the housing and remove the cover. Also unscrew the four screws that attach the power supply housing to the base. You can fold this housing back without even removing a plug and find the printed circuit board that contain all the 1571 EPROMs. Make sure your free of any static electricity before you replace the proper ROM chip. Replace the eight philips screws and your back in business. Your drive is now updated and it took only a very few minutes of your time.

Added to the Disk Library this summer are COMPUTER UTILITIES DISK 9, DISK UTILITIES DISK 9, BUSINESS DISK 10, GRAPHICS DISK 12, ARCADE GAMES DISK 15, and GAZETTE DISK 27. Only the Gazette disk directory is listed in this summer issue of MONITOR because all the others have been included into our new DISK LIBRARY CATALOGUE. Each paid up member will receive a copy of the catalogue when it becomes available (between now and the September CUGS meeting).

Time Machine

A Known History
AN Uncertain Present
A Possible Future
Of the Micro Computer Industry
As Seen by B. Bircher

Whatever happened to the computer revolution everybody said was inevitable? Remember when leading industrialists said that there would be a time when no paper would be in use by the year 1990? Hah! ... If anything, the computer has INCREASED the amount of paper! Why! ... Some say the "futurists" had their eyes open too wide. That's perhaps hitting below the belt as it's hindsight that's always correct. The computer has decreased the amount of paper used in, say, an accounting office, for drafting and inventory-type applications. Even so, the final copy is invariably a hard copy.

The calculation and text manipulation capabilities of the computer make for easy redoing/correcting of a job at hand. It allows us to concentrate on a being more accurate and more thorough. Thus, the final copy is more accurate, less error prone AND generally much larger in size, because it's easier to do. Take, for example, the latest fad of desktop publishing. Desktop Publishing programs allow many people to find many uses for them in everyday activities. I, for one, find it appealing to be able to write an attractive update newsletter on dental equipment to supply our customers with technical tips on how to reduce maintenance costs.

Back to the revolution. This revolution is approximately 10 years old and still in it's infancy. It has yet to full hold of us. We (computer fans) are a minority of people who have found ways to use a computer in everyday life. I feel NOT everybody has to have one (a computer). That would be a poor assumption. Eventually there will be so many services offered for computers with modems that it would make real sense for EVERYONE to own one. For example, there are now ONLINE SERVICES that provide a consumer his/her in-home personal bank machine, online shopping, online everything, including online bill paying! These services save you gas or, at least, the postage (which is STILL on the rise)!

Remember the FORD Model "T". It was to the automotive industry what the home computer is to modern home living. It was the car that brought about a major revolution in transportation in the early 1900's. Look at the automotive industry today. At the outset there were many companies producing cars, usually at a prohibitive price for the "average person". So it began with computers. Many small companies producing expensive micros that few could afford. The consumer ultimately determined the product that sells and thus the existence of a company. The marketplace decided that they would only support maybe 4 or 5 automotive companies. Ford, GM, Chrysler were the biggest of the North American market and a few foreign companies like, Datsun, Toyota (overseas imports) and the like came later on.

Now, as then, the average consumer decided that IBM, Apple, Commodore, Atari and Tandy would be the major players. Most others would die (barring the "elite, high-end" types like Wang and DEC). Adam computer (Coleco), TI99/4A (Texas Instruments), Timex/Sinclair, Osborne, and several others passed away. Not because they were bad computers, but through bad timing, poor management decisions, or poor consumer acceptance, even technical obsolescence before marketing due to rapidly progressing technology.

The purpose of this column is to give you, the reader, some tidbits about what has happened in the computer industry to date.

The future may hold many surprises yet for the microcomputer industry. I do not propose to know what they are but will attempt to clarify what has happened in the industry, what is happening now and glimps the future by looking at where it came from.

As I sit here typing on my machine, my mind is wandering around thinking about what I have just read in several books and magazines the past couple of weeks. It boggles the mind to see how far the computer industry has come in such a short time compared to man's history of invention. Nowhere in the history of man has there been so much discovery and knowledge gained in such a short time, and it shows no sign of letting up. In fact, it is seen to be accelerating! It's been said that man has learned more in the last 15-20 years than s/he (I don't want to be called a chauvinist) has learned since the beginning of recorded history. This is readily seen in the microcomputer industry, as I hope to show you.

In the beginning:

In the beginning, God said, "Let there be light", and there was light ... OOPs too far back. The computer is thought to be a 19th century invention. This is only partially true. Computing has been going on for centuries, as far back as caveman days. (No. I am sure they didn't own a copy of Pac-man). It isn't computing as you and I know it, but computing none-the-less. Man has always wanted to count. He first used his fingers and learned to count his "digits" and thus the base ten number system was born. Then, as now, numbers mean arithmetic. With arithmetic came calculating devices such as the abacus, Napier's bones (the first slide rule) and Pascal's calculator (the first adding machine).

In 1833 a guy by the name of Babbage first visualized a computer as we think of one today. He saw a machine that using cards that were punched with holes to represent numbers and instructions. These instructions had to be preprogrammed to do calculations at a later time without man's help. (This is an important difference between a calculator and a computer - a calculator needs you to punch numbers and functions "on the fly" for it to work). Babbage never built his "analytical engine", but his notes proved he knew how to make one.

The first generation electronic computer was made in the 1950's. John Vincent Atanasoff (1903) applied and got a grant of \$650.00 from the Iowa State Research Council to build his "ABC" (Atanasoff-Berry Computer). Clifford Berry was Atanasoff's assistant, supplied by Iowa State. The "ABC" computer was completed in the fall of 1939, at which time the two received 2 more grants totaling \$1460.00. Later in 1940 they received a further \$5000.00.

In December of 1940 a second claimant came on the scene by the name of John W. Mauchly (1907). He developed an analog computer, but it was too cumbersome to be of real use. Atanasoff and Mauchly met in that December and more or less exchanged ideas they had about their respective machines with Atanasoff, having given Mauchly most of his ideas. This meeting was the scene of some conflict by accounts of both Atanasoff and Mauchly when Atanasoff failed to get patents applied to his ideas.

In the summer of 1941 Mauchly applied for a course in the University of Pennsylvania's Moore School of Engineering. His instructor was one J. Presper Eckert. Mauchly was later to be hired by the University. In a laboratory Mauchly was combining Atanasoff's ideas with his own. A paper written by Mauchly was read by one Lt.

Herman Goldstine. Goldstine was liason between the United States Army Ordnance Department's Aberdeen Proving Ground and the university. Goldstine was excited by this project and managed to get the Ordnance Dept. to fund a project to develop a computer jointly with the University of Pennsylvania's Moore School of Engineering. On April 9, 1943 the project got under way.

The computer thus developed was called the "ENIAC" (Electronic Numerical Integrator And Computer). It was a huge monster that of over 17000 vacuum tubes of 16 different types (transistors were too new), 1500 relays, 70,000 resistors, 10,000 capacitors, worked on a clock speed of 100,000 cycles and cost \$486,804.22. It consumed 140 KiloWatts of power (It would cost \$840.00 to operate for 24 hours at todays prices). A dedicated room and cooling ventilation system consisting of 2-12 HP blowers that blew in over 600 cubic feet of air to cool the components in each of the 40 panel setups. It covered 15,000 square feet.

The computer did work but was prone to errors due to the failure rate of the vacuum tubes. The vacuum tubes used were very reliable when left on all day and night and burned only one tube, on average, every two days. Even then it took maybe 15 minutes to find the problem. If you turned off the machine for overnight, it was found that several tubes needed to be replaced, so it was decided to leave the ENIAC on all the time. The ENIAC was not initially designed to have a stored program as we are accustomed to now. In 1947, it was modified and could hold up to 1800 intructions for any one program. Finally in October 2 of 1955 it was finally shut down.

It was conjectured that the ENIAC did more calculations than the whole human race did by hand prior to 1945.

There were several more computers being developed at this same time, too numerous and out of the scope of this article. They are mentioned later for your information. For further information on the ground grouse please contact your wildlife offic—. ?-oops, Please contact your local library under Computer: History.

In later 50's the second generation computer using transistors were built. Computers of this era were mainly used by scientists, universities and governments. Every day users like us had really no hope of understanding this machine as you needed a PH-D in machine language and, of course, a computer (read "tons of money"). As a matter of fact, you needed a degree in psychology in order to control your temper when programming these things. They were NOT "user friendly".

It wasn't until the revolution of electronics in the 19th century that things really started to happen. In 1948 John Bardeen, Walter Brattain and William Shockley invented the discrete transistor in the Bell Labs. In 1958 Fairchild Semiconductor introduces the planar process which allowed mass production of transistors.

The early 60's brought the third generation using transistors and some integrated circuits. The late 60's are called fourth generation of computers which use a large number of IC's on their boards. We are now entering the fifth generation, which use VLS IC's (Very Large Scale Integrated Circuits).

Some manufacturers saw that there were curious hobbyists who would like to get their hands on one. Naturally, they started to ship out "build it yourself" kits to satisfy these early "hackers". The first kit (1974) was the Scelbi 8H based on the Intel 8008 CPU (first introduced in 1972) which had a whopping 4K of RAM (Random Access Memory). I have heard that these "hackers" had to program in machine language out of necessity, as there were no such thing as an OS

(Operating System) or DOS (Disk Operating System). The programmer had to input his coding one step at a time. For example, if he wanted to program the chip, he would set up 8 on/off switches to correspond to a binary code for the command or number and then toggle a read/write switch for the chip to store the command. Then, on to the next command, ad infintum. That's quite a laborious way to program by today's standards. Writing and debugging was very time consuming, to say the least.

Next month we'll have a look at the way things turned out in the past and on to the present in a point by point generalized layout.

See you then...

Wordprocessing Wizardry!

by Richard Maze



This article is the first in a series involving how to perform particular tasks with a word processor. In each of the articles I will use Paperclip as the word processing program. If you are using a different word processor you should find you don't need that many changes to make these processes work on YOUR word processor. In this and each subsequent article, I will explain how to set up Paperclip to do the general task. Then I will also examine different options to considered.

#1. CREATING A TITLE PAGE

USE: A title page is used as the introductory page of a report.

GENERAL DESCRIPTION: Report title is centered in the middle of the page. In the bottom right-hand corner is the writer's name as well as any other pertinent information (who report is for, date, school subject etc.).

SET-UP: Set paper size to 11 inch (66 lines) (usually the "default" setting), printing to 60 lines, margins to 10 and 75, use the vertical position command to move down 32 lines and turn centering on. In Paperclip this can be done on one line starting with a CHECKMARK (to indicate FORMATTING) followed by:

```
pp66:pg60:lm10:rm75:vp32:cn1 <RETURN>
```

The reason for only printing on 60 of the 66 lines available is to allow a one-inch margin up from the bottom of the page. Setting margins at 10 and 75 does two things - it insures that the title will be centered properly if your paper is set properly in your printer, and it gives a one-inch right margin. The vertical position command determines how far down on the page printing will start. For different sizes of paper, calculate this by dividing number of lines available by 2 and subtracting one from the answer. For example, for 14 inch paper (84 lines) the vp would be $84/2 = 42$ and then $42 - 1 = 41$. Use vp41. Turning centering on means the program will calculate the horizontal placement - you don't have to.



Now turn ALL-CAPS MODE on and type in the report title. If the title line contains less than 65 characters it can be entered on one line. Titles longer than 65 characters must be divided into two lines. If the title is to be divided, separate it into two logically equal parts. The first part is typed in now followed by a return. The next line must be left blank and then the last part of the title is entered. This will produce a double-spaced title. Do not underline the title unless it is the title of a book. Don't forget to turn off ALL-CAPS MODE.

The title has been entered so centering must be turned off and the bottom-right corner information entered. To get down to the bottom corner involves printing a number of blank lines. To calculate the number of lines needed, use the following: 28 - number of title lines (include blank lines) minus number of lines needed in bottom-right. The 28 comes from half a page (33) plus first title line (1) minus one inch up from bottom (6) 33 + 1 - 6 = 28. For a typical page with a one-line title and 4 lines used in the bottom-right you would have to print 23 blank lines. Another thing to calculate is the length of the longest item to be entered in the bottom-right corner. Count the number of characters in this item and subtract this number from 75 (the right margin). The answer will be the new left margin. For example, if your name contains 12 characters your new left margin would be 75 - 12 = 63. All of this can be entered on one formatting line by entering: <checkmark> cn0:lm63:ln23 <RETURN>. Note that the ln23 must be at the end of the line.

It is now time to enter the bottom lines. For school reports this is usually four lines - your name, subject, teacher, and date. For university, add a student number line (and reduce ln23 to ln22 above). This information is entered in lower case letters with proper names capitalized.

The complete title page file would look like this:

(Note: substitute checkmark for %)

```
%cm:title page
%pp66:pg60:lm10:rm75:vp32:cn1
TITLE LINE HERE
%cn0:lm63:ln23
My Name Here
Subject
Teacher
Date line
```

To check before printing, use the video output (in 80 col. mode if available). The check will be the information in the bottom right-hand corner. If a name is split across 2 lines you have set the left margin to the wrong value. If one print line appears by itself on the next page, print one less blank line. Note: if you have both errors, correct the left margin error first and redisplay, this may result in the second error disappearing as well.

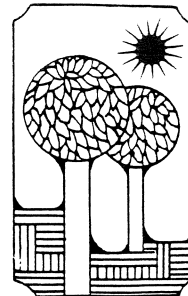
To print the title page, make sure the paper is properly aligned in the printer with the top of the page lined up just below the printhead. You should be able to fold the page in half vertically and horizontally. If everything is lined up properly, the folds will split the top title line. The bottom right-hand corner information will be one inch in from right margin and one inch up from bottom of the page. If this doesn't come out this way, the first thing to check is the alignment of the paper in the printer. Errors of a few characters or lines can often be corrected by changing the position of the paper in the printer. Errors of more than a few characters indicate a formatting error. Check the formatting commands.

Save the complete file. The next time that you need a title page just load in the file and change what you need to make the new title page.

WANT AN ARTICLE ON A PARTICULAR TOPIC?
LET THE EXECUTIVE KNOW YOUR WISHES.

Bircher's Babble:

Babblin' on...and on...and on
B. Bircher

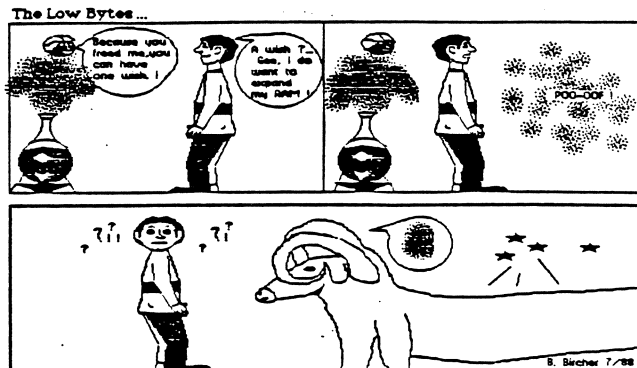


So ... What are you looking at, huh?? Quit staring!!! You expecting maybe George Bernard Shaw or somthin'. Well, I hope not 'cause you ain't gonna get a good writer here 'cept maybe Ken or Richard. I certainly ain't one...so there. The truth of the matter is that we haven't gotten too many mail bags full of articles for this here rag, and I'm limited at the moment to maybe 4 or 5 more articles of my own ideas. I like to read others experiences with their "com-putters". And I'm sure there are more writers in our club besides 4 or 5 regular contributors. The general misconception most club members have is that they think they don't know enough about computering or how to write a reveiw on software or hardware. Nothing could be further from the truth. Like, look at me man! I'm no Jim Butterfield!

As a user and "just a member" myself, I have found only one real obstacle to writing things like this, and that is TIME, not lack of knowledge. We all have different programs we use or have used that we, for one reason or another, believe it to be THE program or hardware to have/not have. After all, we did buy it, or were sorry to have bought it! This information may seem trivial to you but, if you feel strongly for or against some program or hardware item, then, by all means, PLEASE....PLEASE....PLEASE write up how you feel about it. This may tip another member to buy or not to buy, and thus YOU have fulfilled the ultimite goal and reason for the existence of our club.

Perhaps you have a knack for writing short one-liners that can compute the answer to life's existence (the answer, of course, we all know is 3.316). We want the kind of program that we could fire into our own com-putters at home and make the screen burst into flames with unknown wonders! Even longer programs that are of interest to you (or have been written by you and that you don't mind putting into the public domain or shareware) will spark the interest of others so ... submit programs to Earl, our own librarian, and watch your programs help others. Also, if you want to demonstrate a software or hardware item we will be glad to reschedule our ever increasing backlog of presentations we have planned (ed. note: Bircher have heap much tounge in cheek!) just so you can boast your wares and give Ken and Richard a break ... huh!.

CompuChuckle



B. Bircher 7/88

128 WINDOWS

By Earl Brown

1571 DISK DRIVE PROBLEMS?

Relative file problems? "DEVICE NOT PRESENT" errors? I/O error 5 when using Superbase? Major problems when you have 2 or more files open? Painfully slow writing to the second side of the diskette? SAVE with replace problems? Takes forever to recognize a "flippy" disk? If you have one or more of these problems with your COMMODORE 1571 DISK DRIVE, don't despair, don't trash your 1571, do get a:

1571 FIX ROM

The 1571 fix ROM makes the following modifications to the Commodore 1571 Disk Drive operating ROM. The original 1571 ROM number is 310654-03. The 1571 FIX ROM has the number 310654-05.

1. The Set Overflow flag was not disabled when exiting the 1571 controller. This is the cause of many seemingly random and difficult-to-reproduce problems. This particularly explains most of the Relative File problems.
2. TSTAIN caused 'DEVICE NOT PRESENT' errors because the IRQ source was never cleared. This has been fixed.
3. The BAM swap bug. When all the buffers are allocated by the application, the DOS frees up the BAM buffer by marking it out of memory. When it was reread it would also reread the BAM for side one. If the side-1 BAM was 'dirty', it would be corrupted. The fix uses a new RAM location, \$1B6 for a swap flag, and rebuilds the side-1 BAM upon a reread. This usually occurs with multiple files open and sectors being allocated on both sides of the disk.
4. Previously BAM allocations on side one would cause the BAM image to be written every access. This has been fixed.
5. SAVE-@ (SAVE with replace) is fixed. The variable NODRV is now a 16-bit addressable variable, and the STLBUF routine steals the buffer locked by drive one. Original 1541 bug.
6. Previously an active collect in 1541 emulation mode would write a zero to the double sided flag in the BAM. This has been fixed.
7. Applications which addressed tracks beyond 35 (on any side) previously used incorrect bit cell densities because the table TRKNUM only listed up to track 35. The tables TRACKN and WORKTABLE replace TRKNUM and WORKTBL, respectively, and extend the tables to track 40. Same situation on 1541's.
8. A 1541 ROM revision changed the variable TIM from \$3A to \$20 which resulted in problems for some applications. It is once again \$3A, like the original (-05) 1541 ROM.
9. USEDTS returned a 'BLOCK NOT AVAILABLE' status when the number of blocks free was equal to 3. This has been fixed.
10. Previously during a BURST GCR FORMAT the activity led was not activated. This has been fixed.
11. The 1571 BURST LOAD routine would not load 'Locked Files'. This has been fixed.
12. Previously while loading files using the BURST LOAD routine, retries were not performed. This has been fixed.

13. Motor acceleration time for the MFM controller was too long, which affected performance when reading and writing in MFM format. This has been fixed.
14. Previously, determining whether a diskette was double-sided or single-sided GCR would take too long due to valid sync pulses found on 'flippy diskettes' and MFM diskettes. This has been fixed.
15. SPINP interrupts from SP (fast serial input) were not enabled properly. This has been fixed, but has no affect on the operation of the serial bus.
16. Previously if a copy was performed addressing drive one, the error channel would return status '00,OK,00,00'. This has been fixed.
17. Previously the ROM test did not check the first page in ROM memory. This has been fixed.
18. The ROM checksum at \$8000 and \$8001 is now \$23, \$C0.
19. The ROM signature at \$C000 is now \$D3.

NEW CUGS DISK LIBRARY ADDITION

GAZETTE DISK # 27

SPEED FILE
SKEET
GEO-CONVERTER
MOB MAKER
FILE STRIPPER
SPEED/ALIGNMENT
KEYBOARDEHANCER
ENHANCERCUSTOMZR
TREASURE DIVER
RELATIVE EASE
TRAP
FRACTALS
POINTER DEMO
CONVERTER BOOT
ARCADEVOLLEYBALL
RAMDISK 64
GRAPHIC WEDGE
JERICHO
ERROR ANALYZER
EMERGENCY BASIC

BAGGER
QUICK SAVE
SYS STAMPER
ZIPPER 1
ZIPPER 2
ZIPPER 3
SCRAMBLER
V-8 LOADER
V-8 DEMO1.BOOT
V-8 DEMO2.BOOT
V-8 DEMO3.BOOT
V-8 DEMO4.BOOT
V-8 DEMO5.BOOT
GEOS SUPR PTR DR
PR CUSTOMIZER
RAM EXPANDER 64
INVESTOR
ZOOM
BB SCREEN ED
BB CUSTOMIZER
BB BARRAGE

Next C.U.G.S. Meeting:

Wed. Oct. 5/88
7 pm Room #1

North-West Leisure Centre.
New Members Welcome!