

# SPRITE CHASER

No. 4

Official Newsletter of the #1 ADAM USERS' GROUP

THE SPRITE CHASER is published by the #1 Adam Users' Group for the enjoyment and furthering the knowledge of its members in the use of the Adam Computer system. Address all correspondence to The Editor, #1 Adam Users' Group, P.O. Box 3761, Cherry Hill, NJ 08034. (609) 667-2526

Articles from other newsletters are welcome and will be included to broaden our readerships base of knowledge and experience level. All submissions will be noted and credit given to the author. Articles from this newsletter may be reprinted for use by other user groups so long as the user group in question is an existing viable entity for the benefit of those wishing computer literacy. User groups that exit without a membership at large will not be considered user groups per se. All articles or letters sent to the Editor for publication are subject to the unrestricted right to edit and comment.

THE SPRITE CHASER is available by subscription for \$20.00 per year. It is free to members of the #1 Adam Users' Group. Send all subscription payments and/or change of address to #1 Adam Users' Group, Subscription Service, P.O. Box 3761, Cherry Hill, NJ 08034.

It will be the policy of the #1 Adam Users' Group, not to pass, copy, or sell copyrighted text, data packs, diskettes, or any other copyrighted medium thru the Group without the permission of the copyright owner whether by written permission or through the Copyright Clearance Center, 21 Congress St., Salem, MA 01970.

Membership in the #1 Adam Users' Group does not impart to the general membership any corporate authority or status to act for the corporation. Membership in the #1 Adam Users' Group is for one year from the month membership is acquired. Present membership rates are: \$15.00/yr. as of January 1, 1985. Rates are subject to change without notice.

## SPRITE CHASER STAFF:

PRESIDENT -	Jay H. Forman	EDITOR -	Steve George
VICE-PRESIDENT -	Steve George	RESEARCH EDITORS -	Larry Iocco
SECRETARY -	Michele Lovenstein	SOFTWARE LIBRARIAN -	Steve George
TREASURER -	George Rhodes		

## THE EDITOR SPEAKS

I hope you have been enjoying the new look of the "Sprite Chaser". I am looking forward to providing you with more of the same in the future. I regret to inform you however that **Ray Russell WILL NO LONGER** be associated with the Sprite Chaser. If you have sent him technical questions and have not received an answer, please write to me with the details. From now on, please send all technical questions to me. Most questions are answered and mailed out within 2 days. This is the same with the **Software Exchange**. Disks are mailed out a day later, as I feel it is **VERY** important that you are given the information you seek as quick as possible! Other groups are very slow in answering questions and even slower when it comes to software! While I am on the subject of other groups, I am sorry to announce the demise of one of the better ADAM newsletters - "**Serendipity**". We hope that the users who were contributing to the livelihood of that publication, and who no longer have a home, share with us!!

Some of you may wonder why there is no **user mail or questions and answers in this issue**. Part of this is due to Ray's lack of replying, but also, I have received fifty letters or so since July, and have **answered them all** (I hope satisfactorily!). As a member of a few other ADAM users groups I know I would rather get a personal answer a week after I send it then wait 2 months (or longer) to read a reply in the newsletter. This also provides more room for more meatier data like modifying tape-only software to run off of a disk! I hope you understand and keep your questions coming! They will **ALL** be answered!

### What's New

Unfortunately, as reported in an earlier issue, **Jeopardy and Best of Electronic Arts** were canceled. I managed to see both games and was impressed. Jeopardy was even much more playable than **Family Feud** and Electronic Arts had two games on one tape. Why a company would spend all the money to design a game, collect money from people, then cancel it after it was finished, and refund the money is **beyond me!!** One begins to understand exactly why this machine is not accepted by "the world". It was **murdered** by its creators!! Rumor has it that some people were sent the programs by mistake...If you received either program, drop us a line and let us know.

This issue brings you good news and bad news about the ADAM. Which one do you want first? I'll give you the good news. Third-party support of ADAM seems to grow daily! New programs and ideas are being generated and more people bought ADAM in 1985 than when it was first released. The bad news - as we have all expected Coleco announced it is "out of the electronics business". Which means the 800 number will eventually be phased out and getting software from them will become impossible! I recommend you purchase hardware **now**, especially the modem and disk drive because **these will dry up!** For anyone who is a member and who bought the modem and **CANNOT** get the ADAMLink II software from Coleco, I would be willing to "upgrade" your original AdamLink I software. I will do this until I hear from Coleco to desist. I will also upgrade your SmartFiler V21 to 27D. We will be supplying the means to create disk versions of your DDP (i.e. Dragon's Lair, 2010 Text, etc.) in coming issues. In this issue we tell you how to modify

**Donkey Kong and Donkey Kong, Jr.**, to run from disk.

In order for me to upgrade your software, you must: Make a backup of your original (with Packcopy or some other backup program) and mail the original to me with \$5 to cover postage and handling. I will copy the new version to your tape and mail it back promptly. I will also modify any SmartBASIC below version 79. I cannot send you copies on anything but the original!

**Eve Electronics** has not released its mother-board 80 column card yet. It has been pushed back again to March and last I heard will only include **Monochrome capability**. Which means you need a monochrome monitor in order to use it. It will also cost in the \$250 range. The calendar/clock/speech synthesizer is currently available, and although many are extremely impressed and happy with the product, I've heard complaints about the software driving the synthesizer as being "superficial". Look for a detailed review in a future issue.

We now have 28 disks in the **Software Exchange**. We have some of the PD programs from other user groups-NIAD, ECN, AUG and others. Also have many CP/M programs. Look for related article in this issue. This will be the last issue in which all the disks will be listed due to space problems. Starting next issue **only new disks will be included**. In order to see all disks you must look in back issues. You can also send me a SASE, \$1 to cover Xerox costs. I will send you most recent list. You could send me a dollar equivalent in stamps. Please specify you want the updated disk list.

I have found two excellent sources for finding out exactly what is available for ADAM in new hardware and software. One is M.W. Ruth, Co. They have an up-to-date catalog, stock what they sell (and will tell you if it is not in stock), and promise fast shipping. Another excellent source is the back of **Family Computing Magazine**. I recently saw an ad for an **Okimate 10 or 20 interface**. This enables you to do color screen dumps of ADAM graphics. Also converted ADAM to use the Commodore Serial bus, which enables you to use hardware designed for the C-64!! If any of you have purchased this let me know that you think. I have heard about this interface and it is nowhere near as easy to use as the SP-1. The Okimate only runs at 60 or 80 cps and does not print text as well as a near letter quality dot-matrix like the Panasonic or Epson series.

Two excellent titles have been released by Strategic Software, **TurboLoad**, and **PaintMaster**. See the review article on these excellent programs in this issue.

Well that's it for this issue. If you have any interesting tidbits, drop me a line and I'll publish it! - by Steve George

### **Final Chapter: Printing With SmartWRITER**

I did receive some mail requesting a fix for the annoying bug when trying to print the same thing over and over again (like labels) without having the printed material "crawl" up or down the page. What follows is one fix for this (if anyone has a better one I guess I'll write an Epilogue).

This is a reprint of an article published by the "ADAM-NETwork", from Aug. '84. I do not know who originally wrote this.

## The Empty Carriage Return Problem

**The Problem:** Probably the most significant problem with ADAM's SmartWRITER word processing program which COLECO has not corrected, is the inability to properly produce a blank line in a printed document by using an "empty carriage return". An empty carriage return is a return symbol which appears as a dark left pointed arrowhead, and is the only symbol on the line. It is used to produce blank lines on the printed page. It is frequently used to vertically separate items in tables, to space headings, and to separate paragraphs. The ADAM word processor has the ability to set vertical margins and perform automatic paging with fan-fold paper or single sheets. In order for these processed to work properly, ADAM must "know" what is actually being printed by the printer.

Unfortunately, during print-out, when an empty carriage return is encountered, the printer adds ;an extra 1/2 line-feed, of which ADAM is not aware. The standard vertical spacing on a printer or typewriter is 1/6" per line. To allow sub- and superscripts, ADAM's printer moves the paper in 1/12" (half-line) increments. No matter what line spacing is set (single, double, etc.), an empty carriage return will cause an extra- 1/2 line-feed!

Because ADAM is "unaware" of the extra 1/2 line-feed problem, the bottom page margin will be displaced downward 1/2 line for each empty return on that page. Also, the spacing produced will not be as desired, detracting from the appearance of the final document. The problem is particularly serious if fan-fold ("computer") paper is used, since errors in vertical spacing on one page will be added to those subsequent pages.

One way to deal with this problem is to place "end markers" at the proper locations in the text. While this is a fix of sorts, it is tedious, it interferes with whole-document searches, and it does not actually prevent the extra line-feed problem.

**The Solution:** Experimentation reveals that if any printable character is placed before the carriage return, proper spacing results. Unfortunately, the character also appears where a blank line is desired. Wouldn't it be nice if there were a "character" that could be placed before the empty carriage return to suppress the extra 1/2 line-feed and yet not be printed. The sub-script and super-script characters meet this criteria!

There are several rules which must be followed when using this method. If any errors occur during printing, stop printing, go back to the main menu and recheck the way you inserted the sub-/super-scripts. This method MIGHT fail in unusual circumstances, please inform us with the details so we can let everyone know.

### RULES

- 1.) The work space CANNOT begin with a blank line.
- 2.) The left bracket (the first symbol when sub- or super- scripting) MUST be located below the left-most character of the line immediately above (an underline with no character above will not work).
- 3.) If more than one blank line is to be printed, all brackets must be aligned beneath the left-most character of the line above.

## CP/M Corner

Last issue, we discussed how to go about writing a program in CP/M, and I think we agree it is quite involved. As one gets more fluent in this language, it becomes easier to do, especially with some of the tools available to the ADAM programmer. I guess by the lack of mail, you were able to put together the two programs in the last issue. These were relatively easy, since they were both less than 1K! When I first got my CP/M disk and manual, I noticed a four page program in Chapter 4, which looked like some kind of "filter" program. In fact, it is a MUCH needed program, if one is going to bring files created under ADAM "EOS" (or Elementary Operating System", which means anything produced by SmartWriter, or SmartBASIC) to CP/M. One could use SmartWriter as an editor to type in that filter program, then "bring it over" to CP/M with the ADAM.COM program. Before you could use it in CP/M, though, you would need to "strip away" the control characters SmartWriter uses for returns, paragraph indentation, etc. The filter.com program in the book accomplishes this quite nicely.

The big problem with that program is that it was printed out with a daisy wheel which did not distinguish between letter O's or the number 0. After I had the entire 11K or so typed in (about 4 hours for a hunt-and-peck typist like me), I was not able to assemble it successfully the first time. However, after a few hours of exchanging zeros and the letter "O", I was able to get a ".com" file that seemed to work. It wasn't until I downloaded a CP/M program through my modem (which at that time only captured ASCII [text] files) that it actually came in handy. The modem saves the file in "EOS" format. This meant it had to be "brought" over to CP/M format using the "ADAM>COM" file. Before it could be assembled, it needed to be stripped of the control characters put in by ADAM EOS. I put the new program on a disk with the filter program on it, typed filter and I was prompted for a file name. It then began to go to work (the larger the file the longer it takes). When it was finished I simply assembled the new CP/M file, loaded it and then ran it. It worked great!

During assembly, if there are any errors at all, one must load up the CP/M editor and go through it over and over until finally no errors are shown during the assemble. CP/M created a "machine language" version of your typed in program which is called a "hex" file. If you "type" out a "hex" file, it looks like a bunch of numbers and letters together. (See the Modification Corner for an explanation of hexadecimal). Each number-letter combination is a code for a specific machine language instruction. The instruction tells ADAM what to do. The entire group of instruction is called "a program". Before that program can be carried out or "executed", it must be "loaded". On the CP/M disk a load.com file is created. So you could see that although ADAM CP/M programs run much faster than BASIC, they are more complicated to produce.

I thought this month I would review the first third party CP/M program made specifically for the ADAM. The company is Unreal Software, the same company that produced "Packcopy" (one of the first neat ADAM hacks!). Unreal is Darrell Sage's company, which also produces "The Expandable News" another newsletter for the ADAM. The program is called "CONVERT" and the advertisement states that one can read and write in 3 different CP/M disk formats. These formats are:

**IBM's CP/M 86****Zenith 100 CP/M 85****TRS-80 Model IV CP/M+**

The disk comes with a manual that stresses that although one can "convert" these programs to ADAM CP/M, many of them will still not run without specific hardware configuring. Convert is very easy to use, although finding disks with these formats might not.

A few years back CP/M was a real big operating system, with MANY programs, but with the advent of MS-DOS (Microsoft Disk Operating System), it has kind of died down. But many public domain software exchanges, and BBS'S still have hundreds of disks available in this format. In fact, many of the CP/M utilities in our Exchange, are programs downloaded by a modem. (Using a modem with XMODEM protocol, enables ADAM to read most foreign disk formats w/o a convert program)

Requirements of this program are:

ADAM with SmartBASIC V79 or higher, CP/M 2.2, and a minimum of one disk and one data drive. The optional configuration is two disk drives.

The manual included with this program is easy to follow. I was a bit skeptical at first, and did have trouble locating a foreign disk format that met the requirements. I eventually managed to get a copy of the IBM CP/M 86 system disks. I know that I could not actually run the programs on this disk, but if the program did what it is supposed to, I'd at least be able to get a directory in ADAM format, and "dump" the contents of files in HEX. (The reason these would not run on the ADAM, is because these files were specifically configured for an IBM PC and makes system calls that are non-existent on the ADAM.)

I followed the directions outlined in the manual to the letter (for lack of time or space, I will not repeat these, it WAS easy, though!). The process is excruciatingly slow, but it was converting the IBM disks, block by block to ADAM format. After 160 blocks, the main menu came back up to enable another disk to be converted. The first 160 blocks of data (IBM disks have 360K of data when they are filled), so all the data on the foreign disk was not converted. I was able to dump the different files and they looked right although I could not actually test them. Another great feature is that you can create CP/M files on the ADAM and convert them to the foreign format! Two disk drives are strongly recommended, unless you have many hours of free time. I would estimate to convert 160K took a minimum of twenty minutes or so. If you were using a tape drive it would probably be twice as long.

To conclude, this program is another "neat hack" from Unreal Software. It is recommended if you have access to any of the aforementioned formats, and is an especially good buy if you use a computer system using these formats, as you can utilize data files from these on your ADAM and vice versa. You could bring your work home! Two disks are strongly recommended, unless you have the time and patience for a much longer wait.

The Modification Corner

by Steve George

With the event of "easy-to-use" disassemblers and memory dump programs, (i.e. Uncle Ernie's Toolkit, Disk Utility, MOD, and others) many people have been figuring out ways to improve existing software. One of these people is James Walters, who lives in Pennsylvania. He

has found a way to find Coleco's elusive OCB or "the Overlay Control Block". In that block is the table of starting points of each subroutine (usually each different screen of the game..these consist of "overlays" that are called one on top of the other one). Some of Coleco's Super Game Packs consist of many different "starting points". Super Buck Rogers has 9 or so screens, whereas Super Donkey Kong and Super Donkey Kong, Jr. have only 5 including the Hall of Fame.

When Jim finds the OCB, he can replace one of the locations with a different number. If he then places some code at that location, it will be loaded up as part of the game. He can then splice in the actual screen, but make it load up from Block 44 as opposed to Block 144. One can have a 255 block-long tape running from a 159 block-long disk. (Providing there is enough empty space on the tape below block 255.) Although Coleco did make disk versions of the DDPs, they were not released in any sufficient quantities. (I happen to have a rare disk version of Dragon's Lair that I have yet to hear that someone else has.) One disk never released was Super Buck Rogers, which is a great game but is frustratingly slow when loading up the different screens. Also never released in disk form were the two Donkey Kong Super Games.

Mr. Walters managed to change the OCT in all three (he is also working on 2010:The Text Adventure which involves 80 changes!!) to enable them to run from disk. We will cover a different modification each month here in the Sprite Chaser starting with the easy ones and building up to the hardest ones. For those novices, who never tried this before...follow my directions, experiment, and if you really cannot get the program working, I will modify your game for you. You must supply me with the original, since I must know if you have purchased the game, so that I do not get in trouble. Make a backup, send me the original. I will use the original and copy the new version onto your original. When you get it back, copy the new version to disk, then put the old version back on the DDP. Also, send \$5 to cover postage and handling. In the case of either DK or DK, Jr. you MUST send the original tape (as proof of purchase) PLUS a disk..this is because the disk version CANNOT be copied to these tapes!

For those who cannot wait for further issues for the mods, you can contact Mr. Walters (tell him you read about his mods in this publication). He requests a \$2 charge for the instructions for each program. He does have mods for most DDPs. His address:

James Walters  
RD#4 Box 289-A  
Titusville, PA 16354

To make changes to disks, you'll need a few tools:

- a.) A backup copy program- This is necessary to make a full backup of the disk or tape to be changed. You want to be able to copy the whole disk in a couple of minutes.
- b.) A "modify" program- Some examples are Uncle Ernie's Toolkit, Mod (in our Software Exchange), Hacker's Tapedit, DUU (CP/M, in our Software Exchange). These enable you to "read" and "display" the contents of memory, in either HEX, DECIMAL, or OCTAL.
- c.) Spare disks and DDPs formatted.
- d.) Tons of patience!!

Do not worry if you do not "know" HEX, DECIMAL, or OCTAL! Most disassemblers/dump programs use hex, so let me give you a little background in what it is. For more reading, I suggest the Public

Library, or a bookstore. Hex is a number system that uses Base 16. Decimal is what we use in the United States. It is Base 10 and means we count from 0 to 9, then "regroup" or "carry over" to 10. (There's only 10 different numbers.) In hex, there are 16 different numbers:

<u>Decimal</u>	<u>Hex Equivalent</u>
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	A
11	B
12	C
13	D
14	E
15	F

Hex is used because it is a shortcut for programmers using Binary (base 2) which is true machine language (in binary, there are only two numbers, 0, or 1. A zero denotes "off" and one denotes "on". The computer is a large array of switches!!). In hex the number 16 decimal would be 10 hex. Usually Hex numbers have an "H" after them or \$ and sometimes &. To convert decimal to hex, we divide by powers of 16. Most programmers use a "hex calculator" to do this with a press of a button. Let's take a larger number:

100 decimal + 100/16 or 100/16 which equals 6. There is 4 left. You take that and divide by 16 or 1, which is 4. Put the 2 digits together and you have 64. 100D=64H. To reverse the process with a different numeral as an example, take left most digit and multiply by that power of 16. 345H would be converted as follows:

3X162=3X256 or 768

4X161=4X16 or 64

5X160=5X1 or 5

837

345H=837D

If I have lost you, just bear with me..this will all be clear in a minute or two. Let's try to put all this together! We will attempt to make a working disk copy of Super Donkey Kong.

\*\*\*\*\*

WARNING: Attempting the following DDP changes MIGHT destroy your tape if you do not follow directions!! Read all of this first and familiarize yourself with your block-modifier program BEFORE you try to modify your software!

Have you ever tried to backup this DDP? Using Packcopy V1.0, it would copy up to block 63, then spin and spin and spin..This is because Packcopy is looking for block 64, which is not there! Packcopy V1.1 is a little better. It will copy blocks 0-63 then jumps and copies 128 on up. If you are copying to disk, however, anything above 159 is lost, since a disk does not have a block above 159. In DK, or DK, Jr., that means you cannot have four screens and the Hall of Fame. There is a way to change this!



- 1.) Load up the single block copier (whether Uncle Ernie's or MOD.)
- 2.) Put the Super game in the tape drive and a blank formatted disk in the disk drive. (Although it might be a pain, I'd strongly recommend making a tape backup of the Super Game and using the backup to prevent destroying the original if you make a mistake.)
- 3.) Following the copier's instructions, copy blocks 0-58 from the tape to blocks 0-58 on the disk.
- 4.) Then copy blocks 156-190 from the tape and change the numbers when copying them to disk TO 60-94.
- 5.) Next, copy block 1. Use the display feature to examine the contents of block 1. At location 227D or, using the above formula to convert to HEX, E3H, make the number located there a 62D or, if your dump is in HEX only, a 3E. (You'll have to make the rest of the Hex conversions..most use decimal anyway.)

Make these changes:

Location 227D	to a	62D
"	232D	" " 83D
"	237D	" " 91D
"	242D	" " 60D

Most importantly, copy this changed block to the disk as block 1.

- 6.) Test the game. If you performed the mods correctly you'll have all screens! If it does not work...try it again step-by-step. This was an easy conversion.

To change Donkey Kong, Jr., follow the same directions above. First copy from the tape, blocks 0 to 43 and copy them to disk as blocks 0 to 43.

- 2.) Next, copy blocks 144-171 tape & copy them to disk as blocks 44-71.
- 3.) Load Block 2 and change the following locations:
 

492	should be changed to a	48
507	" " " "	51
512	" " " "	61
517	" " " "	69

Finally copy this back to disk as block 2.

- 4.) Test new copy, you should have 4 screens & a Hall of Fame Screen.

If you have tried any true mods, please send them to me and we'll publish them and credit you! Send them to:

Stay tuned for Super Buck Rogers next issue!

Steve George  
67 Stevens Avenue  
Old Bridge, NJ 08857

Software Review: New from Strategic Software  
TurboLoad - \$24.95  
Paint Master - \$24.95

I purchased these two programs from M.W. Ruth recently and they are so good, I thought I'd let you know about them. You all know Strategic from their earlier releases of Fastfiler, Smartspeller, DataCalc, and PowerPrint. And although credit should be given to Strategic for developing these programs, they are written in BASIC and are very slow. However, when I saw these new programs, I was VERY surprised and recommend TurboLoad and PaintMaster to all!! Let's look at each one separately:

**TurboLoad** is a utility program that has been long awaited. Basically, it takes an "A" designated BASIC file and converts it to a binary form. The new file will have an "H" designation. In order to execute the new program you simply type "BRUN <Filename>". It will then execute 10 times faster!! I converted a large BASIC program, Uncle Ernie's Toolkit, which is 14K bytes long and takes 80 or 90 seconds to load up from disk. I "load" Uncle Ernie's into memory, then "BRUN TURBOLOAD". A screen pops up telling me to simply type a filename, move the arrow to the end of the line and hit return. The screen looks like this:

```
      ]bsave _____, A$45089,L14034
```

(A\$ stands for the address in memory the binary form will be located and L stands for the length in bytes.)

When it was finished, the new file has an "H" designation and the ASCII form had an "a". (in order to make it an "A" again, you must type recover <Filename>.)

I then typed "brun toolkit.D", with a stopwatch in hand. It loaded up in 9 seconds!! I think of all the times I sat there waiting for a BASIC program to load up and laughed! You can "turbo" those long 5-minute-loading adventures and they load fast!! I did not try DDP, but I imagine Uncle Ernie's takes 300 seconds or so to load and after turbo, probably would load in 30 seconds, which is superb. **This is a must buy!** It also comes with a disk/tape indexer/organizer as an added bonus. Also included are comprehensive instructions.

**PRINTMaster** - This program attempts to create a "Macintosh-type" paint program for the ADAM. The joystick is substituted for the mouse and different "icons" are clicked when needed. It is probably the best paint program for the ADAM currently available. This also comes with a manual and a few example paintings to get you started.

After executing the program the ADAM is transformed to a large "canvas", with a title bar along the top, a command area, color palette, and brush size area along the left edge. Along the bottom are the different type of brushes. By simply moving the joystick to the desired brush icon and pressing the side button, one can easily change brush size, type, color. Access to the disk for loading or saving is also very easy. An added feature is the ability to move or copy areas of painting. Also included is a comprehensive manual and some sample pictures. Text can be added to the picture and a variety of geometric shapes. All in all, I was very impressed with this and also recommend this to those who enjoy painting or would like to examine in more detail the graphics capability of the ADAM.

#### "ADAM HACKER" AWARD

As Editor of this publication, I have had correspondence from many people around the country. Many of these letters contain suggestions and comments from users who have modified programs, or found easier ways of doing things that all of us would benefit from. I felt it would be nice to highlight one of these users per month, as a way of rewarding their time and contributions to the group.

The award this month goes to **Bert Cook** of Chicago. He started by contributing various LOGO programs to the Exchange. (They are the XMAS scenes and music on one of the disks.) He was the first to submit a

modification to the "Lander" program last issue. In fact, he submitted two modifications. The first included adding a moon, earth, and stars. At that time he told me of the ability to create sprites with the LOGO editor to use with BASIC programs. (I am working on getting him to write an article describing this process.) He then supplied a two new modifications that totally did away with the shape tables (which drew ship and flame) and substituted his LOGO-created sprites for the ship and flame. The second of the two sprite mods used 6 different sprites in the game, and he claims twenty could be used! These are some rather amazing modifications that show one how to use sprites in BASIC.

For those that want the new LANDER...it will be on the same disk as the old one (#3). You can also write to me, include a SASE, and I will include a print-out.

Congratulations BERT!! Keep up the good work!

For those that have written, but have not been recognized, thanks for writing! I'd love to acknowledge all of you, but cannot due to lack of space. Keep writing!

### BASIC TIPS

I am diverging from the regular routine of having a neat program supplied by one of our members. In this issue I'd like to reprint a compendium of some possible PEEKS, POKES, and CALLS, I saw in a newsletter put out by NIAD. My apologies to those members who have already read this.

These pokes can be used in your programs by using the format outlined in the SmartBASIC manual. After "poking", "call" that location and the instruction will be carried out.

Usually most pokes are accomplished like this:

Direct Mode:

!poke 16953, 47

The computer WILL NOT "do" anything until you "call" that location.

!call 16953

Intermediate mode (within a program):

!10 poke 17126, 15

!20 call 17126

!run

To "undo" something, you need to re "poke" that location, and "call" it again.

Location	Function/Description	Default/Range
16136	Used same as ^S (POKE 0)	N/A
16149	Low byte-Highest pokeable address	00144
16150	High byte-highest pokeable address	00255
16641	Value start-up Storage device (tape 1)	00008
16641	Value start-up Storage device (disk 1)	00004
16763	Last X-coordinate HPLOTed	N/A
16764	Last Y-coordinate HPLOTed	N/A
16779	Same as PDL (6) Left trigger	OFF=0, ON=1
16780	Same as PDL (8) Right trigger	OFF=0, ON=1
16781	Same as PDL (12) Keypad # pressed	*=10,#=11 Nothing=15

16783	Same as PDL (5) DIRECTION	1=up, 2=right 4=down, 8=left
16784	Same as PDL (7) Left trigger	OFF=0, ON=1
16785	Same as PDL (9) Right trigger	OFF=0, ON=1
16786	Same as PDL (13) Keypad # pressed	*=10, #=11 Nothing=15
16788	Same as PDL (4) DIRECTION	1=up, 2=right 4=down, 8=left
16821	Value of current storage device	DISKS 1=4, 2=5 TAPES 1=8, 2=2
16953	Value of cursor character	00095
16954	Value of char. printed when 'home' pressed	00032
16956	Left margin (Current Value)	00001
16957	Right margin (Current Value)	00031
16958	Top margin (Text mode) (Current Value)	00000
16958	Top margin (GR or HGR mode) (Cur. Val.)	00020
16969	Bottom margin (Current Value)	00023
16993	How many lines to clear (GR or HGR mode)	00004
16993	How many lines to clear (TEXT mode)	00024
16995	Top margin to clear after	00000
16996	Left margin to clear after	00001
17001	Value of VPOS (1)	N/A
17002	Value of POS (0)	N/A
17059	Color of backdrop (TEXT mode)	00021
17115	Text color in text mode	00240
17115	Text & Background color (Normal)	00240
17126	Text & Background color (Inverse)	00015
17198	No. of lines (Starting Value)	00023
17199	No. of columns (Starting Value)	00030
17201	Top margin (Starting Value)	00000
17202	Left margin (Starting Value)	00001
18711	Text color in GR mode	00240
25431	Color of backdrop (HGR mode)	00001
25568	Text color in HGR mode	00240
27100	Same as PDL (0) Up and down	0-255

Location	Function/Description	Default/Range
27101	Same as PDL (2) Left and right	0-255
27102	Same as PDL (1) Up and down	0-255
27103	Same as PDL (3) Left and right	0-255
64885	Last key pressed	N/A

More to come....  
 \*\*\*\*\*  
 CALL LIST  
 \*\*\*\*\*

SmartBASIC Command	CALL NUMBER
CLEAR	8141
CLRERR	8109
CONT	6387
END	6047

FLASH	11050
GR	11070
HGR	11075
HGR2	11080
HOME	11090
INVERSE	11055
NEW	6356
NORMAL	11060
NOTRACE	6341
POP	8493
RESTORE	9482
RESUME	8313
RUN	6159
STOP	6378
TEXT	11065
TRACE	6336

To use the above: Jcall 6378 or: J10 call 11065  
 Jrun

If you encounter any others, send them in and we'll update the list.

### ADAM Software Exchange

Over the past two months there has been a "blossoming" of ADAM public domain programs. "Public Domain" means these programs can be freely modified and exchanged. Under no circumstances can they be "sold" for profit. Usually, programs **MUST** retain a "remark" statement crediting the source of the program. Common sources of public domain software are large databases (i.e. "Compuserve", "The Source"), other PD Exchanges (NIAD, ECN, AUG), listings from magazines, newsletters, and from individual users contributing to the exchange. Our exchange includes elements from all of the above. Because of space I cannot describe all the programs. I will try to highlight the few that one should really have. If you have any questions about individual programs you may call me at 201 679 6102 (please do not call collect). You may also send me a SASE to:

**STEVE GEORGE  
 67 STEVENS AVENUE  
 OLD BRIDGE, NJ 08857**

Many of the programs have help files that can be "read" in SmartWriter. These have an "H" designation. CP/M help files have a ".DOC" or ".TXT" extension. These can be read by using the "type" command. You can print them out by hitting the Control key + the P key (this toggles the printer on and off in CP/M).

Following is an example. You type whatever is in boldface.

A.) type filename.ext return

On BASIC disks any file with an "H" designation can be read in SmartWriter. These are usually "README" files. As you can see our library has doubled since last issue. I have tried to comment on each disk. Disk #2 has become **the cart utility disk**. There are two different cart copier, plus **the source code**, which enables an experienced programmer to modify the software easily. This was contributed by **Dan Uitti**. Disk #15 is perhaps the **best** ADAM PD disk yet. Chock full of fantastic programs! Three of these are **Utildump**

and Fdump (these enable you to modify your software), and FATFONT (which give the ADAM a great new font in BASIC). We have also gotten some new language disks: #21 contains 'C', #24 contains "COBOL", and #26 contains "FORTH". #27 is disk that contains a modem program written in BASIC and a BBSKIT, that can change your ADAM to a Bulletin Board System. If you like LOGO, Disk #28 is totally devoted to LOGO, full of utilities and games written in the LOGO language.

#### **RULES:**

- 1.) Make all checks out to "STEVE GEORGE". POSTAL or BANK Money Orders are preferred. If you send a personal check expect a 10 day delay. Stamps are also accepted. Most disks will go out NEXT DAY!! (I hate to wait for software, too!!)
- 2.) Questions about programs will be only answered if you send me a SASE.
- 3.) For an updated list of programs available send a SASE + \$1 (to cover xerox costs).
- 4.) If you have nothing to contribute, a \$15 donation is required. I will ONLY supply disk format. This covers handling, postage, and purchase of disk. If you do not have a disk drive, send a LORAN, M.W. Ruth "PLAIN LABEL", or COLECO DDP + \$10 to cover handling and postage. (Victory and FastForward DDPs are unreliable). I will also include an updated disk list with your order.
- 5.) If you have programs to donate, include a README file + \$2 to cover postage and handling. I will copy your files off and then put the requested disk/DDP on YOUR disk. I will accept DDP only if they are the above-mentioned DDPs. You can send me stamps if you want to.

#### **#1 ADAM USERS GROUP Public Domain Software Exchange**

Current disk list: Winter-Sprint 1986

Disk #1 - CP/M: MBOOT3 - Simple binary file upl/dl, Filter - from ADAM CP/M manual (Chpt 4), FICOPY - file disk copier modifier written in CP/M, can edit anything on a disk

Disk #2 - CP/M: Cart Utility, ROMHEX - Dump carts contents in hex/ascii format, Cartcopy - copy carts to a disk. Creates.com file. Carts can be run and moved easily., RSTDSK - Tired of typing CTRL-C? Use rstdsk! This disk also has the SOURCE CODE to the cart copier for easy modification.

Disk #3 - BASIC: BALOON - great sprite game, MOD - use w/Packcopy to edit DDP/Disks, 3D Tictactoe, Dueling Cannons - hires game, HELLO - access any disk easily, Brickout - Different than Bonanza version, Lunar Lander - classic text game, LANDER - shape table graphics, STAR TREK - joystick controlled text adventure, LIFE - graphic population study, BLACKJACK - text, HANOI - graphic game, Paint -has save feature, Eliminator -Hi-res graphic shoot-em'-up, Many other files....

Disk #4 - CP/M: Master Catalog System - Entire cataloguing system for your disks...Access any file from your CP/M disks easily

Disk #5 - BASIC: BACKUP.TAPE - can be modified to backup disks, CARTCOPY - (Not as good as Multicart, but it does work!), TAPEDITOR - Create versions of any sftwre, YAHTZEE, CPMFILTER - to "clean" files from CP/M to BASIC, CROSSFIRE - graphic game, GET EM' - graphic game

SMARTDRAW! - w/save feature, COLORTST - test screen colors of monitor  
Many other files...

Disk #6 - CP/M: LU.COM - Library Utility, SQ.COM - "squeeze" all files  
40% with this utility, USQ.COM - "unsqueeze" files that have been  
squeezed, DUU.COM - Ward Christiansen's famous CP/M disk utility,  
LOGALL.COM/.DOC, BUGS.COM, MEMMAP.COM, SORT.COM

Disk #7 - CP/M: Z80 Programmer - Specialized, use w/#8

Disk #8 - CP/M: SCRNCOP.COM, Z80 Programmers II, Specialized use w/#7

Disk #9 - CP/M: EBASIC.COM - A basic for CP/M..One of the first!  
Complied NOT interpretive, EBASIC.DOC - Documentation for EBASIC,  
ERUN.COM - The COMPLIER for EBASIC, NSWP.COM/.DOC, EDIT.COM/.DOC -  
Better than Adam's ED.COM!

Disk #10 - Telecommunications Package: MADAM7 - (Use ADAM Modem...Has  
auto dial/ans feature..Better than ADAMLINK II!), MEX (Modem Executive)  
- Also self-dialing Programmable keys function, Phone book,  
SCNCRNCH.COM - yet another screen chop Docs for all

Disk #11 - Z80MAC.LBR - (Need LU.COM to extract files) Fully featured  
assembler, w/docs A must for serious programming, SOURCE.LBR - Use  
w/Z80MAC to ;create Z80 code or changae 8080 code to Z80. Can create  
.ASM files from .COM files! - Includes all docs...also usq.com,lu.com

Disk #12 - CP/M: CP/M ADVENTURE - the classic comes to ADAM includes a  
screen chop

DISK #13 - BASIC: Personal Finance Planner, CHRUNCHER - similar to  
Turboload, compresses BASIC programs to run 10 times faster!, COLORCALC  
DISKINIT, CISPICIT-read hires pictures done by other computers \*includes  
some examples, HIRESEASEL, MOVEFILES, UTILITYMOD, HI - Q

DISK #14 - BASIC: EVILTEXT, BATTLESHIP, JOINFOUR, CHECKERS, SERPENT,  
MATHBLS, MENUPRG, SPACE, SCHEDULE, MAYANQUILT

All above include doc files

DISK #15 - BASIC: (from NIAD's Exchange..This is a fantastic disk...  
probably best ADAM PD BASIC disk ever!!!), BACKGROUND, BLOCKS, CRAYONS  
CANON3 - music, KBEXAMPLE, NOISEMAKER, FDUMP - Fantastic!, BICOLOLR -  
Background/text color changes, INSTANT, FATFONT - makes ADAM look like  
PC JR in 40 col mode, SPRITEDIT, CONVERT, ICECREAM, FDUMP2 USAMAP ..  
AND much more!!!!

DISK #16 - BASIC: ROCK w/DOC, HOCKEY w/DOC, GAMESBUS, MASTERMIND,  
STRONGHOLD w/DOC, MINEFIELD w/DOC, TEXTROCKET, METRIC CONVERTER -  
converts common metric measurements to USA measures and vice versa

DISK #17 - CP/M: MUMPS - a database file system for ADAM VERY complete  
you need #18 too.

DISK #18 - CP/M: MUMPS II - use with disk #7 VERY complete!

DISK #19 - CP/M: SPLIT.COM - Break large data file into small ones,  
I/OMAP.COM, BASEBALL.COM, SECURE.COM, /.COM - link commands, HALLEY -  
follow the comet, INVENTY.COM, Documentation included

DISK #20 - CP/M: DU-V89 - a more recent version of DUU, TYPTRYT.LBR - a  
CP/M typing tutor, MLOAD24, XCCP.LBR, XCCPUTIL.LBR, MARKET.COM, XRAM -  
test your RAM disk memory

DISK #21 - CP/M: SMALL-"C"-a 'C' complier for the ADAM!, UNIXTOOL.LBR

DISK #22 - DDTF.COM,.DOC,.LBR, FIND.LBR, HOLD.COM,.DOC, KILL.COM,  
SUPERZAP.LBR, ENCRYPT.LBR, TRIVIA.LBR - Play trivial pursuit w/ADAM

DISK #23 - CP/M: BISHOW.ASM,.COM, LDIRR.LBR, QK21.PRM, YANCTERM.PRM,  
CERTIFY.LBR, PROBE.LBR, Z80 CHESS, (sue LU.COM or NULU.COM to extract  
the files)

DISK #24 - CP/M: COBOL for the ADAM! Includes ALL one would need to

program COBOL on ADAM 1 Full disk!

DISK #25 - CP/M: ORGCHOP.COM, FINDBAD.COM, CONT.COM, PRINT.COM, MAKBATCH.COM, DISPLAY.COM, SLOAD.COM, CATPAGE.COM, CATLBR.LBR, MCAT - 41.LBR

DISK #26 - CP/M: FORTH for the ADAM!! 1 Full disk with documentation \* everything one needs to program FORTH on the ADAM!!

DISK #27 - LOGO: A full disk of logo utilities and games

DISK #28 - CP/M: A full featured BBS program

DISK #29 - JEOPARDY

DISK #30 - TROL's TALE

DISK #31 - BEST of ELECTRONIC ART

#### WANTED

If you would like to have an announcement made or sell something, as a member of the #1 Adam Users' Group, you can have it listed here.

Dave McIntosh - 7 Monsarrat Crescent, London Ontario N5Y 4Y7. 1-519-679-0578. Would like to here from Adam users, from anywhere.

### BASIC for Adam Users

A new ten-lesson correspondence course, designed for both beginners and people with some knowledge of BASIC programming, is now being offered. **Fee is \$15.00.**

This course covers modular programming, advanced string and file manipulation, a variety of sorting routines, and techniques for chaining and merging smaller programs into menu-driven complex programs, also principles of screen organization, use of video processor and calling of machine language subroutines. The lessons are designed and written by an experienced college instructor.

Later in the spring, an introductory course in Assembly-language programming for Adam will be offered.

For more details, write to:

**NATIONAL A-CLUB**

**P.O. Box 15068**

**Chevy Chase, MD 20815**



<u>ADAM</u>	
DATA PACK (Adam)	1/\$3.95 - 10/\$37.50
RIBBON CART.(Adam)	1/\$5.50 - 3/\$15.00
DISKS (Adam)	30/\$35.95 - 10/\$14.95
DAISY WHEEL(Adam) - Italic,Script,Elite, etc.	1/\$5.50
ADAM COVERS - Set with Logo for system	\$18.95
ADAM DISK COVER - To match above	\$7.99
Paper T/F-F/F White 9 1/2x11, 20lb.	1000/\$22.95
Paper T/F-F/F 1/2" Greenbar, 18lb.	1000/\$18.99
Labels T/F-F/F (Address)	1000/\$ 5.00
Labels T/F-F/F (Data pack)	100/\$ 5.00
Index Cards - T/F-F/F - 3 x 5"	500/\$7.95
Rolodex Cards - T/F-F/F-2 1/6 x 4"	500/\$8.95
64K MEMORY EXPANDER	\$69.95
DIGITAL DATA DRIVE	SPECIAL PRICE \$29.95
TRACTOR FEED for Adam printer	\$79.95
PRINTER STAND -Front ON/OFF switch	\$19.95
<u>POWER PACK</u> - To separate printer/use CPU alone	\$69.95
<u>ADAM AIR CONDITIONER</u> .....Stop heat buildup with this super quiet computer fan. Will help eliminate the problem with the computer crashing (freeze)	\$19.95
<u>SERIAL/PARALLEL INTERFACE UNIT</u> -This opens a whole new world for the Adam owner. Now you can connect a dot - matrix hi / speed printer/use standard modem (300-1200 baud). Comes w/ software used with SmartBASIC or CP/M etc. (Disk or DP) - Serial and Parallel	\$149.95
<u>SPEECH SYNTHESIZER UNIT/CLOCK CALENDAR</u> - Now add VOICE capabilities to Adam. Software is included	\$109.95
Disk Holder - Holds up to 50 disks-anti/static	\$15.95
Adam Monitor Cable	\$10.95
Panasonic 1091 Printer	\$279.95
Panasonic Ribbon	\$9.95
PACKCOPY - Backup SmartBASIC etc.	\$29.95
DIABLO -Mind challenge - Graphic	\$19.95
BLACK GOLD - Look for oil. Survey-profits-fun	\$19.95
The STOCK MARKET GAME - Fun & educational	\$19.95
BOUNTY HUNTER - Text adventure	SALE \$14.95
ADVENTURE PACK I - 3 Text adv. programs	SALE \$14.95
ADVENTURE PACK 11- 3 Text adv. programs	SALE \$14.95
TREK - Text adventure	SALE \$14.95
SAVINGS & LOANS - Cal. interest., princ. etc	SALE \$14.95
STRATEGY PACK I - 4 Games for thinkers	SALE \$14.95
GAMES PACK I - 3 Games for fun	SALE \$14.95
<u>SUPER - SUPER GAME - SPECIAL</u>	
QUEST FOR QUINTANA ROO (DP) -	\$12.95
CAMPAIGN '84 (DP)	\$12.95
ROLLOVERTURE (DP)	\$12.95
MOUNTAIN KING (DP)	\$12.95
GUST BUSTER (DP)	\$12.95
NUMBER BUMPER (DP/D) - EDUCATIOAL ADD/SUB GAME	\$12.95
ADAM ENTERTAINER - Book (sound,graphic etc.)	\$12.95
LEARNING TOGETHER with ADAM - Book w/LOGO	\$ 9.95
DataCALC - Spreadsheet	\$24.95
RIB - Basic tutor for Adam (D or DP)	SALE \$24.95
EBU - SmartBasic - Data Pack or Disk	\$21.95
HACKER'S GUIDE TO ADAM - Disk or DP	\$17.95
<u>TurboLOAD</u> - Revolutionary new product. Speeds up loading programs, also included the FILE ORGANIZER	\$28.95
<u>PaintMASTER</u> - HI-Res graphic design system in machine language. Load/save your creation to D or DP	\$23.95
<u>SignSHOP</u> -Now a complete printing center on Adam	\$24.95
<u>CHARTS &amp; GRAPH ASSEMBLER</u> --- "Auto-proportions inputs" Create pie charts, bar & line graphs. Up to 10 inputs. Add a graph to a letter or report (DP/D)	\$24.95
<u>VIDEO TUNES</u> -- Compose, play, save music	\$34.95
<u>AUTOAID</u> ----- Enhances SmartBASIC. Generates new line numbers as you type. Defines function keys to be any command or character string & so much more	\$29.95
<u>MULTI-CART BACKUP</u> - Backup cartridges	\$19.95
S&H-\$2.50 US	M.W. RUTH CO., Dept. SC46 510 Rhode Island Ave. Cherry Hill, NJ 08002 (609) 667-2526
S&H-\$4.50 CN	
US \$'s only	
VISA	
MASTER	
FREE CATALOG - We stock what we sell,for FAST DELIVERY	

**RETURN POSTAGE GUARANTEED**

**#1 ADAM USERS' GROUP  
P. O. BOX 3761  
Cherry Hill, NJ 08034**

**BULK RATE  
U. S. POSTAGE  
PAID  
PERMIT #989  
CHERRY HILL, NJ**