

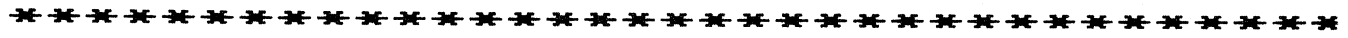


Multi-function User Group
 MONTHLY NEWSLETTER-PUBLIC DOMAIN LIBRARY
 DISCOUNT BUYING SERVICE FOR HDW & SFTW

ISSUE # 18 JUNE, 1986
 SINGLE COPY: \$3.00
 ANNUAL : \$18.00 US 3RD CLASS
 \$24.00 US 1ST CLASS; \$24.00 CANADA

EDITOR: LYLE MARSCHAND

COPYRIGHT (C) 1986



God Bless each of you and your families
 Continuing our study of Ephesians chapter 4 -

²⁵ Therefore, putting away falsehood, let everyone speak the truth with his neighbor, for we are members one of another. ²⁶ Be angry but do not sin; do not let the sun go down on your anger, ²⁷ and give no opportunity to the devil. ²⁸ Let the thief no longer steal, but rather let him labor, doing honest work with his hands, so that he may be able to give to those in need. ²⁹ Let no evil come out of your mouths, but only such as is good for edifying, as fits the occasion, that it may impart grace to those who hear. ³⁰ And do not grieve the Holy Spirit of God, in whom you were sealed for the day of redemption. ³¹ Let all bitterness and wrath and anger and clamor and slander be put away from you, with all malice, ³² and be kind to one another, tenderhearted, forgiving one another, as God in Christ forgave you. These verses offer some practical advice based on the previous verses we reviewed last month which indicated that our minds can be renewed, or made new once our spirits are born again. This is the key to Paul's instructions, changes can only be affected in our outward behavior once a change is accomplished on the inside as a result us accepting Jesus as our personal Lord and Saviour.

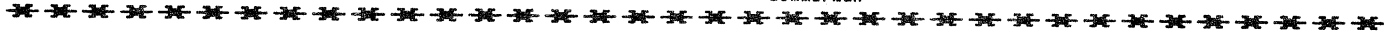
Verse 26 states that anger is ok as long as it does not lead to sin and that we don't harbor our anger for more than a day. This is excellent advice. Anger and its attendant emotions are very destructive to people physically and can lead to the sin of hate which is the opposite of God, who is love. Harboring anger inside us can also result in giving the devil an open door to our mind which which we definitely don't want to do. Hatred and anger are very destructive emotions that can end up harming us more then the person we are angry with ! Verse 29 is interesting, it speaks of our words and the power that is in them for either evil or good. It is no coincidence that man is the only creature that has the power of speech. We have this ability because we are created in the image of God, who used the power of his words to create the universe. The book of Genesis states

³ And God said "Let there be light"; and there was

light. God actually "spoke" the world into existence through his words. He has given us this power of speech. Have you noticed the effect negative statements can have on someone - you can literally destroy a persons confidence in themselves with your words. On the other hand, you can build a person up with your words. Taming our tongue is a big challenge, but one we must let God help us with. Our words have a profound effect on how we feel and how others react to us. Have you ever been around someone who is always complaining, telling you how awful their life is and in general speaking negative most of the time? Are you inclined to avoid them or spend more time with them ? You are what you speak. Paul says that our words should "impart grace to those who hear." I beleive this is a profound statement that is difficult to accomplish, but is so important. Grace is what God had for us when he sent his precious Son Jesus to take the punishment for our sins upon himself and give us the gift of forgiveness. Grace means "unmerited favor" or "free gift". God gave us a free gift and he wants us to reflect this grace in speaking to others. How is this done ? Well, in various ways - by speaking forgiveness to others when we are wronged, rather then "letting them have it"; by speaking love, not hate; by speaking the positives, not the negatives; by building others up, not tearing them down; by recognizing ones good qualities, not looking for their faults; by forgiving as God, through Jesus forgave us. God Bless you all.

INDEX

NIAD News1
 UPDATES2
 CES HIGHLIGHTS2
 PUBLIC DOMAIN3
 BEGINNERS BASIC4
 WORKSHOP (SMARTBasic).....5
 WORKSHOP (ADAMCALC)10
 REVIEWS11
 Reedy Entertainment Pack, Jane's Recipes II,
 Wacky Word Game
 MEMBER COMMENTS12
 GAME HINTS13
 PRODUCT LIST14
 CONTRIBUTORS: W. Motel; C. Kolander; B. Lennes; D.
 Zimmerman



NIAD NEWS

. The disk drive situation is as follows. I am getting continual delays on the order I have placed, but expect my first shipment of 25 drives to arrive by the time you receive this issue. I do not think we will see anymore Coleco made drives after that. However, not to despair, Eve Electronics is moving ahead with their plans for producing a 100% compatible disk drive (see updates section). All members on the disk drive waiting list have been sent letters providing information on these drives and giving them the option to substitute the Eve drive for the Coleco. Eve has consistently produced quality products and I'm sure the disk drive will be no exception. We will fill orders from the waiting list based on the date payment was received. The Eve drives should be ready by the end of July. It has been a long wait for some of you and I appreciate your patience. I am very happy to get these out to you anxious ADAMites so you can get even more out of your ADAM.

. Modems are now available again and we are filling all backorders. Isn't it great! However, Coleco is no longer providing the ADAMLink II software that provides upload and download of programs from bulletin board systems. We have added this item to our PD list for those of you that are getting new modems.

. Hardware/ Software - Super Action controllers are coming in VERY slowly, please be patient. We just purchased a large supply of the SuperGames Best of Broderbund, which contains not one but two great games - the still popular Choplifter and A.E.; and Super Zaxxon, which is an excellent adaptation of this famous arcade game. This data pack version is nothing like the old Zaxxon cartridge. These are two good ones to add to your collection, especially at only \$ 10.95!

. Chicago Local Chapter Meetings are held the first Thursday of each month 7 to 9 PM at the Glenside library, 25 East Fullerton in Glendale Hts, IL. NOTE: There will be no meeting in July due to the Holiday, our next meeting will be August 7th at 7:00 PM. The June meeting was a good one, with close to 30 people attending. We had a general question and answer period and then split into two groups around the ADAMS and went through demos, detailed Q & A's and instructions for many pieces of software. Everyone felt it was a very productive session and I think we will have another big meeting in August. We will have 3 ADAM systems there to provide more coverage for working at the computer. Plan to attend to get your questions answered, meet other ADAM owners and find out some things to help you better use your system.

. A new Review Summary is under development to

cover all the reviews done since last December - wow we

did alot of them !!

. Signshop has a bug in it that will crash the system under certain conditions. Thanks to Bruce Crocker, here is the fix:
Change line 1437 to read -
1437 INPUT pv: INPUT ph:
Bruce has been working a conversion to allow Signshop to print via the SP-1, as we have. I'm sure that between us we should be able to figure this out pretty soon !

. Family Computing magazine in the August issue, left out any reference to the ADAM (they usually list the ADAM on the front cover). I called them and they said it was a goof up and that they were NOT dropping support of the ADAM and had 2 ADAM programs planned for their September issue. I would like you to write to them anyway and let them know that you missed ADAM programs in the August issue. Write to Managing Editor, Family Computing, 730 Broadway, New York, NY 10003.

. Terry Fowler of the Greater Houston Area ADAM User's group has found the bug in the Jeopardy PD game that limits the number of rounds played and occasionally crashes the system. You may send in your Jeopardy tape/disk and \$3.00 and we will copy the corrected version for you or send a SASE for instructions on how to do the fix yourself, which requires a program like DISKdoctor as explained in this months SMARTBasic workshop.

. See the Public Domain section for tips on making backup copies of your Super Game tapes.

. Welcome to our new members from Great Britain. It is really nice to have you as a part of NIAD and to know that the ADAM is "Alive and Well" in Europe!

I goofed in printing the phone number for Bob Wrights new BBS described in the last issue. The correct number is (207) 929-8286

. Great news for your Jeopardy game lovers! Jim Walters has completed a new question pack which will add 27 rounds of additional questions to the existing game for only \$19.95. Jim will begin work on Family Feud next.

. Pinball Construction Set fanatics will be happy. We are almost done with a tape full of pre-done games. Send any in to add to the ones we have done.

. Renewals - Get your renewals in early to insure you don't miss any issues. If "0686" are the first 4 letters of your member number as printed on your mailing label, this is your last issue.

. NIAD product information -
SPECIALS

- . ADAM Resource Directory \$9.95
- . Six ribbons for \$25.95
- . Right directory tapes for copying Supergames \$2.50
- . Reconditioned data drives \$19.95
- . Super Zaxxon \$10.95
- . Best of Broderbund: AE & Choplifter \$10.95

NEW PRODUCTS

- . Jeopardy Question Pack
- . Reedy Entertainment Pack
- . Media Aid Utilities Pack
- . MultiWrite word processor
- . Electronic Games Pack
- . PIA2 Parallel printer interface
- . Number Bumper math arcade game
- . Quickcopy backup program
- . Paintmaster Hi Res drawing program
- . Signshop sign printing program
- . Powerprint print format program
- . New Infocom CP/M text adventure games
- . Rocky Super Action boxing
- . Super Sub Roc Public Domain game
- . 80 Column video/ expansion board

NIAD Services

- . Disk conversion of Super games - Buck Rogers, Super Zaxxon, Dragon's Lair, 2010: Text Adventure, Donkey Kong and DK Jr., Recipe Filer, Smart Letters & Forms, Family Feud - send in the card label from your data pack as proof of purchase and \$4.00.
- . Replacement SMARTBasic tapes - \$7.00
- . ADAMLink II Telecommunications software for upload and download - \$7.00
- . Fix SMARTFiler tapes (send yours in) to provide the most recent, bug free version and to provide the ability to print mailing labels by correcting the spacing problem - \$4.00

UPDATES

. Eve Electronics is busy working on their latest product - replacement ADAM disk drives !! Yes, we finally have another supplier for this much needed and hard to find product !

Eve will offer the following new products:

- . Dual sided upgrade service - Send in your Coleco disk drive and have it upgraded to a doubled sided disk drive, capable of holding 320K on a diskette!! Your Disk Manager and CP/M diskettes are upgraded to read and write BOTH single and double sided diskettes. This is a great deal for those of you that want to conserve on diskettes or that need the extra capacity for large programs (CP/M especially) or need to have a lot of small files on one diskette. You must send in your drive, power cable and ADAMnet connector cable AND your disk manager and CP/M 2.2

diskettes. Please note that if your drive is not functional you will be charged \$19.95 plus parts to fix it in addition to the \$149.95 upgrade charge. The \$149.95 upgrade charge includes a trade-in of the single sided

drive in your disk drive. You may send in your drives to NIAD or directly to Eve. Include \$8.00 for shipping.

- . Eve Single sided disk drive (direct replacement for the Coleco disk drive, although in a different, vertical mount housing). Approximate cost - \$225.00
- . Eve Dual sided disk drive Approximate cost - \$300.00

The dual sided upgrade service is available now by sending in your drive directly to Eve (2 Vernon St. Suite 404; Framingham, MA 01701) or to NIAD. The single sided and double sided drives will be available in late July. Things just keep on getting better for us orphaned ADAMites !

- . Eve is also now doing disk drive repairs for \$39.95 plus parts.

. There is a NEW cartridge out that uses the Super Action Controllers - Soccer ! This should be a great hit due to the rising popularity of this game in the US. In August there will be two additional titles released - Skiing and Amazing Bumpman ! These are titles that were evidently developed in Great Britain and have just made it over here. We will have more on this next month.

Some new cartridge games are showing up at Toys R Us that you may want to pick up - Defender (NOTE: Will not work on the complete ADAM, just Colecovision expansion unit), Centipede, Beamrider, River Raid and Keystone Kapers.

. Digital Express is a new company that will be producing a monthly newsletter and marketing software. They are also taking over the distribution of the products produced by Data Doctor who has discontinued developing products due to some personal problems. I will have a review of their first newsletter and software product next month.

. New User Groups -
Adam Users of Gainesville
702 SW 16th Ave #207
Gainesville, FL 32601

Greater Houston User's Group
Rt 2 Box 2756
Pearland, TX 77581

CES HIGHLIGHTS

I attended the summer Consumer Electronics Show held in Chicago each June. This show is the largest in the Electronics industry and it is estimated the orders are placed for 10 billion dollars worth of merchandise! This is no small show, attended by 10's of thousands of retailers, manufacturers, distributors and of course, the press. Each of the companies are there to tout their new products and woo the retailers into placing those big orders for the next Christmas season. It was at this show in 1983 that Coleco first showed the ADAM to a sea of retailers.

1983 was the last heyday CES for the home computer vendors. 1984 was the beginning of the big slide for the small computer industry due to over production which saturated the home market.

There were some interesting items at the show that may be of interest to you. Sega, which has produced arcade games, introduced "the ultimate" game unit. This unit comes with a base, 2 hand controllers, a light gun and two games which will retail for under \$150.00. The real surprise is that the games come on a "wafer" that is the size of 2 credit cards and contains 256K, soon to be expanded to 1048K worth of games !! These are big games when you consider that most of the ADAM Supergames, which contain some super graphics and game play, contain only 160K. Sega is marketing this unit as only a game unit, not a computer. Nintendo (original developers of Donkey Kong arcade series) recently introduced a game only unit, that Sega's looks very similar to! It appears these 2 Japanese based companies are squaring off for a duel in this advanced video game market. The games that have and are being developed for these systems are excellent, employing arcade like game play and color graphics although the resolution is not as fine. In fact these machines use the same microprocessor (780A) as the ADAM. They have a custom video chip but the resolution is the same as ADAM. The real advantage to these machines is the complexity of the games they can provide. A 1048K game is hard to imagine, but promises to be something else. The light gun is a nice addition and comes with some cute "shoot-em-up" games. The Sega unit will also have a graphics tablet and disk drive available to add even more functionality to the games. The Nintendo unit comes with a robot of sorts that can do certain restricted movements in conjunction with one of the games. I personally didn't see the utility to the robots, but they're a nice gimmick. Both the Sega and Nintendo booths were busy, with distributors and retailers checking out these new generation of games, which could well be the start of a resurgence in the video game market. I personally liked the Sega unit better than the Nintendo, due to the ability to handle the large size games and the expansion capabilities (graphics card and disk). However, Sega is a late comer, Nintendo is out on the shelves of some Toys R Us, Venture and recently Montgomery Wards. Sega will not have their units on the shelves until this fall, hopefully

in time for the Christmas season.

Atari was out in force with their entire line of computers and video games, especially the 520ST which is planned to be their salvation. The 520 is definitely a powerful machine. The graphics are superb (although the Commodore Amiga are even better) and there are built in expansion connectors for almost anything you would want to add. The real question is will the home market pick up on it at \$800 to \$1000 dollars. I think Atari has to land some business contracts to make it because the IBM PC compatibles are coming down in price so dramatically that the home market is faced with the draw of IBM PC compatibility at ever lower prices. The small computer market is tighter than ever with rumors that Apple will introduce a 520ST competitor this summer. Get this, there are strong rumors that IBM will introduce another home computer this summer as well !! The PC Jr. was a flop because it was a junky little machine, but maybe IBM will do it right this time ! It certainly smells to me like there is a resurgence beginning.

As for me, I will sit back with my ADAM's and watch the shake out and see who is left. Commodore appears to be down for the final count and we will have to see if Atari can pull themselves out it time. Apple and IBM are obviously in for the long haul and proceeding cautiously. I predict that either (or maby both) Nintendo and Sega will be BIG hits this Christmas with their "ultimate video game" systems. These systems will be relatively inexpensive and offer so much more than currently available games on existing computers. These systems are designed for the video gamer and will draw all those dissatisfied Atari 2600, 400, 800, Intellivision and Colecovision owners as well as those who primarily use their computer systems for games.

All in all, it is nice to see some "life" back in the video game market. We will keep you posted on future developments.

PUBLIC DOMAIN WORKSHOP

. For those of you who want to back up your SuperGame data packs using either UTILCOPY on PD # UNDV1 or Quickopy, there is a special procedure to follow due to a glitch in the ADAM's operating system. Basically the problem is that ADAM doesn't check to see if a tape is a right directory or center directory tape AFTER you have first loaded a program from tape. ADAM ASSUMES that if you initially loaded with a center directory tape, that all tapes will be center directory from then on or vice versa if you loaded from a right directory tape. This presents a problem if you load a copy program from a center directory tape and then try to copy a right directory tape (or vice versa). The first thing you need to know is how do you tell center from right directory tapes ? Well, all the SuperGames use right directory tapes - Buck Rogers, Dragon's Lair, Super Zaxxon, Family Feud, 2010, Jeopardy,

Super Sub Roc, Pinball Construction Set, Troll's Tale. All other tapes are center directory tapes including the blank ones you buy from us or other sources. We also sell right directory tapes for use in copying the SuperGames Buck Rogers SuperGame tapes. We made the mistake of using these tapes for some of our PD libraries several months ago. The best way to tell a right from center directory tape if you're not sure is to put it tape drive 1 and pull the computer reset. A right directory tape will spin to the right until all the tape is on the left spool; a center directory tape will go to the center of the tape - pretty scientific, uh ?

OK, to get around this problem if you want to back up SuperGames (NOTE: This only applies if you want to copy the above mentioned SuperGame tapes, all other tapes do not require this special procedure) you need to fool ADAM. Set up your copy program as if you were going to copy the tape per the instructions, however only copy the first several blocks from the source to the destination tape. If you are using UTILCOPY, hit the ESCape key AFTER 5 blocks have been copied to your destination tape (not just read from your source tape). For Quickopy, just set the number of blocks to copy to 5. Once you have done this "short" copy, start over and copy the full tape from source to destination and you will have a good copy. What we did by doing the "short" copy of only 5 blocks, was to get ADAM to recognize that it has right directory tapes in the drive(s) so it would copy correctly the second time when we copied the whole tape.

. As noted in previous Public Domain workshops, we have upgraded/ corrected problems in several of the PD library tapes. If you want the upgraded versions of the following PD volumes, send in your tape/disk and \$3.00 (which includes postage) per tape:

Basci Utilities UNDV1
SMARTBasic BNDV4, BNDV7, BNDV8
Adamcalc ANDV1

. Wayne is working on Utilities volume 2, which should be a good one with a lot of great programs.

. We are almost done with "Pinball Games Vol I", which is a collection of predone pinball games for use with the fantastic Elec Arts Pinball Construction set. Watch for it next month.

. Those of you that have tried to copy Troll's Tale from tape to disk or vice versa have discovered that the game won't run. This is because the tape and disk versions are different. There are 2 spots where the program needs to know whether to look on tape or disk. A "4" in these locations tells it to look on disk, an "8" is for tape. These locations are both in block # 0. One is at address "0A" on page 1; the other is at address "33" on page 2. These addresses are in hex. See the Basic workshop for information on how to use the DISKdoctor program to make these changes.

NIAD PUBLIC DOMAIN
PROGRAM DESCRIPTIONS #BNDV11
by Bob Lennes, Librarian

*COINCLCTN- Program to keep track of the value of the coins in your coin collection. See the file COIN.DOC
*utilbills- This program helps you figure out your utility bills. See utils.DOC
*INTCALC- Helps you calculate interest on loans, etc.
*PERfinPLAN- 'The Personal Finance Planner'- see the file perFN.DOC. This program has a fast loading version- type BRUN perFN.ASM
*MULTDIVEX- This a multiplication and division drill
*USCITYQUIZ- How well do you know your major U.S. cities? This program will quiz you.
*USPRESQUIZ- Do you know all 40 presidents? Find out.
*LOVEYOUGR- This program makes a low-res graphic Valentine that you can show your loved one
*SHAPEIZE- Draws different sized shapes
*3DPLOT2- the 'sequel' to 3-Dplotter on Vol.2- this program creates another 3-D landscape
*circgrphc- run this HGR program and see what it draws
*ZODIAC- Oriental Zodiac Compatibility- what sign are you? What ones are you compatible with?
*CATALOGPR- A very simple pgm. to print a CATALOG on your printer. Shows the use of the 'PR#' command
*POKER- A good version of the classic card game
*baseball- You never thought there could be a good text baseball game?!? Well, this is the exception
*networth- How much are you really worth? This program will tell you based on your financial holdings, etc.
*MENU- This is basically the same as MENUSELECT on Vol.#2. I polished it a tiny bit and decided to put it on again.
*horserace- The first of two horserace programs on this volume

*CATCREATE2- Prints a neatly formatted directory of your disk or tape on your printer or saves it in an A-type file. Tells you how many programs there are and how many blocks the programs use
*CHECKBOOK- A program to help you balance your book
*Planetlbs- How much would you weigh on other planets?
*KENO- a musical lottery type number guessing game
*ADDITION- A musical addition drill
*MULTIPLY- The multiplication version of the pgm.above
*HORSERAC2- A horserace (has music also)
*BIBLEGAME- A program to quiz you on the bible- see the file BIBLEDOC volume # BNDV11:

BEGINNERS BASIC WORKSHOP

This article is somewhat a companion to the first article in this months SMARTBasic Workshop and is based on a question we recently received from member Michael Bogress.

The problem is one that many of you that have disk drives have encountered. One of the first things you did was probably to copy SMARTBasic from tape to disk. When you subsequently booted Basic from the disk version you noticed your tape drive 1 spun after Basic was loaded. You also noted that if entered "Catalog", tape drive 1 spun and you got the infamous "I/O ERROR" message. Hopefully you found out that you had to enter "Catalog,d5" to tell ADAM to look on the disk drive for the catalog and not the tape. Once you did this once, ADAM remembered to look on disk instead of tape in the future.

What is happening here is that SMARTBasic still thinks it is on tape, once you copy it to disk. On initial boot it looks on tape drive 1 for a "Hello" program which can be any program you name "Hello" and want to automatically run when you boot SMARTBasic. Now, we need to change this so SMARTBasic "knows" it is on disk. This is done by making a permanent change to the SMARTBasic program. There is a number at address 16641 of Basic that indicates what the default drive is. This number is "08" which indicates tape drive 1 is the default; we want to change it to "04" which indicates disk drive 1. You might ask "How would one go about doing this?" Well, you can use the program DISKdoctor in the SMARTBasic workshop this month. Address 16641 is located in block 18, and is the second byte. If you are a beginner (and this is a beginners column) this approach may be a little too complicated for you. There is a version of DISKdoctor that is a lot easier to use called Basicmods (done by Bob Lennes). This program is on the Basic PD library # BNDV4 and is also printed in the July/85 issue. When you run this program it asks you to enter the address you want to change (16641 in this case) and it loads the correct block and displays the value at that address. You can then enter the value you want change it to (04 in this case) and Basicmods will write this back to the disk - Voila and you're done! Pretty easy I'd say.

Here is a really nice graphics program from Basic volume # BNDV9 -

```
5& NIAD #BNDV9- bounce
6HOME:? " PRESS ESCAPE TO END"
7FOR de=1 TO 3000:NEXT
10DIM g(2), inc(2), x(2), xt(2), y(2), yt(2)
20HGR2:HCOLOR =3
30HPLOT 0, 0 TO 255, 0 TO 255, 191 TO 0, 191 TO 0, 0
40FOR i=1 TO 2: inc(i)=RND(1)*4+2: g(i)=0: x(i)=0:NEXT i
50 y(1)=RND(1)*40: y(2)=RND(1)*70+10: c=0
60FOR i=1 TO 2
70 g(i)=g(i)+.9: x(i)=x(i)+inc(i)
80 y(i)=y(i)+g(i):IF y(i)<=190 THEN 100
90 y(i)=190: g(i)=-g(i)/1.05
100 xt(i)=x(i)
110IF x(i)>254 THEN xt(i)=254: h2=x(i)-254: c=i
120 yt(i)=y(i):NEXT i
130IF x(1)>254 AND x(2)>254 THEN FOR d=1 TO 900:NEXT
d:GOTO 20
140IF c=0 OR y(1)=y(2) THEN 160
150 yt(c)=y(c)+(y(3-c)-y(c))*h2/ABS(x(1)-x(2))
160HPLOT xt(1), yt(1) TO xt(2), yt(2)
170 ck=PEEK(64885):IF ck=27 THEN 180
175GOTO 60
180TEXT:END
```

```
Try this one, also from # BNDV9 -
5 REM DONUT
10HOME
20HGR
25HCOLOR =5: ry=15: rx=15
30FOR a=0 TO 2*3.1416 STEP 3.1416/25
40 x=127+50*SIN(a): y=96+40*COS(a)
50GOSUB 100
60NEXT a
70GOTO 240
100IF rx>ry THEN c=rx:GOTO 120
110 c=ry
120FOR b=0 TO 2*3.1416 STEP 3.1416/(4*c)
130HPLOT x+rx*SIN(b), y+ry*COS(b)
140NEXT b
150RETURN
240END
```

SMARTBASIC WORKSHOP

There are many times when you need to make direct changes to the value in an address on a disk or data pack. For example, to modify a program to run from disk where it will only run from tape; to change the default drive in SmartBasic so it will look for the "Hello" program on disk 1 instead of tape drive 1, etc. Also, you may need to change the attributes for a file or repair a directory. As an example, when I went to save a long SmartWriter file, it didn't save correctly and I had to enter in the header information to get SmartWriter to access it.

DISKdoctor (on NIAD Public Domain # BNDV4) is a program that will allow you to read in a block of data from tape or disk, change any value, and write the altered block back to the media. I thought we could walk through this process to better describe it.

When you run DISKdoctor, which was originally written by B. Hinkle and modified by Bob Lennes, you are asked whether the disk or tape is the one to be modified. Then you must tell it which block needs to be changed. A block is 1024 bytes of data and there are 160 blocks on a disk and 256 on a tape. Hence, if you wanted the 10th block you would enter 10 as the block number to read in. Let's use as an example the Troll's Tale problem described in the Public Domain section this month. There are two locations in block 0 (yes the first block is 0 not 1) which indicate whether the program should load from tape or disk. So, we enter "0" as the block number for DISKdoctor to read in. The program reads block 0 from the tape/disk and presents the following display:

```

      0 1 2 3 4 5 6 7
      8 9 A B C D E F
===== 0 0001010EB0053F02
===== 0000000001000000
===== 1 0001000000000100
===== 0000000100000000
===== 2 0100000000010000
===== 0000010000000001
===== 3 0000000001000000
===== 0001000000000100
===== 4 0000000100000000
===== 0100000000010000
===== 5 0000010000000000
y Bob Le 7920426F62204C65
nes, Li 6 6E6E65732C204C69
brarian= 6272617269616E0D
=*COINC 7 0D2A13434F494E43
LCTN=- P 4C43544E142D2050

```

This display is know as 1/2 a "page" of data. A "page" contains 256 bytes of data, hence there are 4 pages in a block or 8, 1/2 pages. On the left of the screen is the ASCII data in that 1/2 page, on the right in an 8 by 8 grid is the corresponding hexadecimal data. The display is sort of funny and needs describing. Each byte contains a 2 digit hex code. There are 16 bytes displayed horizontally in two rows of 8 each that correspond to the two horizontal rows of ASCII data on the left. There are 8 sets of these two rows for a total of 128 bytes of data. The vertical column of numbers on the left and the horizontal row on the top are the addresses that the data is stored at in that page. The first byte of data is stored at address "00", the second at "01", the 9th at "0A", the 17th at "10", etc. You need to know your hex here !

The first location in Troll's Tale is at address "0A" of page 1, the second is at address "33" of page 2. Remember that 1/2 a page is displayed per screen, i.e. there are two screens for page 1, two for page 2, etc.. When you locate the address on the page you want you will then tell the program you want to change it and you will be prompted to indicate the new value for that address. Once it is changed the program will write the corrected block back to the tape/disk. For the Troll's Tale fix you need to enter a hex "04" for disk or a "08" for tape. Remember that all the values must be entered in hex (the program reminds you as well). Once your change is entered that page is redisplayed with the new values in it for you to check. You then hit "e" to exit and you are given the option to permanently write the altered block out to your tape or disk, which you would want to do in the case of the Troll's Tale fix.

Here is the DISKdoctor program listing for those of you that do not have it -

```

1& -DISK editor by B. Hinkle
2& Modified by B.Lennes 11-4-85
3LOMEM :36500
4 x$="0123456789ABCDEF"
5HOME:? " THE DISK DOCTOR"
7?:? "A disk block modifying program":VTAB 20
10? "SELECT DRIVE: 1)DISK or 2)TAPE":GET a$:
d%=4+4*(a$="2" OR a$="@")
11 dn$="disk":IF d%=8 THEN dn$="tape"
15? " Insert "; dn$; " into drive #1":INPUT " hit
return"; a$
20DATA 62,4,1,0,0,17,0,0,33,184,136,205,243,252,201
25RESTORE:HOME: o=9
30FOR x=30000 TO 30014:READ d:POKE x, d:NEXT
35POKE 30001, d%
40?:INPUT "Block # to be edited?"; x
50POKE 30006, x:CALL 30000:& -read block 'x' to 35000
60FOR x=35000 TO 36023 STEP 128
65HOME: tb=17: bb=17
67? "page: "; INT((x-35000)/256+1);
70? TAB(13); :FOR e=0 TO 7
80? e; " "; :NEXT e?
83? "block: "; PEEK(30006);
85? TAB(13); :FOR e=9 TO 16
87? MID$(x$, e, 1); " "; :NEXT e?
89 o=10-o
90FOR i=0 TO 127 STEP 8
95& -print character part of block
100FOR j=0 TO 7
110IF PEEK(x+i+j)<32 THEN ? "="; :GOTO 125
115IF PEEK(x+i+j)=128 OR PEEK(x+i+j)=148 THEN ? "="; :GOTO
125
116IF PEEK(x+i+j)=151 THEN ? "="; :GOTO 130
117IF PEEK(x+i+j)>159 AND PEEK(x+i+j)<162 THEN ? "=";
:GOTO 125
120? CHR$(PEEK(x+i+j));
125NEXT j: ? " ";
130IF INT(i/16)=i/16 THEN ? MID$(x$, i/16+o, 1); :GOTO 133
132? " ";
133? " ";
135& -print hex part of block
140FOR j=0 TO 7
145 w=PEEK(x+i+j)
150? MID$(x$, INT(w/16)+1, 1);
160? MID$(x$, (w/16-INT(w/16))*16+1, 1);
170NEXT j:?:NEXT i:
180INPUT "Does this screen require changing (y/n, e to
exit)?:"; a$
190IF a$<>"y" AND a$<>"n" AND a$<>"e" THEN 180
195IF a$="e" THEN 280
200IF a$="n" THEN NEXT x:GOTO 280
210?:INPUT "Byte # to be changed(00-FF)?:"; b$
230GOSUB 520:IF tb=17 OR bb=17 THEN 210
255IF tb>7 THEN tb=tb-8
257 ad=x+16*tb+bb
260INPUT "Change byte to (0-FF)?:"; b$
263GOSUB 520:IF tb=17 OR bb=17 THEN 260
265& -change byte and write it to tape
270POKE ad, tb*16+bb: o=10-o:GOTO 65
280? "Would you like these changes to be permanent on ";
dn$; " (y/n)"; :INPUT a$

```

```

290IF a$="y" THEN POKE 30012, 246:CALL 30000:GOTO 25
300IF a$="n" THEN 25
310? "yes or no please":GOTO 280
510& -change byte # to decimal form
520FOR k=1 TO 16:IF MID$(b$, 1, 1)=MID$(x$, k, 1) THEN
tb=k-1: k=16
530NEXT k
540FOR k=1 TO 16:IF MID$(b$, 2, 1)=MID$(x$, k, 1) THEN
bb=k-1: k=16
550NEXT k:RETURN

```

Random Access in Basic
By W. MOTEL

This is prompted by a request from one of our members concerning a random access file he was trying to create. I will attempt to give a BRIEF explanation of random access, how it SHOULD work, and why it doesn't work properly in BASIC V1.0. This will not be an in-depth explanation of how to write random access code, but is mainly for those of you who have tried random access in BASIC and have had problems. If you are new to computers, BASIC, etc., don't worry if some of this might be confusing.

First, random access means that you can create (write) and/or access (read) records from a file in a NON-SEQUENTIAL, or RANDOM fashion. Instead of processing the records as they exist on the file (first record, then second, then third, etc.), you might want to access the fourth record first without having to go thru the first three. In essence, you go DIRECTLY to the record you want. Once you have the record you want you process the fields on the record the same as you would with a sequential file. SMARTFILER is an example of random access. You are presented with a list of KEY or SEARCH fields that are associated with each record. You choose the KEY value you want and SMARTFILER accesses that record, no matter where it exists in the file. How does the happen? The system needs to have a directory (similar to catalogs on your tape/disks), but in this directory (for the random access file), each key field has a pointer that tells the system where the record for that key value actually exists on the file. You can, on true random access files, also have more than one key field on a record. The key fields MUST ALSO BE UNIQUE. For example, if you have a file that contains member records. Each record contains a member number. This member number could be used as your KEY field, however, each member number must be a unique (different) value.

The DIRECTORY or INDEX for the file contains each key value and the pointer to where the record associated with it actually exists. As new member records are added, the actual record can be stored any where on the file, as long as an INDEX entry is also created (to point to the actual location). Why do this? Faster access to a specific record (by key value). Also, we can access the file in key value order by, NOT having to sort all the actual records, which are probably quite large, but by sorting the small INDEX of key fields and pointers. As records are added, we don't

need to resort the entire LARGE file of records, but only the INDEX.

That is, in theory, how random access should work, and for the most part, how SMARTFILER works. Why doesn't it work correctly/effectively with SMARTBASIC V1.0. First, we will use the following sample program as our example.

```

10 D$=chr$(4)
20 V$="      ":rem leave 5 blanks
30 for v=1 to 5:v$=v$+v$:next v:rem V$ contains 160 spaces
50 print D$:"OPEN TEST,L160,d5":rem OPEN on disk 1
60 for j=1 to 10
70 print D$:"WRITE TEST,R";j
80 print j*10;v$
90 next j
100 print D$:"CLOSE TEST"

```

This creates a file TEST on disk (d5) with a record Length of 160 characters (Line 50)

Line 60 thru 90 are executed 10 times (j = 1 to 10)

Line 70 sets mode to write a Random record - The key value being the Record number (indicated by the value of j)

Line 80 (print) actually writes the record. The data being the value of j * 10, followed by the contents of V\$ (spaces).

Line 100 closes the file TEST

What do the records contain. The first record contains 10 (j=1 * 10) followed by blanks (V\$). The second record contains 20 (j=2 * 10) followed by blanks, on up thru the tenth record which contains 100 (j=10 * 10) and blanks. The OPEN statement defined the file as having records whose Length are each 160 characters (L160). It doesn't matter if you actually write 160 positions or not, it reserves 160 positions in each record. Therefore, the print at line 80 has V\$ after j just to insure the remaining positions in the actual record will be filled with blanks (enough of the 160 spaces in V\$ to fill in the remaining 160 record positions after the value of j). If we just had print j, the record would contain the value of j followed by whatever was already in that spot on the tape or disk. The system does NOT automatically fill in the remaining space with spaces.

The write statement at Line 70 (within the print) directs the next print statement (without the chr\$(4) or D\$ at the beginning) to actually write to the OPENed file. What does it write?. It writes to the record space indicated by the value following the R, in this case the variable j. One thing to note; we DO NOT have an INDEX. SmartBASIC expects us to tell it what record number to write (or read). You must set up your own index to search (for example, a table of values 10 = record 1, 20 = record 2, etc.) or have the specific record number be the key (for example, my baseball card program, the card number could also be the record number since the numbers are all unique).

How does the system know where to write to or read from by only knowing the record number? Two things, the record length in the OPEN and the record number in the WRITE (or READ for input). In my example, each record is a Length of 160, therefore the first record (R1) is in the

first 160 positions of the file (regardless of what block its actually at on the tape/disk). Record 2 is in the second 160 positions and so on. Remember a block contains 1024 characters. The following shows the positions of each record. We will use block 1 to indicate the first block of the file, regardless of its actually location on the tape/disk.

REC #	REL BLOCK	POSTION in BLOCK
1	1	1 - 160
2	1	161 - 320
3	1	321 - 480
4	1	481 - 640
5	1	641 - 800
6	1	801 - 960
7	1	960 - 1024 (64)
	and 2	1 - 96 (96)
8	2	97 - 256
9	2	257 - 416
10	2	417 - 576

Notice, record 7 cannot all fit onto the first block, so part of it is on the end of the first block and the rest start the second block.

Looking at the record map, you can see that records 1 thru 6 and part of 7 all fit on the first block, therefore, as long as you are reading/writing those records AND that block is already in the buffer, no physical I/O should be needed.

SmartBASIC V1.0, unfortunately DOES NOT do this. When you write record 1, it will physically create the file and write record 1 block. When you write record 2, it reads block 1, adds in the second records info, and RECREATES the file and write block 1 to the NEW VERSION of the file, marking the older version as deleted.

What does this mean? The tape/disk is almost in constant motion of reading/writing. As the catalog entries are recreated and the prior entry marked deleted, the system is not only rewriting the directory block, but also using up catalog entries and (if you write enough records) use up all 38 entries in the catalog.

The way it should work (my example) is to fill up the buffer with 1024 characters (the first 6 and part of 7 records) then actually write the block to tape/disk, fill the buffer up with the rest of record 7 and records 8 thru 10, then write the buffer to the second block, close the file by creating 1 catalog entry for the file.

Another problem (this is the last)! Assuming the random access worked correctly, the ideal program is where you are prompted for the record number, you key it in on the keyboard, and the actual record is read (or written). SmartBASIC does not work very well at this either. It doesn't seem to like to mix keyboard/screen I/O in the middle of TAPE/DISK I/O (this indicated by the print chr\$(4)). You will encounter system locks or invalid/bad I/O messages. I know, you might be reading this saying that you have or seen a program mixing these methods of I/O. Yes they do exist, HOWEVER, all of these programs do screen/keyboard I/O, then do all the file handling OPEN

thru CLOSE, then go back to screen/keyboard I/O. This is fine. It's when you try to mix screen/keyboard I/O inbetween the file I/O, (after the OPEN and before the CLOSE. This causes massive headaches to the ADAM and you in trying to figure out why it doesn't work like the book says it should.

If you would like to see the above problems with random access, run the sample program. I would suggest

ONLY running it on DISK. Use a freshly initied disk for the output. Note the time it takes to actually run (about 2 minutes) and the constant running of the disk. When you are finished, run my UTILDUMP and do the catalog-directory print option on the disk. You will see the filename TEST appear a number of times. Note, that each appearance was when a record was written. All will be deleted except the last entry.

You should also see a pattern in the LastBYTE column. The numbers will go up by 160 (record size). Note the point where the file goes from 1 to 2 blocks. Not only are catalog entries being used, but actual disk space (blocks are being wasted with the older versions of the file).

If you find the last entry for TEST (the type is A), this should be the current good version of the file. Using the block read option of UTILDUMP, read in the actual block that the file starts at. If you then print or view this block, you should see the actual records in the 160 position areas (10 in position 1-2 from record 1, 20 in position 160-161 for record 2, and so on).

Hopefully, this has helped explain and illustrate how the random file is actually stored and why we have problems with it in SmartBASIC V1.0. This is not a hardware problem, but simply a problem with the way SmartBASIC V1.0 handles it. This was simply not correctly written.

P.S., the APPEND option on the OPEN also does not work. All you get when you use the APPEND option is the last record written to your sequential file.

THE ADAM SMARTBASIC PROGRAMMER'S TOOLBOX by Bob Lennes

The Control-P Screen Dump

Many a times I have wanted to push Control-O (to delete a character) and instead accidentally pushed Contro l-P and have had to wait for the stupid printer to print out the whole screen. Or I was going through memory, printing out characters, and came across a 16, forgetting to make sure I didn't print CHR\$(16). Now I found myself a way to 'turn CHR\$(16) off'. Just poke 17302 and 18320 with 255, and the screen dump will be disabled.

Printing All the Control-Characters

Some of the characters you try to print, such as CHR\$(15), have special functions. There is a table of these

characters between memory addresses 18304 and 18320. Try poking these with different values- such as 255. For example, the Peek(18312)=28. If you poke it with a 255, you can now print the graphic character CHR\$(28).

ADAM also doesn't allow you to print CHR\$(4) in the first column. It interprets it to mean that an input/output command is following it. To disable or change the character, poke 19479 with a number. You could then print hearts in the first column.

Recovering Files

Whether you noticed it or not, SmartBASIC 1.0 does not allow you to recover H-type files. I'm not sure if this is a bug or a prevention from having an A file and an H file of the same name- but there's an easy fix. Just poke address 20619 with 72.

Initializing Disks From SmartBASIC

Basic treats disks the same way as tapes and sets the directory up for 255 blocks even though disks have only 160 blocks. This isn't a problem until you get near the end of the disk. You will get I/O errors. The only problem with using DOS is that you can't use whatever volume name you want. Well, as usual, there is an easy fix. Whenever you want to INIT your disks, just poke the address 25305 with 160.

A Forty Column HELLO Program

Here is a program that I'm sure you will like. It has a machine language subroutine I made that changes ADAM's display to 40 columns like most normal computers have. SmartBASIC still thinks it's in 31 column mode, so all carriage returns, HTAB's, VTAB's, etc. are all offset. I have not yet found a fix for this, but I will tell you as soon as I do. In the meantime, enjoy.

Password Security

This is just basically your normal "enter name and password" program. The names and passwords are in a data statement at line 910. You can change these for your own use. The Control-C interrupt is changed to Control-Delete at line 90. If you want complete security, change it to 255. Also, if you enter "PROUT" for the name, there is a "backdoor" routine that will print out all names and passwords, in case you forget your password. You can eliminate it by deleting line 225. All characters typed in are converted from lower to upper case.

Once your password is accepted there are several commands available:

CAT (or DIR)- Catalog Tape or disk
 TAPE or DISK- Select tape or DISK
 BASIC- Go to Basic (31 Columns only)
 BYE- Go to Word Processor
 RUN <prog.name>- Run basic program

Here is the program:

```

10& 40 Column HELLO password program
20& by Bob Lennes
90POKE 16134, 127
95ONERR GOTO 2000
100LDMEM :28000
110READ v:POKE 27900+a,v:IF v<>201 THEN a=a+1:GOTO 110
115CALL 27900
120POKE 16957, 31:POKE 16956, 0
130POKE 16994, 32:POKE 16996, 0
140POKE 16959, 29:POKE 16993, 30
145HOME:VTAB 6:? " Hello. "; SPC(33):FOR t=1 TO
700:NEXT:?:VTAB 11
147 nu=0:DIM n$(30), p$(30)
148READ n$(nu), p$(nu):IF n$(nu)<>"EOF" THEN
nu=nu+1:GOTO 148
150? " What is your first name? ";
155GOSUB 1000: nm$=n$
160IF n$<"!" AND LEN(n$)>1 THEN n$=RIGHT$(n$,
LEN(n$)-1):GOTO 160
170IF n$<"!" THEN ?:VTAB 11:GOTO 150
180IF RIGHT$(n$, 1)<=" " AND LEN(n$)>1 THEN
n$=LEFT$(n$, LEN(n$)-1):GOTO 180
200 pw$="":FOR t=0 TO nu-1
210IF n$(t)=n$ THEN pw$=p$(t)
220NEXT
225IF n$="PROUT" THEN ?:FOR t=0 TO nu-1: n$(t),
p$(t):NEXT:GET a$:RUN
230IF pw$="" THEN ?:VTAB 16:? " You have not been
authorized for access, "; n$
240IF pw$="" THEN FOR t=0 TO 1999:NEXT:RUN
300?:VTAB 16:? " Please Enter Your Password: ";
310 p%=1:GOSUB 1000: p%=0
320 ep$=n$:IF ep$="" THEN 300
330IF pw$<>ep$ THEN ?:VTAB 21:? " Password Entry
Failure !!!":FOR t=1 TO 999: CHR$(7*(t<40)); :NEXT:RUN
400HOME:? " HELLO "; nm$; " !!!":VTAB 6:? " Please
Enter A Command: "
410VTAB 7:HTAB 10:GOSUB 1000

420IF n$="" THEN ?:GOTO 410
430IF LEFT$(n$, 4)="RUN " THEN ??: CHR$(4); n$
440IF n$="DIR" OR n$="CAT" THEN ??: CHR$(4);
"CATALOG":GET a$:GOTO 400
450IF n$="SS" THEN 1200
460IF n$="QUIT" OR n$="END" OR n$="BASIC" THEN POKE
16134, 3:TEXT:CALL 16650:END
470IF n$="BYE" OR n$="WP" THEN CALL 64743
480IF n$="TAPE" THEN POKE 16821, 8:GOTO 400
485IF n$="DISK" THEN POKE 16821, 4:GOTO 400
590HTAB 50:? "I don't understand you":FOR t=1 TO
2299:NEXT:GOTO 400

```

```

899END
900DATA
14,243,6,1,205,32,253,14,19,6,7,205,32,253,201
910DATA
"BOB","MISTY","BRETT","DOG","GREG","KATIE","RULER"," "
990DATA "EOF","EOF"
1000 n$="":FOR t=1 TO 38
1010GET a$:IF a$=CHR$(13) THEN t=38:GOTO 1090
1012IF a$=CHR$(27) THEN n$="":RETURN
1015IF a$=" " OR a$=CHR$(2) THEN 1080
1020IF a$=CHR$(8) THEN IF LEN(n$)>1 THEN a$=a$+" "
+CHR$(8): n$=LEFT$(n$, LEN(n$)-1):GOTO 1080
1023IF a$=CHR$(8) THEN IF LEN(n$)=1 THEN a$=a$+" "
+CHR$(8): t=1: n$="":GOTO 1080
1030IF a$>="a" AND a$<="z" THEN a$=CHR$(ASC(a$)-32)
1050IF a$<"A" OR a$>"Z" THEN 1010
1080IF p% THEN ? " * " : IF ASC(a$)=8 THEN ? a$: a$:
:GOTO 1010
1081IF p% THEN 1085
1082? a$: :IF ASC(a$)=8 THEN 1010
1085 n$=n$+a$
1090NEXT:RETURN
1200 f$="":FOR t=55374 TO 55384:IF PEEK(t+1)=3 THEN
t=55385:GOTO 1220
1210 f$=f$+CHR$(PEEK(t))
1220NEXT
1230?:VTAB 11:? " Hit any key but ESCAPE to run " ;
f$:GET a$
1240IF a$=CHR$(27) THEN 400
1250? CHR$(4): "RUN " : f$
1999END
2000 e=ERRNUM(0)
2010IF e=8 THEN ?:"Drive Error!":FOR t=1 TO
1799:NEXT:GOTO 400
2090CLRERR:?:? " --- ERROR #": e: " ---":END

```

other ones - it is a simple concept that makes so much sense you ask "why didn't I think of it" (didn't you ever wonder why you didn't think of inventing the Hula Hoop?). The basic idea of windows is to provide the ability to view multiple "screens" on your video terminal at once. This is accomplished by dividing the terminal screen into multiple little "windows", each of which contains a selected grouping of data. These data groupings could actually be different programs that are running simultaneously in the computer. Usually, only one "window" and hence application program is active at one time. If I remember correctly the Xerox Star system was the first to introduce this concept as an office productivity tool. All the major software vendors have come out with their "window" products in conjunction with integrated data base, word processing and graphic programs. What ADAMCalc provides us is the application of this "window" tool to help the user in getting around their spreadsheet. Obviously, all but the very small spreadsheets will not completely fit on the ADAM's small screen display and this type of a user aid is really a necessity. Lets see how it works:

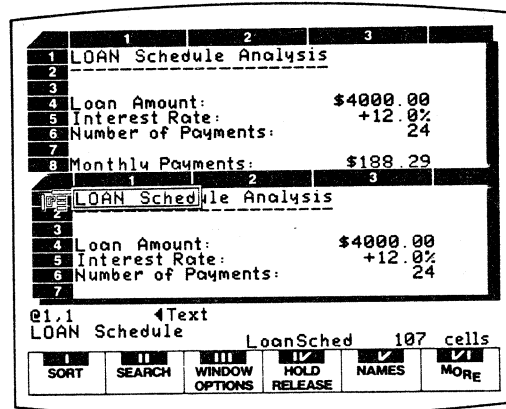


FIGURE 18: DIVIDE YOUR SCREEN INTO TWO WINDOWS

ADAMCALC WORKSHOP

We have many requests for information on the ADAM spreadsheet program ADAMCALC from our new members that I've decided to "re-kindle" a series of articles we published in early 1985. Here is the first :

You know, every time I work with ADAMCalc I am amazed at the quality of this piece of software. The functions provided are equal to or better than spreadsheet programs costing five times as much. Its also very easy to use and the HELP function adds to its utility. Well, enough of the ranting and raving (but its sooooo good !!). I wanted to review one of the features of Calc this month that is in my opinion, a must for your effective use of Calc's functions.

"Windows" is a concept that has only recently come into the computer buzz word vocabulary. This idea is like many

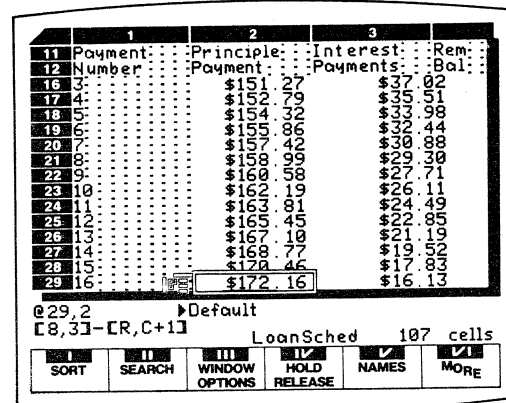


FIGURE 17: HOLDING THE TITLES OF COLUMNS AND ROWS MAKES A LARGE SPREADSHEET EASIER TO READ

The Reedy Entertainment Pack I
By L. Marschand

The first thing we need to do is distinguish between the "HOLD/RELEASE" function and "WINDOWS". The H/R function simply "holds" whatever row and/or column you specify on the screen at all times as you scroll your spreadsheets rows/columns across the screen. I recommend that you use the H/R to keep your row and column headings "fixed" on the screen so that you know what data you are looking at. As an example, if you have a monthly budget spreadsheet you will want to HOLD the expense item names (rows) and the name of the month (columns) on the screen so you know what item/month you are inputting. H/R works within each of the windows you may set up. Depending on the spreadsheet you are working with I would suggest you set up the H/R of your title rows/columns on the first window which is the whole screen. You see, each of the windows you set up will "lay" on top of the current screen you are

This is a set of three color graphics games done in SMARTBasic by Reedy Software. Many of the SMARTBest enhanced commands are used to provide advanced sound and color presentation techniques. The disk/tape is self bootable, containing SMARTBasic on it as well as the built in SMARTBest commands i.e. you don't have to own SMARTBest to run this program. All programs are set up to fastload to reduce the time for both initial load and changing from game to game. Color is used very well on all screens as our sound effects. An instruction manual is provided and instructions are included in the program options as well for viewing on the screen prior to playing a game.

1	2	3	
1	LOAN Schedule Analysis		
2			
3			
4	Loan Amount:	\$4000.00	
5	Interest Rate:	+12.0%	
6	Number of Payments:	24	
7	Monthly Payments:	\$188.29	
8			
9			
10			
11			
12			
13			
14	Loan Amount:	\$40.00	
15	Interest Rate:	\$38.52	
16	Number of Payments:	\$37.02	
17			

←Text
LOAN Schedule LoanSched 107 cells

I SORT II SEARCH III WINDOW OPTIONS IV HOLD RELEASE V NAMES VI MORE

1	2	3	
1	LOAN Schedule Analysis		
2			
3			
4	Loan Amount:	\$4000.00	
5	Interest Rate:	+12.0%	
6	Number of Payments:	24	
7	Monthly Payments:	\$188.29	
8			
9			
10			
11	Payment	Principle	Interest
12	Number	Payment	Payments
13			Rem Bal
14	1	\$148.29	\$40.00
15	2	\$149.78	\$38.52
16	3	\$151.27	\$37.02
17			

←Text
LOAN Schedule LoanSched 107 cells

I SORT II SEARCH III WINDOW OPTIONS IV HOLD RELEASE V NAMES VI MORE

FIGURE 19: THE ACTIVE WINDOW SOMETIMES HIDES OTHER WINDOWS

looking at, much as you would lay a postage stamp on top of a playing card. The window that is "behind" is available when you want it. To move between windows you use the ACTIVATE window smartkey which allows you to choose which window you want to work with. You can only scroll within or input into one window at a time. However, by setting up your windows correctly via overlaying them you can see multiple parts of your spreadsheet at once, which is the real advantage of Calc's windows, especially for large spreadsheets. The instructions for creating and adjusting the sizes of your windows are pretty well explained on pages 41-46 of the ADAMCalc manual. Hope this brief introduction to windowing will help you better utilize ADAMCalc.

BLOCKADE - This is the classic "breakout" type of game where you must keep a bouncing ball in play by moving your paddle across the bottom of the screen. Low res color graphics are used and the movement is very smooth and fast. There are four skill levels to give even the "joystick pro" a run for their money. One and two player options are provided and a pause feature is available. This is a challenging game that be alot of fun.

CONNECT 4 - This is an ADAM recreation of the board game where you insert tokens trying to get 4 in a row of your color token. I've played this game with my children for years. Jack Reedy does a nice job on this game. You can play against another player using either the hand controllers or keyboard or you can play against ADAM (he takes a while in calculating his strategy). This is a fun adaptation.

SLIDE PUZZLE - This was my favorite. Remember the little hand held puzzles that had one slot open and you had to get all the numbers back in sequence? You now have it on ADAM. A cute slide puzzle is drawn in hi-res graphics containing 4 columns by 6 rows of numbers that ADAM mixes up at the start of the game. You use the arrow keys or the hand controller to move the numbered squares around, to get them all in order. This is a toughy, but should be fun for the strategy minded among you.

Overall, I found these games well done and entertaining for kids (or us so called adult kids). The programs worked flawlessly and are truly professional.

RATING - B+

This is the second volume of a set of recipes that utilize the ADAM program Recipe Filer. See the review of Volume I and some comments on what Recipe Filer is in the April 86 issue.

This volume contains 40 summer salads ! For those of you into salads or trying to diet, these are for you.

Here are some of the names for you -

Cherry Salad (pink cloud)
 Cranberry Mallow
 French Beef
 German Potato
 Heavenly Cole Slaw (has to be good)
 Hot Chicken
 Korean
 Layered Cheese and Apple
 Marshmallow Cheese Gelatin
 Molded
 Oriental Broccoli
 Pink Artic Cheese Fruit
 Pretzel
 Seafoam
 Sour Cream Potato
 Walnut Antipasto
 Watergate

Anything that sounds this good has to get a rating of A for appetizing.

WACKY WORDS By W. Motel

I've had this "game" sitting around for some time and never got around to reviewing it. I'm sorry we didn't do it before as it is designed to aid in the use of SMARTWriter.

This is not a regular game, but a DDP containing 22 word-processing files. It's purpose is to provide game-type exercises to teach and give you practice in learning the SMARTWriter word processor that is built into the ADAM, it's capabilities and some of the special keyboard functions. This package was done by Intentional Educations, Inc and is designed to teach. Solutions are provided for all exercises via the BACKUP FILE DIR which is a nice help if you get lost.

Instructions are provided onscreen within each game and are also provided in the 38 page guide. They are organized by the MAIN word-processing function to be practiced, however, each game involves more than 1 function.

The exercises involve the following major commands/keys:

MOVE

- Fix jumbled sentences
- Match up phrases/answers
- Realign phrases to make sense

INSERT

- Missing vowels
- Missing middle of story
- Missing begin/end of story

SPACEBAR/BACKSPACE

- Unscramble famous names/movies/TV shows
- Codebreaker

MOVING WINDOW

Use it to adjust to columns containing clues/hints/answer and to construct a story.

SEARCH/REPLACE

Search/replace to find fortune based on your birthday

Besides the above functions, exercises also give practice in using CLEAR, GET, PRINT, PRINT HILITE, and HILITE. The book also includes a summary/explanation of the keyboard controls used by WACKY WORDS. A nice explanation is provided for each of the SMARTWriter functions as well that is better than the SMARTWriter book supplied with ADAM.

Overall, this is a nice drill to teach SMARTWriter word-processing functions. It is a good additional source for exercises to use in learning SMARTWriter and its capabilities. Recommended for those that are not "up" on SMARTWriter.

RATING: B

MEMBER COMMENTS / QUESTIONS & ANSWERS

. As you stated in the introductory letter and in the sample copy of the newsletter, I, too, feel that the ADAM is an admirable machine. Being a scientist with the Provincial Public Health Department, my initial interest in the ADAM was in the word processing capabilities, in order to write reports, scientific papers, etc. with out having to write each one long-hand, modify, type, re-modify, correct, re-type, etc.. However, I soon found, too, that the ADAMCalc spreadsheet was a marvelous bit of software for all kinds of scientific tabulations and calculations, from monthly number of medical specimens examined and the number of infections identified, to quarterly and annual workload statistics, from exam results of our students (in alphabetical, numerical, or whatever order), to compact and comparative tabulation of epidemiological findings published by other investigators, etc, etc.. In short, I am using the ADAMCalc tape so much I'm afraid I'll wear it out within the near future. I also have used the SMARTFiler tape a fair bit, but, through a tragic error, recently wiped out the program. It is presently, I hope, being re-programmed by Coleco. I am not a computer man by training, and so far have relied almost exclusively on the word processing and spreadsheet

programs, and I don't know how much more use the ADAM could be to me. My children also use it for their school reports and for games, but I try to discourage that last activity. Although I would like to acquire such items as a disk drive, modem, tractor feed, and a faster, less noisy printer, the budget for the apparatus is strictly limited, so that items such as these can only be purchased piecemeal and over a period of time.

Th. Scholten

- I am always happy to hear of someone getting the benefits out of the ADAM that they should. Although many people bought the ADAM for the word processing capabilities, you have found that it is certainly more valuable than that. ADAMCalc and SMARTfiler are two excellent programs that every ADAM owner can benefit from. The ADAM is a versatile computer and not just a toy.

. I started a paint contracting company in Jan/85. The book work got very hectic to do, so I went computer shopping. After comparing prices of other popular home computers, I found the Coleco ADAM to be a wise investment, and a bargain at \$300.00 for the equipment offered. I purchased my ADAM in August specifically for business purposes. The built in W/P program has been a great help in writing letters and advertising flyers. ADAMCalc has been a very helpful resource in keeping such vital records as book keeping files, proposals, billing invoices, etc. Also, I use ADAMCalc for my home budget expenses.

Recently, I went to the local retail outlet (Toys R Us) where I have been purchasing blank DDP's and found the shelves empty. I located the department manager for assistance. I was informed that Coleco was no longer making any hardware and software at the retail level. In my panic, I went to all the local retail outlets and purchased the software in fear that I would not be able to find it the future. I was very disappointed with the thought that I had invested \$300.00 in a computer that was obsolete six months after I purchased it.

Then I discovered Family Computing magazine (Feb/86) and the ads in the classified section. I proceeded to request information on the future of ADAM from several software manufacturers and user groups. Out of all the responses I received from my requests, I found the information I received from you to be more complete and comprehensive on the future of the ADAM. I was relieved that ADAM was "ALIVE AND WELL" and being used by thousands across the nation.

Since I purchased the mentioned software I have spent countless hours at the keyboard experimenting with these new programs. Although I'm just a novice, I would like to enhance my knowledge of ADAMCalc, SMARTBasic and CP/M 2.2 programs.

Thank you for taking the time to read this letter and understand the panic I went through. Again, I would like to thank you for the information you sent me which persuaded me to join the NIAD ADAM User's group. It's nice to correspond with someone who cares about ADAM.
M. Ditoto

- This letter so epitomizes the plight of many ADAM owners that I wanted to print it for everyone's information. This problem is the whole purpose for NIAD and it makes me feel good to see that people are being helped. Thank you very much for sending it in for us to share with others.

. Would like to start or become a member of a local ADAM User's Group chapter. Please contact Dale M. Flaven, PO Box 704, Waterford, Ct 06385 or phone 447-1791 Ext 4267 weekdays/ 444-2437 all other times.

. FOR SALE: Artwork, photo masks and documentation to manufacture 64K Expansion circuit boards for the ADAM. Fits as the original. Include all rights to this design. Possible group or club enterprise. Contact B. Barr, 6829 High Bluff Wy., Las Vegas, NV 89108 (702) 645-8545

. WANTED - SpyHunter cartridge. Will purchase outright or trade SEVERAL other games for this one cartridge. Contact Randall Adams 4757 #B, Sunny Palm Cir, WPB, FL 33415 or call after 6:30 PM EST (305)689-1085

GAME HINTS

2010: Text Adventure
is a super game, but it is a toughy. Send in you hints to help everyone out.

See the Jan/86 issue for how to get into the ship. J. Bonavita writes that you need to leave via door C and enter the air lock to go outside and fix the main generator with the MMT, then recharge all the battery items. Turn the lights on, but don't leave the generator on! After everything is recharged head straight to the bridge and fix the hull breach, using the plate in the Electronics section and WLT. After this head for Life support and turn on the air. Your suits air and water supply can be recharged at Life support.

. Does anyone have a clue for how to fix the leak in the Hibernators. I have replaced the pipe in the shower. I always die from no sleep and it is the only place I can find to sleep! G. Lacerda, Bowlers Country Club, 301 Washington St, Fairhaven, MA 02719

PRODUCT LIST

HARDWARE & ACCESSORIES

ADAM DISK DRIVE

DC-1A/SINGLE SIDED 160K CAPACITY \$ 229.00

DC-1A/DOUBLE SIDED 320K CAPACITY \$ 309.00

5-1/4" high-capacity disk drive for the Coleco Adam. Provides expanded capability for faster storage and retrieval and increased reliability. Requires standard diskettes. Manufactured by Eve Elec Sytems and 100% software and hardware compatible with the ADAM.

DOUBLE SIDED DISK DRIVE UPGRADE \$ 149.95

Send in your Coleco disk drive to be upgraded to 320K capacity. Send in your complete drive with cables/ Disk Manager and CP/M System disk if you have CP/M. If your drive requires repair you will be charged \$19.95 plus parts. NOTE: Due to a limitation of CP/M you can not mix single and double sided drives while using CP/M.

ADAM LINK MODEM 7818 \$ 69.95

ADAM phone modem which provides capability, with included software, to interface with other ADAM computers or large bulletin board systems such as CompuServe. Includes coupon for receiving advanced communications software for uploading and downloading of programs.

COMPUSERVE STARTER KIT \$ 25.95

Includes account number, password and five free hours of connect time to the popular compuserve information system.

EVE 64K MEMORY EXPANDER ME-64 \$ 49.95

Provides additional 64K of memory for SMARTWriter, CPM programs. Provides print buffer spooling for ADAMCalc.

EVE RS232/PARALLEL INTERFACE SP-1 \$139.95

Allows the connection of the ADAM to any popular printer and other devices requiring either serial or parallel interface connections. Includes software for directing print to additional printers directly from SMARTWriter, SMARFiler, BASIC, CPM programs.

Includes EITHER parallel or serial cable - specify which one desired.

EVE SP-1 PARALLEL INTERFACE ONLY \$ 79.95

(Includes parallel cable)

ORPHANWARE PIA2 PARALLEL INTERFACE \$ 50.00

(Parallel cable required)

PARALLEL OR SERIAL CABLE SP-1C \$ 17.95

Second cable required to attach SP-1 interface to parallel or serial printers.

SPEECH SYNTHESIZER/CLK CAL SS-CC \$109.95

Output voice speech and words via Basic and CPM programs. Includes software to construct words. Real time clock calendar provides continuous date and time accessible from Basic and CPM.

EVE 80-COLUMN VIDEO/MOTHER BOARD VD-MB

With Power Supply \$329.95

W/O Power supply \$309.95

With trade in of PS-1 \$299.95

Provides 80-column video output from the ADAM to a monochrome 80-column monitor. Also includes separate power

supply and expansion slots for attaching other EVE products.

Light pen port attachment also included. Expands ADAMS capability for software requiring 80-column display.

** Includes Word Processing and Basic software programs **

EVE MON-80 \$329.95

80 Column video board and monochrome monitor assembly.

Includes cable to attach to inside of ADAM console.

Does NOT include independent power supply or motherboard

** Includes Word Processing and Basic software programs **

EVE POWER SUPPLY FOR ADAM PS-1A \$ 79.95

EVE MULTI-UNIT ADAPTER MA-3 \$ 44.95

Special adapter cable required to attach both the SP-1 and SS-CC to the ADAM. NOTE: Not required for 80-column video board.

CARD EDGE ADAPTER CEA-1 \$ 24.95

For attaching ADAM Autodialer to MA-3 cable.

ADAM PRINTER TRACTOR FEED \$ 72.95

Hooks unto the ADAM printer as originally designed to provide for feeding of pin-fed continuous form paper.

Provides consistent alignment and advancing of paper. All metal design - guaranteed.

PRINTER STAND/ON/OFF SWITCH \$ 15.95

Provides raised legs for the ADAM printer and relocates the on/off switch to the front of the printer for easier access when loading paper.

MONITOR CABLE 7830 \$ 9.95

Required to hook complete ADAM console to a video monitor.

Supports both picture and sound signals.

EXPANSION MOD MONITOR KIT \$ 29.95

Kit to modify colecovision unit to allow it to be connected to a monitor via 7830 cable above. Requires soldering skill - see review in 2/85 issue.

ADAM REPLACEMENT RIBBONS 7806 \$ 4.95

ADAM DUST COVERS

3 pieces for complete ADAM system \$ 18.95

Disk Drive Only Cover \$ 8.95

3 pieces for ADAM Colecovision

Expansion Unit \$ 23.95

PRINTER WHEELS \$ 5.55

Replacement printer wheels for the ADAM printer - Gothic 12 /Script 12 /Elite 12 /Emphasis /Courier 72/Pica. Specify font desired.

TAPE DRIVE HEAD CLEANING KITS \$.50

COLECO/LORAN DATA PKS \$ 4.75 @

10 for \$ 39.95

NIAD/LORAN DATA PKS \$ 4.25 @

10 for \$ 34.95

NIAD UNFORMATTED DISKS - DS/DD 1-9 \$1.50 @

10 or more \$.99 @

50 or more \$.85 @

PRODUCT LIST

SOFTWARE (DDP UNLESS NOTED)

SMART LOGO 7600	\$ 29.95 SPECIAL
EXPERTYPE 7602	\$ 19.95 SPECIAL
SMART FILER 7813	\$ 15.95
RECIPE FILE 7814	\$ 15.95
SMART LTRS/FORMS 7805	\$ 15.95
FLASHCARD MAKER 7662	\$ 15.95
FLASHFACTS (TRIVIA 2902, HISTORY 2901, VOCAB 2900)	\$ 11.95
ADAMCALC 7831	\$ 24.95 SPECIAL
R. SCARRY'S WORDBOOK 7658	\$ 20.95
DRAGONS LAIR 2683	\$ 19.95
WACKY WORD GAME 7834	\$ 15.95
CPM 2.2 & ASSEMBLER DDP or DISK	\$ 29.95 FEW LEFT
SUPER ZAXXON 2623	\$ 10.95 SPECIAL
HOME SFTWARE LIBRARY 7826	\$ 19.95 SPECIAL
2010: TEXT ADVENTURE GAME BY MGM/UA 7849	\$ 20.95
FAMILY FEUD 7710	\$ 20.95
BEST OF BRODERBUND	\$ 10.95 SPECIAL

BOUNTY HUNTER VS4048	\$19.95	
ADVENTURE PK II VS4015	\$19.95	
VIDEOTUNES (DDP ONLY)	\$26.95	SMURF PAINT AND PLAY 2697 \$18.95
FANTASY GAMER (DDP)	\$29.95	SUESS FIX UP PUZZLE 2699 \$18.95
BASIC BONANZA	\$29.95	MONKEY ACADEMY 2694 \$18.95
DIABLO	\$19.95	TELLY TURTLE LOGO GRAPHICS 2698 \$18.95
SOFTPACK I	\$18.95	DUKES OF HAZZARD \$18.95
LVAC ARCHIVES I	\$ 9.95 SPECIAL	ROCKY BOXING \$18.95
REEDY SOFTWARE LIB	\$15.95 SPECIAL	WARGAMES \$18.95
QUICKFAX QUEST	\$22.95	CABBAGE PATCH PIC \$18.95
PERSONAL ACCOUNTANT	\$19.95	SHOW
SMARTBEST	\$16.95 NEW	
STRATEGY STRAINER I	\$19.95	
BUSINESS PACK	\$18.95	
PAINTMASTER	\$22.95 NEW	
TURBOLOAD	\$26.95 NEW	
POWERPRINT	\$22.95 NEW	
SIGNSHOP	\$22.95 NEW	
SMARTTRIX	\$28.95 NEW	
QUICKOPY	DISK \$11.95 NEW	
	DDP \$14.95	
MULTIWRITE	\$36.95 NEW	
MEDIA AID	\$19.95 NEW	
ELEC GAME PACK	DISK \$17.95 NEW	
	DDP \$19.95	
NUMBER BUMPER	DDP \$18.95 NEW	
REEDY ENTERTNMNT PK DSK	\$15.95 NEW	
	DDP \$17.95	
JEOPARDY QUESTION PACK	\$19.95 NEW	

NIAD USER'S GROUP PRODUCTS:

I. NIAD PUBLIC DOMAIN SOFTWARE

** COST IS \$7.00 FOR EACH VOLUME ON DDP **
 ** COST IS \$5.00 FOR EACH VOLUME ON DISK **
 *** SPECIFY VOLUME # AND DISK OR DDP***

- SMARTBasic Volumes I-13 #BNDV1-13 (13 different volumes)
- SMARTLogo Volume I #LNDVI
- ADAMCalc Volume I #ANDVI
- BASIC Utilities Volume I #UNDVI (INCLUDES BACKUP UTILITY PROGRAM)
- CPM 2.2 Volumes I-18 #CNDV1-18 (18 volumes available)
- JEOPARDY
- PINBALL/ MACK
- TROLLS TALE
- ADAM DIAGNOSTIC (NOTE: Requires 64K Memory Expander)
- SUPER SUB ROC
- ADAMLINK II TELECOMMUNICATIONS

II. COMMERCIAL SOFTWARE

SMARTGAMES PACK	\$ 9.95 DISK
	\$ 11.95 DDP
ROYAL AMBASSADOR EDUCATION PACK I	\$ 14.95 DISK
	\$ 16.95 DDP
CPM NEVADA BASIC	\$ 39.95 DISK/DDP
SP-1 CUSTOM SFTWARE FOR SMARTWRITER /FILER (AVAILABLE FOR MOST PRINTERS)	\$ 20.00

**** NIAD SPECIALS ****

EVE SS-CC & ME64K	\$ 144.95
EVE SP-1 & PANASONIC 1080 PRNTR	\$ 369.95
EVE SP-1P (PARALLEL ONLY) AND PANASONIC 1080 PRINTER	\$ 309.95
RECONDITIONED DIGITAL DATA DRIVES	\$ 19.95 (instructions /30 day guar)
SUPER ACTION SET WITH BASEBALL	\$ 39.95
NEW ADAM HAND CONTROLLERS 2 for	\$ 10.00

SIX # 7806 RIBBONS	\$25.95

JANE'S RECIPES (REQ'S RECIPE FILER) \$ 7.00 DISK
 (specify VOL 1 Deserts or VOL 2 Salads) \$9.00 DDP

CONVERSION OF SUPER GAMES TO DISKETTE: \$ 4.00 EACH
 NOTE: YOU MUST SEND IN THE LABEL CARD FROM THE GAME AS PROOF OF PURCHASE EDUCATION PACK II \$ FAMILY FEUD; BEST OF BRODERBUND CAN BE COPIED DIRECTLY BY MOST COPY PROGRAMS

SMARTFILER COPY SERVICE FOR LATEST VERSION WITH MAILING LABEL PRINT FIX (SEND IN YOUR FILER DISK/DDP)	\$ 4.00

BACK ISSUES OF NIAD NEWSLETTER FROM 1/85	\$ 3.00 EACH
	\$ 2.50 EACH (10 +)

RIGHT DIR TAPES FOR COPYING SUPERGAMES TO TAPE	\$ 2.50 EACH