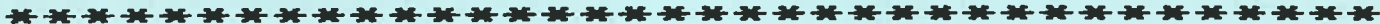




# Multi-function User Group

MONTHLY NEWSLETTER-PUBLIC DOMAIN LIBRARY  
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ISSUE # 15 APRIL, 1986  
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EDITOR: LYLE MARSCHAND



Spring has sprung here in the Midwest !  
It won't be long and the kids will be out of school. It seems that time goes faster the older you get -oh well !

Continuing our study of Ephesians Chapter 4 -  
" And his gifts were that some should be apostles, some prophets, some evangelists, some pastors and teachers, <sup>12</sup> for the equipment of the saints, for the work of ministry, for building up the body of Christ, <sup>13</sup> until we all attain to the unity of the faith and of the knowledge of the Son of God, to mature manhood, to the measure of the stature of the fullness of Christ; <sup>14</sup> so that we may no longer be children, tossed to and fro and carried about with every wind of doctrine, by the cunning of men, by their craftiness in deceitful wiles. <sup>15</sup> Rather, speaking the truth in love, we are to grow up in every way into him who is the head, into Christ, <sup>16</sup> from whom the whole body, joined and knit together by every joint with which it is supplied, when each part is working properly, makes bodily growth and upbuilds itself in love.

These verses speak of the importance of the various different roles each Christian may be given by God and of the fact that, although there are different roles, unity of belief is the requirement. Verse 11 defines some of the different gifts God gives to men. These are the various "offices" of the church, all of which are needed and equally important. Verse 13 states the two fold goal of God in setting up these different offices:

1. To attain unity of faith - this is such a major goal of God's plan for the Church that has been thwarted by man. Instead of being in unity of belief as Christians, we have split up into denominations and factions that stress differences rather than commonality. I am convinced that Jesus will not return until this unity is accomplished, until the modern day Church becomes as the first Church described in the book of Acts.
2. To attain knowledge of the Son of God. At first this appears as a matter of fact statement, however it has a greater meaning in my opinion. I feel it refers to REALING knowing Jesus from the standpoint of becoming one with him and like him. This can only be accomplished by reading and studying God's Word - the Bible to understand who Jesus is and why he came down from heaven as a man to teach, heal, love, suffer and die for all of mankind. God has given

each person a "searching" spirit for this truth, unfortunately many of us are searching in the wrong areas for this peace and fulfillment - Jesus is the answer to our searching. Jesus said "I am the way, the truth and the life." Believe me, He is all of these and more. God's plan to save mankind through Jesus is a magnificent one that is always there for us to take advantage of.

Verse 14 gives a good reason for us having this unity of faith and knowledge of Jesus - so that we can be mature Christians and not be subject to false teachings and deceitfulness. Most of the cults in force today appear to offer "Godly" types of things like brotherly love, which are tricks to draw lonely people in. Many of them even state their belief in the Bible and Jesus. However, once they are pinned down to defining their doctrine it is

evident that they hold some person (usually the cult leader or founder) above Jesus as a so called prophet of God that has received some supernatural revelation from God that makes them special. Acts 4:12 talking about Jesus says: "And there is salvation in no one else, for there is no other name under heaven given among men by which we must be saved." I Timothy 2:5 says: " For there is one God, and there is one mediator between God and men, the man Christ Jesus, <sup>6</sup> who gave himself as a ransom for all...".

These verses and many more state that only Jesus, the Son of God who came to earth to provide salvation, is the one we should be looking to, not anyone else.

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## NIAD NEWS

. Newsletter changes - we have taken out the NIAD BASICS, NEW ADAM OWNER'S and SOFTWARE EXCHANGE sections from this issue. Rather than repeat these sections which usually stay the same, they are being sent out to all new members as part of a NEW NIAD MEMBER HANDBOOK that also contains other information particular to new members. Any changes to these sections will be printed in the monthly issues (see updates to Software Exchange librarians in this issue). This will cut down on static information in each issue.

. Coleco Public Domain Clarification- There has been some concerns over the propriety of our placing of Jeopardy, Troll's Tale and Best of Electronic Arts (Pinball Construction Set) into the PD. We have submitted these games to Coleco for evaluation and they have written us that they have no problems with them going into the PD as they are. However, they want to make it clear that Coleco has not released them into the PD, but has said it is ok for NIAD to. This may seem a fine line, but is very important. Anyone desiring a copy of this letter can send me a SASE and request one.

. Interviews - next month we will print an interview with Hank Szretter, owner of Eve Electronics. As the first ADAM peripheral supplier I think his opinions and thoughts on the future are important for NIAD members to know.

. SMARTfiler Fix- Great news for you heavy SMARTfiler users. As we have discussed before, Filer is a great database program but lacks in the printing department. One of the biggest problems is that you can not print mailing labels with it due to irregular line spacing. I know that I spent hours trying to get this to work. Well, I got a call one evening from Bob Dobrow, asking about NIAD. He indicated that he had "decided" to correct this spacing problem in Filer and would get back to me. I said "good luck" and forgot about it. Well, to my surprise he found and corrected the problem !! Unfortunately, there are any different versions of Filer and all would require a different patch. So what we will do is offer to give you the latest version of Filer (version 27D) with the correction for the line spacing via a copy service, similar to the disk conversions. Just send in your Filer tape or disk and \$4.00 to cover the copying, mailing and a small royalty to Bob. If you have version 27D of Filer and a utility to edit blocks from tape, send in a SASE and request the instructions for doing the change yourself. Thanks, Bob for the service to all ADAMites.

. CHICAGO AREA LOCAL MEETING is set for May 1 at the Glenside Library located at 25 East Fullerton, Glendale Hts, IL at 7:00 PM. These meetings are what you people have asked for. You can get your questions answered, see demos of programs, look at books available for the ADAM and

meet other ADAM owners. Contact Chuck Kolander at 790-1857 for more information.

. SMARTBASIC 2.0- is evidently being sold by some User groups in Canada for \$30.00. We have been trying to obtain permission from Coleco and Laser Microsystems to either release it into the PD or commercially, however to no avail. There are apparently some legal issues that are holding this up. It appears these User groups have decided on their own to sell it !

. Hardware/ Software is still readily available, except for some specific software titles. Disk drives should be in to fill backorders by early May. If you are on the waiting list and have not sent in your payment, please do so now to reserve your "spot". Modems are another matter, we can't find any of these at a reasonable price. Toys R Us still has them for \$99.95, however. See our product list for some new cartridge games and reduced prices on most of the Coleco software !

. Wayne has completed an extensive list of Apple to ADAM conversion addresses/routines for use in converting Apple Basic programs to ADAM SMARTBasic programs. ADAM SMARTBasic is very similar to Applesoft Basic. However, there are many differences in the hardware and operating system routines. Wayne's list, which builds on the list Bob Lennes started last month, will allow you Basic programmers to start on converting all those Apple PD programs to ADAM !! Please note that the Hires and Lowres color graphics commands are the same between Apple and ADAM, so we can make use of all the color graphics Apple programs out there. We just keep making progress all the time with our little ADAMs !!

. Jeopardy is such a great game that Jim Walters (Walter's Software) is working on a question pack for it, since there are only a limited number of questions on the gamepack.

. Reviews are still going strong. See Multiwrite, Media Aid, Signshop, VD-MB, DDP Conversion Manual and Jane's Recipes in this issue. Next month we will review a new game - Number Bumper, Codevisor and the Spanish Vocabulary from Marathon Computer Press, FastPatch and a new Parallel Printer interface from Orphanware and Rocky - SuperAction Boxing.

. Renewals - Get your renewals in early to insure you don't miss any issues. If "0486" are the first 4 letters of your member number as shown on your mailing label, this is your last issue.

. Copying SuperGame tapes to a blank tape (for your own backup purposes only) can be done using Quickcopy, which was reviewed last month. However, you need special "Right Directory" blank tapes to copy them on to. See our product list for these tapes. Also, if you are copying tapes and

switch between the regular Coleco and Loran tapes (which are all center directory tapes) and right directory tapes you should reload your copying program due to a bug in the ADAM operating system or you might not get a good copy.

#### . NIAD PRODUCT INFORMATION

- We now have a whole bunch of Infocom games (run under the CP/M 2.2 only). Eve has been able to convert the Kaypro versions of these games which are readily available. We even have the new games Seastalker and HitchHikers Guide to the Galaxy !! Watch for reviews in future issues of these great text adventure games !

- We are changing the pricing of our Public Domain library volumes to better reflect the cost of duplication. Volumes on data pack will now be \$7.00 and disks will be lowered to \$5.00.

- We have added the game SuperSubRoc to our Public Domain list. This game (like Jeopardy, Pinball, Troll's Tale) was never released by Coleco. The graphics are SUPER !! - - The Electronic Games Pack (reviewed in the March issue) is now on our product list. This is a great collection of graphics games that require strategy.

- Media Aid (reviewed this issue) fills a need for some good utilities.

- Orphanware's Parallel interface PIA2 - see comments in UPDATES section.

- MultiWrite has finally arrived (see review this issue).

#### SPECIALS -

. ADAM Resource Directory (book) is a good central source for information about the ADAM. They are finishing the 1986 version and we have a special on the 1985 version, which includes a coupon for money off the 1986 edition.

. Six ribbons for \$25.95

. Right directory tapes (for use in copying the Supergames) for \$2.50

. Super Action Controller sets with the super graphic Baseball game for \$39.95.

. Two hand controllers for \$10.00

. New data drives for \$29.95

. Reconditioned data drives for \$19.95

#### SOFTWARE EXCHANGE CHANGES

Please note the following changes in the Software Exchange librarians effective immediately:

SMARTBASIC >>>>>>> J. Lahaan  
17835 Commercial Ave  
Lansing, IL 60419

ADAMCALC >>>>>>> G. Van Valkenburg  
701 Pond View Dr  
Audobon, PA 19403

CP/M 2.2 >>>>>>> C. Kolander  
1295 A Pearl Ave  
Glendale Hts, IL 60139

UTILITIES >>>>>>> L. Marschand  
LOGO >>>>>>> L. Marschand

NOTE: You may send in either a tape or disk containing a non-copyrighted program not already on the library in exchange for any library volume of the same type i.e. send in a Basic program to get a Basic volume. You MUST include a stamped return mailer to receive your tape/ disk back.

#### UPDATES

. Eve's 80 column video board is selling well and they are doing some research and design on a disk controller card that can be used under both the ADAM operating system (EOS) and under CP/M. However, under ADAM EOS only a standard 5 1/4 disk drive can be used (limitation of the ADAM operating system) while many different drives, including hard disks can be used in the CP/M mode. Additionally, under the CP/M mode software will be provided to read most popular CP/M disk formats which will open up the ADAM to even more software !! Eve has no idea on price yet.

. Orphanware has stated that they will be in full production with the PC board (as opposed to wire wrapped) version of their PIA2 parallel printer interface driver by May 1st. Price will be \$50.00 plus \$3.00 if the software is supplied on data pack plus the price of the cable to attach it to the printer (about \$16.00). The Eve Custom Printer software (for putting special control characters in your SMARTWriter documents) can be used with the PIA2.

I have used the wirewrap version of the PIA2 and it works fine. It is a small card that fits into the middle expansion slot INSIDE the ADAM, as opposed to the Eve SP-1P which is a separate box that plugs into the side expansion port on the outside of the ADAM console (or inside the VB-MB if you have one).

Some clarification is needed based on questions that many of you are asking.

There are two types of interfaces available for the ADAM - PARALLEL - This interface is used to attach the ADAM to other, high speed printers. Almost all dot matrix printers use this parallel interface. The Eve SP-1P and the Orphanware PIA2 provide these interfaces and the software required to direct printing from Basic, SMARTWriter, SMARTfiler and CP/M. The only difference between the two units is the fact that the Eve SP-1P plugs into the outside expansion port and the Orphanware PIA2 plugs inside the ADAM and requires that the cable be routed from inside the ADAM to the printer. The price of the SP-1P is \$79.95 (includes cable) and the PIA2 is \$50.00, not including the cable. If you only need a parallel interface I would recommend either of these units.

SERIAL - A serial interface, also known as RS232, is an industry standard interface for transmitting data between devices. This interface can be used to attach the ADAM to special printers, modems, plotters, external control devices and other computers whereas the parallel interface is basically limited to printers. Eve makes the SP-1 which contains BOTH a serial and parallel interface. Orphanware is working on a serial only interface.

. Orphanware is also working on a 128K memory card for the inside of the ADAM which would be in place of the 64K cards now available. The major advantage would be for use as a RAM disk under CP/M 2.2. Some new copy utility programs could use this as well to reduce the time to copy tapes/ disks. NOTE: Orphanware has stated that separate "decoder" card will be required for the 128K card to work if you do not have their PIA2 interface card. More details on this next month. Contact Orphanware at : 5665 Myers Rd, Akron, OH 44319, (216) 882-4720

. Signshop (reviewed this month) is a big hit and we are looking at providing a special print program to allow printing on dot matrix printers for those of you who have the SP-1 and a printer. Let us know if you would be interested in this.

. Bob Lennes , who has done a great job as our SMARTBasic librarian and programmer is starting to design a program which he will call ACL (ADAM Control Language). ACL will be a variety of powerful utilities for the ADAM. Please write Bob or myself with what you would like to see.

. E & T Software is considering developing an Accounts Payable/ Receivable system for small business' if there is an interest. Please write me if you have an interest in this program. I personally feel that this would be a good product.

## PUBLIC DOMAIN WORKSHOP

Please take note of the changes in the Software Exchange librarians and the prices to directly purchase the individual PD volumes.

A common problem that occurs with the data packs that many of you have had is when you get an error like "I/O ERROR" in Basic or "MISSING BLOCK" in CP/M. This could be a "real" problem, but is usually just a result of a read or write error on the tape. These problems usually (but not always) occur at the end of the tape. Before you think disaster has struck, remove the tape, give it a good shaking and reinsert it in the drive. Retry whatever you were doing and you will usually find it works ok.

Here is a listing of Basic Volume # 9:  
MIAD PUBLIC DOMAIN  
PROGRAM DESCRIPTIONS #BNOV9  
by Bob Lennes, Librarian

- \*bounce- Uses draws and bounces an object across the screen
- \*hallway- Makes a hallway with draws
- \*SHAPEDEMO- A demonstration using draws

- \*donut- creates circles with trig functions
- \*BIRTHSTONE- quizzes you on birthstones for each month
- \*HOROSCOPE- describes personality traits
- \*LOANPYMNT- Calculates monthly payments
- \*ELF- an excellent text adventure in which you stumble through the forest searching for home, but end up in all sorts of misadventures. This program also has the option to create a fantasy game player. This program also has a faster-loading partially assembled version; type 'BRUN ELF.ASM' and ADAM will run ELF.
- \*STARTREK2- A version of Super Star Trek by David Ahl converted for use on the ADAM. Has two Documentation files- TREK2A.DOC and TREK2B.DOC. You can read these from the word processor. The program also refers to them for the instructions. This also, being a 24K program, has a fast-loading version- just type 'BRUN STREK2.ASM' in SmartBASIC and Adam will run it
- \*COMMITTED- Another good text adventure- read the DOC file titled 'COMMITTDOC' from the Word Proc. It also has a fast-loading version; type 'BRUN COMMIT.ASM'
- \*Valentine- Create a graphic valentine for the person you love
- \*drivernum- this program will figure out your driver's license number when you type in your name, birthday and sex.
- \*falling- Watch leaves fall off a tree in the fall
- \*LOTTO- this musical program will pick LOTTO numbers for you- different every time!
- \*BRAINTERN- A puzzle- instructions in the program
- \*HRESPLOT- Draw in high resolution graphics
- \*CATCREATE- Converts the catalog of a disk or tape into a file which you can access from your word proc.

## BEGINNER'S BASIC WORKSHOP

### BASIC PROGRAM LOCK UP PUZZLE By D. Zimmerman

Did you ever want to lock up your Basic programs from prying eyes? If so try entering these three lines at the beginning of your programs.

2 POKE 461,79  
4 POKE 20185,79  
6 POKE 21445,79

Now try LISTing the program or even CATALOGing the disk/tape. What happened?

Here is a clue: Try entering "LOST" and see what happens. Now try entering "COTALOG" (Spelled like this). Notice the "LOST" worked but line number six prevented the "COTALOG" from working. If you had only used the first two lines "COTALOG" would have worked.

Basic will have to re-booted to regain normal functions or else type in and RUN this to reset Basic.

2 POKE 461,73  
4 POKE 20185,65  
6 POKE 21445,73

The answer to this puzzle is extremely simple once you know how it works. ALL computer "experts" were once beginners like everyone else. It is certainly no disgrace to be confused and lost many, many times when starting to learn computers. The transition from amateur to pro is no more than the REFUSAL of the beginner to give up when faced with problems. Solving the most complex problem is accomplished by solving small ones ONE AT A TIME. Subscribe to newsletters. Join Users' groups. Write/phone other users. Most experienced users really want to help but are too busy with their own work to answer questions like "How do I use CP/M?". Short questions like "What is the difference between the "default" and the "logged" drives?" and "Why can't I TYPE out a .COM file?" will be readily answered by 99% of all experienced users. The user who will not quit will soon be rewarded with a feeling of confidence and the knowledge that ADAM is not only useful but FUN!

See next months' NIAD for the answer to this puzzle.

## SMARTBASIC WORKSHOP

### THE ADAM SMARTBASIC PROGRAMMER'S TOOLBOX

By Bob Lennes

This month, we will take a look at a super quick sort, the print statement using zone format (that's when you use a comma), and getting true random numbers from Adam.

Rather than explain everything, I put together a documented program that shows everything. I will explain some of the major details.

In this program, I changed the print zone with two pokes in line 115. I used the Print with a comma in line 135. Note that in line 170, I used a TAB statement that does exactly the same thing as the comma in line 135! That is because in machine code (Basic itself), the comma is a shortened version of the TAB statement that I used. The comma is preset so that cZ is equivalent to 16, but you can change that with the two pokes I showed you in line 115. The value of CZ must be a power of 2 for the zone to line up correctly (i.e. 8, 16, etc.).

Whenever you use the RND function in Basic 1.0, the value it gives you is the same everytime you run the program. When you use RND(num), Basic skips over 'num' number of elements in its built in list, that if you use RND(0), you will get the same number all the time. If you use RND(1), you will get the next value on the built in

list. Also, if you type print RND(1), and then type PRINT RND(-1), the values will be the same. I used a wait for keypress to lower the 'num' value, so that Basic's pointer in the built-in list would move back as long as it takes for a key to be pushed. This is as near to true random numbers as any computer can get.

The Sort in this program is the Shell-Metzner Sort Routine. It is the fastest I have seen. I thought I'd just throw it in for kicks.

```
10& DEMONSTRATION PROGRAM-
20& Sort, Pr.Zones, Rnd.#s
30& by Bob Lennes
40POKE 16150,255:&Eliminate Basic 1.0's poke limitation
50HOME
60PRINT:PRINT " PROGRAM TO DEMONSTRATE:":PRINT
70PRINT " Different Sized Zone Printing"
80PRINT " True Random Numbers"
90PRINT " The Shell-Metzner Sort":PRINT
95GOSUB 1500:& RND #'s
100 nu=40:& #of elements
105 cZ=8:& column zone
107 vs=5:& element size
110DIM a$(nu)
115POKE 7881, cZ:POKE 7879, cZ-1
117HTAB 2:& So 1st element lines up with zones
120FOR t=1 TO nu
130& a$(t) = STR$(INT(RND(1)*100))
132FOR t2=1 TO vs:a$(t)=a$(t)+CHR$((RND(1)*26)+65):NEXT
135PRINT a$(t),
140NEXT t
150GOSUB 1000:& Sort array
155PRINT:PRINT " SORTED ARRAY IS:"
157HTAB 2:& So 1st element lines up with zones
160FOR t=1 TO nu
170PRINT a$(t); TAB(INT((POS(0)+cZ)/cZ)*cZ+1);
180NEXT t
999END
1000& *****
1010& Sort Subroutine
1020& For an array
1030 m=nu:& nu=how many
1040 m=INT(m/2)
1050IF m=0 THEN RETURN
1060 k=nu-m
1070 j=1
1080 i=j
1090IF a$(i)<=a$(i+m) THEN 1150
1100 t=a$(i)
1110 a$(i)=a$(i+m)
1120 a$(i+m)=t
1130 i=i-m
1140IF i>=1 THEN 1090
1150 j=j+1
1160IF j<=k THEN 1080
1170GOTO 1040
1500& *****
1510& True RND #'s Routine
1520POKE 64885, 0
```

```

1530PRINT * PUSH A KEY, PLEASE*
1540IF PEEK(64885)=0 THEN r=r-1:GOTO 1540
1550 seed=RND(r)
1560& True Rnd # Now Ready
1570HOME
1580RETURN

```

### Baseball Total By W. Motel

The following program is one I made for my own use. I thought I would include it for your own use, if any of you are into baseball (or any other type) card collecting.

I use it to keep track of what cards I have in a set (i.e. 1986 TOPPS) and to keep track of what type of package they came from. The packages being Wax (15 card packs), Cello (usually 28 cards - clear wrapper), or Rack Packs (3 section packs of 48 cards). I also am able to produce a list of what cards are still needed to complete the set (or multiple sets, in my case).

I enter the card numbers in thru data statements, (usually 1 data line per package). Since card numbers don't go over 792 (for TOPPS, 660 for Fleer, 653 for Donruss), I have set up arrays of 800 elements. Any numbers following data value 991 are assumed to be Cello, 992 precedes Wax, and 993 for RackPack, 999 signals the END of DATA. If you notice, I've already set these values up for you at lines 1000 thru 9999, just enter your data lines between there.

The output is a 2 dimensional report showing 0 thru 9 across the top (columns) and the rows down the left increasing by 10. Number 15 would be in the 10 row, under the 5 column. Each page is set up to print 120 groups. Each card number shows on 4 lines as (1) total of all types (2) total Cello (3) total Wax (4) total Rack pack. This will show you, not only how many of a specific card you have, but where they came from.

The end of report also show total cards, total Cello, total Wax, and total Rack. The last thing printed is a list of card numbers needed to complete a set (or sets). The number that prints with it is the number you do have. I use this, since I check for 2 sets and need to know if I need 1 or 2 cards.

```

Lines 1 thru 22 are REM's
Lines 28 - 80 set up array and do the reading and adding to
specific array (for package type)
lines 100 - 109 display counts on screen/inquiry prompt
Lines 110 - 200 do printing
    140 - 145 do total for card number
        146 bypass check if total only print
    149 - 155 do Cello
    159 - 165 do Wax
    169 - 175 do Rack
    180      Blank line between groups
    181 - 190 End of page group checks (total or all)
Lines 210 - 213 Print type totals
Line 215      Check if Missing list wanted
Lines 230 - 290 Print list of needed cards
Lines 300 - 310 Prompt for paper insert
Lines 350 - 370 Routine to turn on printer and do col
heading

```

```

Lines 700 - 780 Setup print specs
Lines 800 - 850 Inquiry routine

```

This is not limited to Baseball cards, but can be used for any type cards. Use the BBtotal as your shell program. You can then have your own copies for each type

set and years you want, for example, 8886TOPP, 8886FLEER, 8886TOPP (FootBall), or whatever. This will also serve as an inventory of what you have.

You can keep adding data line to the set copy and resave it as you get new card packs. One NOTE, as your data (cards) grow, it will take a while for the program to read and process them in the matrix. Do not be alarmed if it takes a while to get to the inquiry/print prompts.

NOTE: POKE 12185,240 sets the line limit to 240 characters. This means that each program line can have that many characters in it. The normal value is around 120. This is no big deal unless you want to make up long data lines. I've included another program CARDCALL that simply sets this for you and then runs your BBtotal program version (you are prompted for the actual name). This eliminates you're having to remember to do it. If you don't set this limit and load/run a program that was previously created with the large data lines (or other statement lines), the excess characters pass the limit are truncated as it is read into memory. This will possibly result in lost data values and an incorrect report. If you notice that this has happened and you didn't use CARDCALL or do the POKE yourself, just do the POKE (or run CARDCALL) and reload/run the BBtotal program. The data has not been lost on the file, only in memory as it was read in.

### 1REM BBtotal By W. MOTEL

```

2REM NIAD 3/86
3REM This is used to keep track of Baseball (or other)
c ar d s
4REM The card numbers are entered in as data lines at 1000
t hru 9999
5REM The program keeps track of the cards by the type of
p a ckage they came from
6REM line 1002 thru 3999 can be used for CELLO packs
( p r e c e e d e d by 991 at line 1001
7REM line 4002 thru 5999 can be used for WAX packs
( p r e c e e d e d by 992 at line 4001)
8REM line 6002 thru 9998 can be used for RACK packs
( p r e c e e d e d by 993 at line 6001)
9REM The printout shows a 2 dimensional matrix (by tens
d o w n the left side).
10REM For each card number, the total of that card is
p r i n t e d
11REM Each card number is shown on 4 lines as total all,
t o t a l Cello, Wax, and Rack pack
12REM The arrays for counts are set at 800, as this will
handle any card set (TOPPS is largest at 792 cards) up to
799
13REM Each page prints 120 groups (All option) or 310
(Total only option)

```

14REM At the end, a list is produced showing what cards are missing to make up a set.

15REM IMPORTANT NOTE

16REM To allow for large data lines, prior to running POKe 12185,240 (240 characters per line) or RUN CARDCALL

17REM Prior to printing, you have an option of INQUIRY against specific card numbers

18REM

19REM UPON printing, you SELECT

20REM HIGHEST card number (total in actual set)

21REM Print option -Total only or -All (total and by type: cello, wax, and rack pack)

22REM MISSING card list option

23REM enter 0 for no missing list

24REM or number of complete sets you are making

25REM I.E. 1 is one set, prints list of numbers with less than 1 card

26REM 2 is two set, prints list of numbers with less than 2 cards

27REM

28DIM tZ(800), cZ(800), vZ(800), rZ(800):POKE 17115,

245:POKE 17126, 74:TEXT

29READ v:IF v=999 THEN 100

30IF v<800 THEN 40

31IF v=991 THEN tp=1:GOTO 29

32IF v=992 THEN tp=2:GOTO 29

33IF v=993 THEN tp=3:GOTO 29

4000 tp GOSUB 60, 70, 80

50 tZ(v)=tZ(v)+1: t1=t1+1:GOTO 29

60 cZ(v)=cZ(v)+1: cZ=cZ+1:RETURN

70 vZ(v)=vZ(v)+1: vZ=vZ+1:RETURN

80 rZ(v)=rZ(v)+1: rZ=rZ+1:RETURN

100? " TOTAL cards "; t1

103? " MAX "; vZ

104? " CEL "; cZ

105? "

106? CHR\$(7):? " Do you want "; :INVERSE:? "INQUIRY"; :NORMAL:? " first":? " ";

107INVERSE:? "Y/N"; :NORMAL:INPUT " "; a\$:IF a\$="N" OR a\$="n" THEN 110

108IF a\$="Y" OR a\$="y" THEN TEXT:GOSUB 800:GOTO 110

109TEXT:GOTO 100

110GOSUB 700:GOSUB 300:GOSUB 350

120FOR y=0 TO 1e STEP 10

130? y; SPC(5-LEN(STR\$(y)));

140FOR x=0 TO 9

141IF tZ(x+y)=0 THEN ? " "; :GOTO 145

142? tZ(x+y); SPC(5-LEN(STR\$(tZ(x+y))));

145NEXT x:?

146IF pt=1 THEN 180

149? "C ";

150FOR x=0 TO 9

151IF cZ(x+y)=0 THEN ? " "; :GOTO 155

152? cZ(x+y); SPC(5-LEN(STR\$(cZ(x+y))));

155NEXT x:?

159? "W ";

160FOR x=0 TO 9

161IF vZ(x+y)=0 THEN ? " "; :GOTO 165

162? vZ(x+y); SPC(5-LEN(STR\$(vZ(x+y))));

165NEXT x:?

169? "R ";

170FOR x=0 TO 9

171IF rZ(x+y)=0 THEN ? " "; :GOTO 175

172? rZ(x+y); SPC(5-LEN(STR\$(rZ(x+y))));

175NEXT x:?

180?

181IF pt=2 THEN 190

182IF y=300 OR y=610 THEN GOSUB 300:GOSUB 350:GOTO 200

185GOTO 200

190IF y=110 OR y=230 OR y=350 OR y=470 OR y=590 OR y=710

THEN GOSUB 300:GOSUB 350

200NEXT y

210? " TOTAL CARDS "; t1

211? " TOTAL CELLO "; cZ

212? " TOTAL WAX "; vZ

213? " TOTAL RAKPK "; rZ

215IF mn=0 THEN 295

220GOSUB 300

230PR #1: x=0

240FOR y=1 TO hc

250IF tZ(y)>mn-1 THEN 290

260 x=x+1:? y; TAB(7); tZ(y)

270IF x<60 THEN 290

280GOSUB 300:PR #1

290NEXT y

295PR #0:END

300PR #0:? " PAPER READY ":INPUT " HIT any KEY "; a\$

310RETURN

350PR #1:?:? " ";

360FOR x=0 TO 9:? x; " "; :NEXT x:?:?

370RETURN

700REM PRINT SPEC ROUTINE

701TEXT:INVERSE:HTAB 3:? "PRINT SPECIFICATIONS"; :NORMAL

705VTAB 3:HTAB 2:? "enter "; :INVERSE:? "HIGHEST";

:NORMAL:? " card number "; :INPUT ""; hc

710IF hc>800 THEN VTAB 3:? "

"; :GOTO 705

715VTAB 5:? " enter print matrix option"

716VTAB 6:HTAB 3:INVERSE:? "a"; :NORMAL:? " for all"

717VTAB 7:HTAB 3:INVERSE:? "t"; :NORMAL:? " for total only"

720VTAB 8:HTAB 5:INVERSE:? "WHICH OPTION"; :NORMAL:? " ";

:INPUT ""; a\$:?

730IF a\$="a" OR a\$="A" THEN pt=2:GOTO 750

735IF a\$="t" OR a\$="T" THEN pt=1:GOTO 750

740VTAB 8:? " "; :GOTO 720

750VTAB 10:? " enter NUMBER of "; :INVERSE:? "SETS":NORMAL

755VTAB 11:? " you are making "

760VTAB 12:? " for missing card list"

765VTAB 13:? " or 0 for no list "; :INPUT " "; mn:?

770IF mn<0 THEN VTAB 13:? " "; :GOTO

765

775 1e=INT(hc/10)\*10

780RETURN

800REM INQUIRY routine

810NORMAL:?:? " NEXT card number or "; :INVERSE:?

"999":NORMAL:? " if DONE "; :INPUT ""; v

820IF v=999 THEN RETURN

825IF v<0 OR v>800 THEN TEXT:GOTO 810

830TEXT:INVERSE:HTAB 3:? "CARD NUMBER "; v:NORMAL

```

835?:? " TOTAL "; tZ(v):?
840? " CELLO "; cZ(v)
845? " WAX "; wZ(v)
850? " RAK "; rZ(v):?:?:GOTO 800
1000REM CELLO packs here tp=1
1001DATA 991:REM CELLO
4000REM WAX packs here tp=2
4001DATA 992:REM WAX
6000REM RACK packs here tp=3
6001DATA 993:REM RAKPAK
9999DATA 999:REM END of DATA

```

SCREEN POKES  
by W. MOTEL

In doing the APPLE/ADAM list, I came up with 3 small programs to help illustrate some commands and peek locations to control screen text.

FLASH

This simply lets you see the effect of different values on the speed of the flash. Location 159 contains the value that controls the speed of the flash. The higher the value (up to 255), the slower the flash. Normal default value is 12. To end the program, simply do a CNTL-C.

POKE 17006,128 is the equivalent of saying FLASH  
POKE 17006,0 turns the flash off (NORMAL in text)

```

1REM CARDCALL by W. MOTEL
2REM NIAD 4/86
3REM This is caller for BBtotal version program
4REM It simply makes sure that 12185 is set to 240 char.
l limit
5REM (for large data lines)
6REM and calls your specific version of BBtotal
10POKE 12185, 240:POKE 17115, 245:POKE 17126, 74:TEXT
15? " What is name of the program"
16? " you wish to run"
17INVERSE:? " NAME IS "; :NORMAL:INPUT " "; n$
20DIM d$(24): d$(4)="DISK 1": d$(5)="DISK 2": d$(8)="TAPE
1" : d$(24)="TAPE 2"
30 d=PEEK(16821)
35?:? " LOAD WILL BE FROM "; :INVERSE:? d$(d):NORMAL
40?:INPUT " CORRECT y/n "; a$
50IF a$="y" OR a$="Y" THEN ? " HERE GOES ":? CHR$(4);
"run "; n$
55INVERSE:? " ":NORMAL
60? " Insert proper media":? " Do CATALOG from that
drive":? " and rerun this program"

```

VPOSTEST

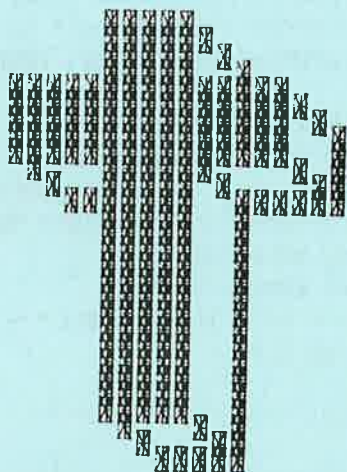
This illustrates the use of VPOS(0) and PRINT CHR\$(24). PRINT CHR\$(24) clears the screen from the current cursor location to the bottom. VPOS(0) contains the current cursor row (vertical - up/down) position. This value is found if you PEEK(17001).

VPOS(0) is always 1 less then the actual value.(0 -23 for a normal text screen). The VTAB commands normally use 1 - 24. Keep this in mind if you use this. The program prints 16 lines does an INPUT prompt (on actual line 17). After you hit a key, the cursor goes to line 18 (VPOS(0) of 17). Program line 40, says to do a VTAB with the value of VPOS(0)-10. Note, we are on screen line 18, but VPOS is 17. 10 less sets it to 7, therefore the VTAB should go to screen line 7 and do the PRINT CHR\$(24);

Try it again without the - ; - after PRINT CHR\$(24). The use of VPOS(0) to determine VTAB is useful in a program where you want text placement relative to your current position. PRINT CHR\$(24) is, of course, useful in clearing part of the screen.

MARGTEST

This illustrates the use of permanent values for left, top, bottom, and line widths on the text screen. It also will show you the difference between the PHYSICAL screen in VRAM (31 columns and 24 rows) and the ACTUAL screen you can define. What we will talk about right now is the text portion. Read the APPLE/ADAM note, for the margin values, as these are the same I've used in MARGTEST. I will refer to the Left margin as L, the Width of the line by W, T for Top line, and B for Bottom line add value. The actual poke locations are shown on the APPLE/ADAM sheet for TEXT, HGR, and GR. All values are put in as 1 less than the actual value EXCEPT L (left margin). The right margin is calculated as L + W. The bottom line is (T+1) + B. Remember, the top value is already 1 less, so 1 is added to compensate. These define the ACTUAL text screen window. The PHYSICAL screen area is still columns 1 - 31 (across) and lines (rows) 1 - 24 (down). In my program I redefine it to actually be columns 6 - 25 and rows 5 thru 18. VTAB (as does HTAB) always must point to the PHYSICAL screen row or column. In my program, after I redefine, a VTAB of less then 5 would default (by BASIC) to 5 (T+1). A VTAB of





greater than (T+1)+8 (25) defaults to 25. HTAB works the

same way. VPOS (as does POS) is in relation to your ACTUAL screen. We will see this later.

Back to the program. First, I do printing to the normal default defined text screen in program lines 10 to 33. This prints at the very top and very bottom. It also prints < and > in columns 5 and 26. I then redefine the ACTUAL screen boundaries in program lines 40 - 43. These just POKE the values in. We have to have them take effect. A TEXT command would do it, however, it will also clear the entire screen. I don't want this. I want to keep the printed information I put there to remain. The CALL 17197 does this. It is part of the routine that is done when you say TEXT. It is the part that sets the values for the margins and line edges. It is after the part that clears the screen. All this does is reset the screen boundaries. HOME will clear the area, but unlike TEXT which CLEARS the PHYSICAL screen, HOME just CLEARS the ACTUAL screen area. This illustrates a method to put information on the text screen (such as instruction, constant info, etc) and keep it there by redefining our text window. HOME should be used to clear the new text window.

If you do a LIST, the program will list out in the new text window. HOME will clear it from the screen. The original text at the top, bottom, and sides is not destroyed. Before you are done, type VTAB 7:PRINT " ;VPOS(0). This will go to PHYSICAL line 7 and print the contents of VPOS. You should see a 2. VPOS is showing you the line (row) relative to your ACTUAL screen. Top line is row 5 in the redefined window. Line 7 is the 3rd line (row) in your ACTUAL window. VPOS(0) is always 1 less. The value is PHYSICAL line number - your ACTUAL Top line value (17201) - 1. When working with the text area in GR or HGR, the concept is the same, but using the respective locations for GR and HGR.

Since I've changed the permanent margin locations TEXT will clear the entire screen, but still keep the new ACTUAL window at columns 6 - 25 and rows 5 thru 18. Either REBOOT BASIC or POKE 17198,23:POKE 17199,30:POKE 17201,0 POKE 17202,1:TEXT

Next month, I hope to start a series of articles on Video RAM with some programs illustrating how it works and how we can control it.

```
1REN FLASH by W. MOTEL
10TEXT:HTAB 13:VTAB 3:FLASH:? "FLASH":NORMAL
15VTAB 5:HTAB 3:? " current speed is "; PEEK(159):?
20INPUT " flash speed 1 - 255 "; fl
25VTAB VPOS(0):? CHR$(24):VTAB VPOS(0)
26IF fl<0 OR fl>255 THEN 20
30POKE 159, fl:GOTO 15
```

```
1REN VPOS by W. MOTEL
10TEXT
20FOR x=1 TO 16:VTAB x:? " vtab = "; x; " vpos = ";
VPOS(0):NEXT
30INPUT " Hit any key and WATCH"; a$
40VTAB VPOS(0)-10:? CHR$(24);
```

50? " We went back 10 lines"

60? " and cleared to the bottom"

```
1REN MARGTEST by W. MOTEL
2REN when finished REBOOT BASIC or
3REN POKE 17198,23:POKE 17199,30:POKE 17201,0:POKE
17202,1:TEXT
5POKE 17059, 55:POKE 17115, 245:POKE 17126, 27
10TEXT
15INVERSE
20VTAB 1:HTAB 3:? "CONSTANT HEADER LINE"
22VTAB 3:HTAB 3:? "will stay on screen"
25VTAB 5:HTAB 5:FLASH:? ">"; :HTAB 26:? "<":NORMAL
26VTAB 18:HTAB 5:FLASH:? ">"; :HTAB 26:? "<":NORMAL
27INVERSE
30VTAB 21:HTAB 3:? "CONSTANT FOOTER LINE"
31VTAB 23:HTAB 3:? "will stay at bottom"
33NORMAL
40POKE 17201, 4:REM Top line
41POKE 17198, 13:REM Bottom line add value
42POKE 17202, 6:REM Left margin
43POKE 17199, 19:REM add for line Width
45CALL 17197:HOME
49VTAB 5:? " top window line"
50VTAB 7:? "VTAB 7 vpos = "; VPOS(0)
```

#### APPLE TO ADAM CONVERSION By W. Motel

We've included a fairly comprehensive list of APPLE/ADAM locations. This includes Bob's locations from his FEB. article. Re-read Bob's article for the other minor modifications needed (such as text and HGR adjustments). This list should help recognize APPLE POKE or CALLS and see what is compatible on the ADAM. This list might also show you some ADAM locations you may not have been aware of (see my other article on SCREEN POKES). This list may seem long, however, I've listed below the biggest changes I've run across.

1. Adjusting text from 40 (APPLE) to 31 (ADAM) columns.
2. The APPLE keyboard scan PEEK -16384 and clear keyboard PEEK -16368. We have covered this in the past by use of the ADAM location 64885. This is used to allow the program to continue running until a key is pressed. I use this in UTILDUMP or UTILCOPY, as has BOB LENNES, in his programs.

3. Margin and line sets to control text area.
4. CALL to -16297/16302 areas on APPLE
5. CALL to -16287/16285 PDL areas.
6. Various BELL/SPEAKER calls
7. Music/sound - write your own ADAM routine, which we've had articles on.

All in all, once you start, it's not really too difficult in converting programs. Start on something small, until you get the hang of it. The only thing you won't be able to convert, is any embedded machine language routines in an APPLE program, as it's machine language is not compatible with ADAM's

# NIAD

## APPLE/ADAM EQUIVALENTS

**NOTE:** Apple addresses are given as positive. Occasionally, they will be shown as negative (-). To calculate the positive equivalent, add 65,536  
 I.E. -16384 = -16384 + 65536 = +49152

On ADAM or APPLE, 2 addresses denote Low value in first and High in second calculated value is Low + (High \* 256)

On some of the ADAM addresses, the normal default will be shown as (x).

Nothing for the ADAM denotes no known (as of yet) equivalent

### APPLE

### ADAM

32	Left edge	17202 (1)	put in actual value
33	Line Width	17199 (30)	Cols from 17202 value
34	Top edge	17201 (0)	
35	Bottom edge	17198 (23)	Lines down from 17201 value

NOTE: I.E. 17202 = 6, 17199 = 19, 17201 = 4, 17198 = 13 and do TEXT

Creates a text window from line 5 thru 18, margins being cols 6 thru 25

- Resetting the above and doing a CALL 17197:HOME will reset the text window and ONLY clear the new window area. Text already on the screen outside the new boundaries will not be erased.

- The equivalents for HGR are  
 25577 (1), 25574 (30), 25578 (20), 25573 (3)  
 CALL 25572:HOME for hgr text window clear (similar to text CALL 17197)

- you can increase the HGR text window to 8 lines by  
 POKE 25578,18:REM top edge  
 POKE 25573,7 .REM lines down to bottom than HGR.

- The equivalents for GR are  
 18536 (1), 18537 (30), 18539 (20), 18540 (3)  
 CALL 18535:HOME for gr text window clear (similar to text CALL 17197)

36	Cursor horz (col)	17002	or POS(0)	value is 1 less than actual
37	Cursor vert (row)	17001	or VPOS(0)	value is 1 less than actual

NOTE: POS and VPOS values are always in relation to your text window as defined by your margins/rows I.E. the above margin/line sets would have LINE 5 (top row in window) show as VPOS(0) = 0

48	Lores color	18633	GR window
50	Text format	17006	0 for non-flash 128 for flash

63 = inverse, 127 = flash, 255 = normal

51	Prompt character	1146
105-106	LOMEM pointer	16095/16096
107-108	Start array space	
109-110	End array space	
111-112	Start string space	16111/16112
113-114	End string space	16115/16116
115-116	HIMEM pointer	16089/16090
119-120	Line # where program	*
	stopped	
117-118	Line # being executed	*
121-122	Addr of line # exec	*

\* NOTE: 16124/16125 contains address pointing to

the NEXT line number-token address area. The 4 bytes pointed to are as 2 bytes for line number and 2 bytes for actual token instruction area. Since 16124/16125 point to NEXT line, the current line number area is the 16124/16125 address - 4 (preceeding 4 block area). The first 2 bytes at that point are the line number, the next 2 is the actual tokenized instruction address.

123-124	Current DATA line #	NOTE: 16119/16120 contains address of the current data VALUE. 16121 shows the number of bytes left of data in the current data VALUE area.
---------	---------------------	--

125-126	NEXT data address	16117/16118
127-128	INPUT/DATA address	

# NIAD

## APPLE/ADAM EQUIVALENTS

APPLE		ADAM	
129-130	Last used variable name	16107/16108	Has the next variable number (1st is 30) that points to the var. name/addr area.
131-132	Last used var. addr.		
216	ONERR (0 clears)	CLRERR	
218-219	ONERR line #	16126/16127	
222	ONERR error code	x=ERRNUM(1)	
225	x of last HPLOT	16763	
226	y of last HPLOT	16764	
228	HCOLOR code	16777	
231	SCALE	16765	
232-233	Shape table start addr	16766/16767	
234	Hires collision check		
241	SPEED	16129 (255)	
243	FLASH speed	159 (12)	
249	ROT		
	POKE limit	16149/16150	POKE each with 255 for unlimited address

### CALLS

-16384	Read Keyboard	PEEK(64885)	
-16368	Clear Keyboard	POKE 64885,0	
-16336	Speaker click	PRINT CHR\$(7)	
-16302	Full graphics	HGR2	
-16301	Split screen		
-16298	Lo-res	GR	
-16297	Hi-res	HGR	
-16287/285	PDL	use PDL commands	
-3288		RESUME	
-3086	Clear Hires to Black	HGR or HGR2	
-3082	Clear Hires to last HPLOT color		
-1036	Move cursor right		
-1008	Move cursor left		
-998	Move cursor up	VTAB VPOS(0)-1	Range 0 - 23
-958	Clear text cursor-down	PRINT CHR\$(24)	
-922	Move cursor down	VTAB VPOS(0)+1	Range 0 - 23
-868	Clear text cursor-right		
-756	Wait for keypress	POKE 16136,0	do inside a program. not immediate
-678	Wait for return		
-676	Bell, Wait for return		
-198	Ring bell	PRINT CHR\$(7)	

## SMARTWRITER TIPS WORKSHOP

### BOILER PLATING WITH SMARTWRITER

By D. Zimmerman

Until ADAM users become familiar with CP/M and word processing programs such as WordStar most ADAM users will be working with the SmartWriter that came with ADAM. Until such time that the ADAM user decides to commit themselves to the time, effort, and money required to master programs such as these they will be forced use SmartWriter and live with its' limitations. Dont get me wrong. SmartWriter is a VERY good word processing program and I have used it extensively for over two years now. I honestly can not think of any bug that can not be worked around in one way or another. The only real "bug" I have encountered is the famous keyboard lockup when trying to CLEAR WORKSPACE. This only happens on rare occasions and then you are trying to clear the entire memory anyway so nothing is lost. Of course if you are trying to write a two hundred page book ADAM is not the computer to use. It still surprises me that many ADAM users think that ADAM can not MERGE material from more than one file. This is known as BOILER PLATING and is easy to do. I would recommend limiting each file to about four or five pages in length and then SAVE it as a separate file. If you did this twenty times you still could produce a one hundred page document and it will be a lot easier to re-edit to boot.

Probably the most important thing to watch for when GETING a new file and having the newfile merge into one that is on the screen, is the changing of page margins, tabs, and the like. ADAM will take on the attributes of the NEW file and reform ALL of the COMBINED text to these new defaults. Outside of going back over each paragraph using INSERT/DELETE to put in a hard carriage return for each line I know of no way to get different margins in one document. Of course you could get different margins within the same document if you SAVE each file with a different filename. They can be printed on the same page if you enter an END PAGE marker on the last line of the first document. When you print out the first document this END PAGE marker will stop the printer in its' tracks where it is on the paper. The work space can then be cleared and the second document can be loaded and printed with the new margin settings without the paper advancing in the printer. If you do this be sure to not have the TOP MARGIN set to more than one. If you leave the second documents' top vertical margin set to the default of six ADAM will skip six lines before it starts printing the contents of the second file. Note it is best to work in the MOVING WINDOW mode. This mode shows how the text will appear on paper. It may be easier for some users to do the entering in the TYPEWRITER mode and then change over to the MOVING WINDOW mode to edit and reform the text.

It is important to know what ADAMs' page default settings are and which ones will take on the attributes of

the new file when merging two files. YES in the following

table means that this setting will be taken from the NEW file and will over ride and reform the existing text to these settings.

<u>ATTRIBUTE</u>	<u>BOOT UP DEFAULT</u>	<u>CHANGE?</u>
HORIZONTAL MARGINS	LEFT = 10, RIGHT = 70	YES
VERTICAL MARGINS	TOP = 6, BOTTOM = 60	YES
TABS	EVERY 5 SPACES	YES
TYPE OF PAPER	LETTER (11 inch)	YES
LINE SPACING	ONE	YES
SCREEN COLOR	BLUE	NO
SOUND	FULL	NO
FORMAT	TYPEWRITER	NO
NAME OF FILE	NONE GIVEN ON BOOT	YES

The NEW file will be placed on the next line BELOW the cursor in every case. This DOES present a problem if you try in merge a NEW file ABOVE the one in memory if the OLD file starts in the first line at the top of the screen. ADAM will leave the first line of the OLD file at the top of the screen and insert the NEW file starting on the second line. This leaves you with the NEW combined file with the first line on the screen being the first line of the old file. Simply INSERT an extra carriage return at the top of the original file before GETING the NEW file. ADAM will NOT place the NEW file in the middle of a sentence. It will place the NEW text on the line BELOW the cursor. The NEW text can then be HI-LITed and MOVED to a specific column location if desired.

## REVIEWS

Eve VD-MB/ MON-80 Video Board  
By L. Marschand

Continuing our review started last month...

I have a good color composite monitor and found the 80 column display readable, although it I would not want to work at the terminal 8 hours a day. I did, however, have to readjust the vertical and horizontal alignment to center the display (your monitor must have these adjustment controls). To get good resolution for a 80 column display, you really should have a monochrome monitor (see last months issue for more details on this), although many people are using the VD-MB with their composite color monitors without any problem. This must be an individual decision based on how much you will use the system in 80 column mode and how well your composite color monitor displays the text. As mentioned last month, Eve has allowed for adding a RGB color output to the VD-MB in the future which would provide 80 column display on RGB color monitors.

Three pieces of software are provided with the VD-MB or MON-80. The first is a special version of CP/M that has been modified to support the VD-MB/MON-80. The second is a comprehensive word processing program that has been customized to run on the ADAM and the VD-MB/MON-80. A 50 page manual comes with this package to describe its many features:

### PRINTING

Special printer format commands can be put within your documents or entered prior to printing. These commands set the left/right top/bottom margins, line spacing, justification (left, right, centered or flush right and left), etc. You can have different margins within a document as well. End of page markers, continuous forms and page numbers are also supported. You can also specify the number of copies desired.

### EDITING

Three modes are provided - text, program (for programming use) and special (combination of the two). The following functions are provided - line/page scrolling; insert/delete; search; search/replace; block move, copy, delete. You may also read other files in from disk and merge them into your documents. An additional nice feature is the ability to look at the contents of any ASCII file on disk without leaving your edit session. A status screen displays the number of lines and characters in the document, the number of characters available in memory and the file names that are open. You can work on documents that are larger than available memory space, the rest of the document resides on disk. Variables can also be assigned which allow you to bring in and print the value of these variables (such as names and addresses for form letters). If...else logic can be used

with these variables for some very sophisticated print routines.

I could go on and on, but I think you get the idea that this is a powerful word processor !!

ZBASIC is also included with the unit. This is a powerful Basic interpreter that runs under CP/M and has been specially customized for the ADAM by Eve. It has all the features of SMARTBasic plus many additional functions such as renumber, merge and a built in editor.

All in all, the software provided with the VD-MB/MON-80 is top notch and designed for the ADAM owner who wants to get professional use out of the ADAM and use the CP/M software that is available.

It is obvious that Eve has done a tremendous amount of research, design and work to produce this unit and the included software. It works as documented and is a true extension of the ADAM that adds powerful capabilities and provides for future expansion. The real question that each of you have to answer for yourselves is whether the enhanced capabilities provided are worth the price. There are some other companies rumored to be coming out with a 80 column card, but I have not seen any hard evidence. In fact Orphanware has decided to take a different approach and come up with software that will allow the attachment of a serial monochrome terminal to a serial interface card to generate 80 columns. We'll see how this develops.

Rating - A

### MultiWrite By L. Marschand

This is a word processing program developed by Strategic Software (Paintmaster, Signshop, TurboLoad, Powerprint). I just got the program in and do not have time to do a comprehensive review, so this will be another two-parter. Multiwrite is designed to provide additional functions not supported by SMARTWriter, the word processing program built into ADAM. The major advantages of Multiwrite over SW are:

1. MW displays 64 characters horizontally (SW displays 36).
2. MW can do right justification of text (SW can't).
3. MW allows multiple different margins within the same document (SW does not allow more than one left and right margin).
4. MW does automatic centering of individual lines between the current left and right margins (SW does not).

If these items are something you have been waiting for then MW may be for you ! MW is loaded from SMARTBasic, as are all the Strategic programs, although most of the MW program is written in machine language due to the speed required. Once loaded the main menu gives the options to edit a current file, create a new file, print a file, convert a file or quit. If you create a new file you can choose from black, blue, or a

green background screen. The characters are white on these

backgrounds. As you might imagine, the letters are small in order to display 64 across. I found the "a" and "s" hard to distinguish and I have a good color monitor. Strategic recommends the use of a monochrome monitor to provide good readability of the character set and I agree.

A ruler is displayed across the top of the screen with indicators of where the Left and Right margins are set. Most of the formatting commands are done via use of the Control key i.e. CONTROL - C centers the current line; CONTROL - R allows the setting of the right margin, etc. MW uses a "Format" facility to provide for variable margins within a document. You set the left and right margins, but unlike SW which automatically reformats your text, MW gives you the option to selectively re-format only certain paragraphs. As an example, if you have your margins set at 10 and 70 and for the next paragraph you want to have it set to 15 and 50, you just reset the margins and everything from that point on will be in the shorter margin. If you want to go back and change the margins on your first paragraph, just reset the margin and place the cursor at the paragraph you want and hit CONTROL - F to re-format that paragraph. This is a nice facility that works fast. In fact, all the commands that I tried were done very quickly on the screen, including block moves.

Strategic states that they patterned MW after SW, but just added more functions. MW uses the moving window format and scrolls the screen to the right if you enter a character higher than the 64 characters displayed horizontally.

MW will convert existing SW and Basic files so they can be edited and printed via MW.

Printing of MW documents is accomplished by first storing the completed document (you can't print directly from the screen like in SW) and then running a separate program. Prior to printing you are given the options to set page length, change left and right margins, top and bottom margins, set for pause after each page and page numbering. Your document is then printed, however printing is not quite as fast as SW because backwards printing is not utilized.

All in all, MW worked fine in the limited time I had to work with it. I will cover more details next month. A couple of points to consider however, are that MW does not use the 64K expander and since it runs under SMARTBasic, there is only room for 5-7 pages in memory. Hence, you would have to split large documents up. You could print them out one after the other by starting the subsequent documents with the correct page number. MW will only work on the ADAM printer, and not on other printers attached via the SP-1 printer interface.

SIGNSHOP By L. Marschand

This is a new ADAM program developed by Strategic Software (developers of TurboLoad, Paintmaster, Powerprint, Multiwrite).

Signshop is patterned after the very popular Printshop program developed by Broderbund and suprisingly contains

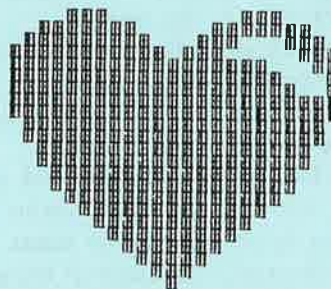
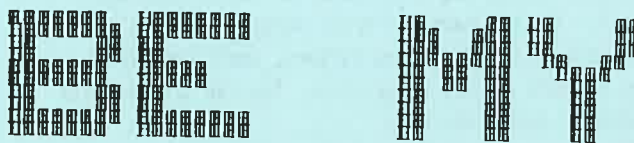
many of the same features. Signshop uses the ADAM letter quality printer in a unique way to generate some nice pictures and signs. Unfortunately, Signshop will not work with other printers via the SP-1 interface. EDITOR'S NOTE: If there is a demand NIAD will provide a print program for the SP-1 and dot matrix printers - let us know.

There are 10 pre-drawn pictures on the Signshop data pack that may be used to make a sign or notice. There is also a picture editor program provided that allows you to design your own pictures. This editor is simplistic, but functional in that it allows you to enter an "X" at any point you want to print. A counter keeps track of what vertical and horizontal point you are on to help in aligning your print points. Pictures may be from 1 to 50 lines high and wide and the entire screen scrolls (the screen is actually redrawn by SMARTBasic which is a little slow) when you draw a picture larger than the screen. You may erase points and print a draft of your picture via the editor as well. Once you are done with your masterpiece you save it as a file to a disk or data pack.

Let's walk through the various options for printing in Signshop:

#### Signs and Notices

You can have only one picture in each sign or notice, but it can be printed multiple times. You indicate where the picture is to be printed on the page as well. You also have the choice to print two different sizes of text on a Sign/ Notice - small text allows 12 characters per line and large text allows 8 characters per line. You may have as many lines of text as can fit on a 8 1/2 x 11 piece of paper. You also specify whether the text is to be left, right justified or centered on each line. Although, you can't insert normal text in the sign, this could be added later via the ADAM Electronic Typewriter if desired. Below is a sample of a Sign:



### Letterheads

To create a letterhead you can mix a picture, small or large text and 3 lines of normal text.

### Greeting Card

To design a greeting card, the same basic procedure is used as for a sign, however, you design an outside and inside 1/2 page for the card so it can be folded.

### Horizontal Banner

You can create banners of almost any length that print on continuous form paper. You can print one picture before, after or both before and after your text. You have 7 different sizes of text to choose from for your banners. Needless to say, I won't print an example of a banner here! We did find one problem. If you make a mistake in entering the name of a picture file, the Signshop program will bomb and you will have to re-load it and start over again so just be careful when entering the name of a file to retrieve. Overall, I found this program an interesting addition to my library of ADAM programs. It works well and offers a creative person the capability to do some nice signs that would spruce up things like reports, theme papers, notices, mailings, etc.. Signshops use is only limited by your creativity. Try using various print wheels as an example to vary the size of the blocks that are printed.

Rating - A

### Media-Aid By W. Motel

This is package of 10 Basic utility programs written by Walters software. The intent of this set of programs is to give the ADAM owner a comprehensive set of the most needed utilities on one disk/data pack.

INIT - This program initializes the directory for data packs and diskettes. It allows you to specify any name for the volume (to help segregate your programs) and correctly inits a diskette with 160 blocks. A nice feature is the ability to set the size of the directory to any number of blocks up to 127! This is a real useful utility since all the pre-formatted tapes and diskettes (via disk manager) only have 1 block for the directory, which allows only 38 filenames. Many times you may have a lot of space left on your tape or disk but no more room on the directory for another file name, especially if you have many small files. Now you can set aside 2 blocks for the directory and store 77 filenames on a tape or disk to fully utilize all the space on your tapes/ disks with this program.

HELLOBCD - Allows you to change the default device on your Basic tape/disk. Normally, when you load Basic it is preset to load the next program from tape drive #1. This is a problem if you have a disk drive and want to load your next program from disk, HELLOBCD will change this for you by altering your Basic program itself.

MENU - Gives you a catalog type display of each file on your tape/ disk and gives the option to run the program so you don't have to enter the name of the program. This can be put on each of your tapes/disks of Basic programs to provide a Menu.

MODIFIER - Allows you to modify catalog entries for filenames and attributes. You can "undelete" a file that has been inadvertently deleted or change a file type from A to H or vice versa (this is useful for writing a Basic or ADAMCalc program in SMARTWriter and then changing it from an H to an A file to load and run.)

COPY - A full tape/ disk backup copy program that will duplicate the contents of a tape or disk to another tape or disk. Copies from/ to center or right directory tapes and when copying from tape to disk, correctly determines the number of remaining blocks on the disk.

PURGE - A super program that reorganizes a tape/ disk to move all the files to the "front" of the tape/ disk and delete any empty blocks between files, hence creating more room for adding files. This program should be run against all tapes/disks you have used alot to clean them up. You will be surprised how much extra space you will get. This program will also remove deleted filenames from the directory, giving you room for more filenames. This program is unbelievably fast.

MANAGER - Allows the copying of individual files (not an entire tape/ disk) from one drive to another. It copies all types of files, even SMARTBasic itself.

TOOLKIT - Allows viewing the contents of blocks on tape or disk. Loads up to 16 blocks into memory at address 30,000. You can display and alter the contents of a

specific memory location and copy individual blocks to any block number on another tape or disk. This program is useful in altering programs. This is the program that Walters Software used to create the disk versions of the Supergames.

HMODIFY - This program takes machine language data from memory and creates an "A" type file that can be transmitted via modem. Sizes up to 1K can be done and this is intended for those experienced with machine language.

HRECOVER - Companion to HMODIFY that recovers files and puts them back in machine language.

All together, I would highly recommend this utility package. MANAGER, INIT and PURGE are necessary utilities for tape/ disk space management. COPY is a good backup utility program. TOOLKIT and MODIFIER are good technical utilities for the more experienced. The major advantage to this package is that you have a number of very useful utilities on one tape/ disk for a reasonable price.

RATING - A

Orphanware "Jane's Recipes Volume I  
By L. Marschand

This is for you owners of Coleco's Recipe Filer program.

This is the first of a series of Recipe Volumes, that make use of this excellent method of storing, retrieving and organizing recipes for the Betty Crockers out there. Briefly, Recipe Filer is a program that stores recipes and allows one to select them by type (dessert, meat, etc.), main ingredient or name. It also produces a shopping list of the ingredients required for the recipes. The excellent search capabilities built into SMARTfiler are used in Recipe Filer as well.

Well, Jane's Volume I justifies her husbands nickname (BIG John) ! There are 32 desserts representing at least 1,000,000 calories !!

Here are some of the names to tantalize your tastebuds:

Butter Brickle Bars  
Coconut Cream Pie  
Fried Ice Cream  
Grape Pie  
Molasses "Porkers"  
Mudhens  
Snickerdoodles  
Texas Tornado Cake

There are 24 more to choose from. Jane's next volume is Summer Salads. Order via NIAD product list (see NIAD SPECIALS) or direct from Orphanware.

Rating - Delicious

Cassette to DDP Conversion Manual  
By L. Marschand

This manual written by Rex B. Dominguez Jr is intended to provide instructions on how to convert ordinary audio cassettes to ADAM formatted data packs in lieu of purchasing pre formatted Data Packs (which may be hard to find for some ADAM owners). Additionally, this same method can be used to make backup copies of your tapes, including the Supergames.

The manual accomplishes this goal. It is well written and contains many diagrams that are essential to making ADAM data packs. I feel that most people will be able to understand these instructions and diagrams. Rex has done his homework to provide the data needed to make both the right and center directory tapes required (Supergames are on right directory tapes, the regular preformatted ADAM tapes you buy are center directory tapes).

The materials needed to make your own tapes are:

1. A regular household electric drill.
2. A 5/32 drill bit.
3. Two stereo cassette decks with manual recording level controls and a pair of standard RCA connecting cables.

4. A C60 Normal (Low noise or Standard) Bias cassette tape.
  5. A Digital Data Pack using the center directory format (the normal Loran or Coleco brand currently available).
- As you might guess, you have to do some drilling of the audio cassette to provide the two holes needed to fit into the ADAM data drive and you need access to stereo cassette decks to actually copy from an already formatted data pack to make your data packs from an audio cassette.

I would recommend this manual to those of you who have the equipment and skill required. Cost is \$19.95 for both the manual and a sample tape, including shipping and \$15.95 for only the manual. I recommend getting both the right and center directory sample tapes to use as your source, otherwise you also have to drill holes in the ADAM tapes to get them to fit into a stereo deck. May be ordered by sending a check or money order to :

Rex B. Dominguez  
613 Lasalle Ave  
San Francisco, CA 94124

Rating - A

MEMBER COMMENTS  
QUESTIONS AND ANSWERS

. In Sage's Expandable Computer News, issue #12 (Jan-Feb 86), pages 21-22, they tell you how to make your own monitor output. They give you a parts list and Radio Shack part numbers so that anyone can get the parts easy. The cost of parts come to less then \$10.00. They give the details of how to put in the parts on the Colecovision board along with a schematic diagram. For the price of parts and the subscription for one year of ECN, you'll end up cheaper than Eve's kit!

It again confirms to me that Eve Electronics is out for money first then ADAM user's second. After I purchased Universal Interface System's 64K RAM card for \$49.00, I notice that others are now coming down on prices on the 64K, with Eve matching U.I.S.' price ! What's needed is competition. If you compare other computers expansion cards and peripherals with ADAM, you can see why I get annoyed with ADAM expansion makers (Eve). It all wants to make me throw ADAM out the door, however, I have spent too much on ADAM to do that and I spend alot of time behind its wheel.

I guess I'm just frustrated at the lack of software-hardware (competitive) for ADAM and at Coleco for dumping it. Your newsletter and Data Doctor have inspired me to keep going on and I thank both of you for that. Well, it is time to load up SmartTRIX, which will make me end on a happy note as such a high quality software needs mention. Dale Metcalf

- Well Dale, you certainly express your frustration well and I feel your comments are representative of a number of ADAM owners and hence my decision to print it. Let me start off by agreeing with your premise that there needs to be competition among ADAM hardware peripheral suppliers. However, I think we now have that competition



with Eye, Universal, Capitol, Orphanware, HI-tech and others coming on. I am very encouraged by the products from various vendors that are popping up each month. The ADAM now has significantly more support than it ever had when Coleco was going full swing! I have said many times that Coleco's dumping of the ADAM has been a plus for us in that technical information has become more readily available to developers.

Relative to your comments about the monitor interface for Colecovision, I agree that for the person with the know how and experience to interpret a schematic and construct the modification, the article in ECN is the way to go. However, I can assure you that the majority of ADAM owners do not have this capability and I would be afraid that if they tried they could "fry" their ADAM and maby themselves. The kit supplied by Eve is a step by step guide with diagrams that walk you thru the process. Additionally, the kit not only includes the parts but they are actually preassembled so all you have to do is solder three wires and drill the hole in the Colecovision to install the plug. In my mind it is well worth the money to spend an additional \$15-\$20 and insure the adapter will work. As I said in my review, even the Eve kit is not for the novice who has not had soldering experience.

On to your other comments. Competition is one influence on price but I think volume is the major consideration. If a manufacturer can buy parts in large quantities the price per part and hence the retail price of the end product can go down. This is why so many companies are making peripherals for the Apple, Commodore and IBM PC's - there is a large market to share. I give a lot of credit to these companies that have supported the ADAM out of "blind faith" that a market would develop.

In some cases peripherals for other systems are cheaper than for the ADAM, but not dramatically so. In reading the March issue of Family Computing (the only major magazine that supports the ADAM) the prices for Apple/Commodore parallel printer interfaces range from \$70 to \$120; 64K memory expansions from \$70 to \$279 and 80 column cards from \$170. It is difficult to make direct comparisons here because of the different designs of these computers, but these prices are not that far off. Please see our interview with Hank Szretter of Eve Electronics next month to get his view on these issues.

Relative to software, I am very encouraged by the work being done and the new titles coming out. Data Doctor, Strategic Software and others are providing us with fine products that we can be proud of. The reduction in price of most of the original Coleco software titles make them a bargain that can not be beat. I am less concerned about the cost of peripherals when you can buy an ADAM for \$299, a spreadsheet program (ADAMCalc) for \$19.95, Logo for \$29.95, CP/M 2.2 for \$29.95 and most games for under \$20. The ADAM is a home computer bargain that can not be beat. Just add up the price for a comparable Apple or Commodore and you will see what I mean!

. First a note of thanks for your fine newsletter and for all the hard work by yourself and your contributors. Second, thanks for the prompt completion of my order although I am anxiously awaiting Dambusters which you

indicated was on backorder. The copy of the PD Utilities # UNDOV1 is superb for making backup copies. I took advantage of your back issue offer of a quantity of 10 to save some money even though it duplicated my November issue and it was worth every penny. You are correct in urging members to get these back issues. Incidentally, you will note that I am using fan-fold paper. I do not have the Tractor Feed but I get pages of good printing. I merely insure that the paper feeding into the platen is lifted up in a loose loop behind the printer.

J. Sparrowe

- Thanks for the nice comments and suggestions about fan-fold paper. I'm not sure we will find anymore Dambusters around but will keep trying.

. I have just recently purchased JEOPARDY from NIAD and would like to comment on it.

I was never very big on shooting aliens and such. Frankly they would always bore the heck out of me after a while.

While text games are interesting, I also find them lacking, though I admit I have not had the opportunity to try an Infocom adventure at \$40, but for the measly sum of 6 bucks we have JEOPARDY. It truly is a shame that Coleco was never able to get its act together while it was coming up with games like this. It might have made all the difference, considering how big Trivia games are at present.

The way this game was set up to mimic the TV show is just amazing. I have had the neighbors over playing this and everyone seems impressed with it!

I would urge all NIAD members to spend the \$6 and get this game. Perhaps if many of us purchase this game Lyle and the other folks at NIAD might see their way clear to developing additional question packs.

You know Lyle, I've been with NIAD since the "early" days and this was the first game that Coleco (almost) developed that has really won me over. Thanks for the time.

R. Lefko

- Thanks to you for the note. I couldn't agree with you more. Both Family Feud (which was released commercially) and Jeopardy are great family games that are challenging and visually appealing. NIAD will be working on question packs for Jeopardy if there is a demand.

. Is there a way to have a timed input facility within basic programs? I am doing some question and answer type of programs for children and this would be quite helpful.

B. Rooney

- There are a couple of ways of doing this that Wayne and I discussed. One is if you only require a one letter/number response (multiple choice, etc.). The following routine uses the address 64885 which contains the last key pressed:

```
10 Print "Enter your answer here --> "  
20 Poke (64885),0: Rem Clear keyboard buffer  
30 For x = 1 To 1000: Rem Timing delay loop, set to any  
value  
40 If Peek (64885) < > 0 Goto 100  
50 Next x  
60 Print "Sorry, time is up"  
100 A = Peek (64885): Rem ASCII value of the key pressed  
110 Rem Put your routine for correct or incorrect answer  
here
```

## PRODUCT LIST

### CP/M 2.2 COMM'L SOFTWARE - RECOMMEND DISK ONLY

REQUIRES ADAM CP/M SOFTWARE # 7832

#### INFOCOM PRODUCTS:

Planetfall	\$34.95
Zork I	\$34.95
Zork II, III	\$39.95 @
Starcross	\$39.93
Deadline	\$39.95
Seastalker	\$39.95 NEW
HitchHiker Guide	\$34.95 NEW

#### HARDWARE & ACCESSORIES

ADAM DISK DRIVE 7817 \$185.00

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.

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 \$ 14.95

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 \$299.95

W/O Power supply \$279.95

With trade in of PS-1 \$269.95

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 \$299.95

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 \$1.20 @

PRICES VALID 5/1 to 6/1/86

# PRODUCT LIST

## SOFTWARE (DDP UNLESS NOTED)

SMART LOGO 7600	\$ 29.95
EXPERTYPE 7602	\$ 19.95
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	\$ 19.95
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
SUPER ZAXXON 2623	\$ 19.95
HOME SOFTWARE LIBRARY 7826	\$ 19.95
2010: TEXT ADVENTURE	
GAME BY MGM/UA 7849	\$ 20.95
FAMILY FEUD 7710	\$ 20.95

## OTHER SOFTWARE- SPECIFY DDP OR DISK

BOUNTY HUNTER VS4048	\$19.95
ADVENTURE PK I VS4011	\$ 9.95 SPECIAL
ADVENTURE PK II VS4015	\$19.95
VIDEOTUNES (DDP ONLY)	\$26.95
EXT BASIC UTILITIES	\$19.95
FANTASY GAMER (DDP)	\$29.95
BASIC BONANZA	\$29.95
DIABLO	\$19.95
SOFTPACK I	\$18.95
LVAC ARCHIVES I	\$ 9.95 SPECIAL
REEDY SOFTWARE LIB	\$15.95 SPECIAL
QUICKFAX QUEST	\$22.95
PERSONAL ACCOUNTANT	\$19.95
SMARTBEST	\$16.95 NEW
STRATEGY STRAINER I	\$19.95
BUSINESS PACK	\$18.95
PAINTMASTER	\$22.95 NEW
TURBOLOAD	\$26.95 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

## CARTRIDGE SOFTWARE

ILLUSIONS 2621	\$18.95
BC II: GROG'S	
REVENGE 2620	\$18.95
SHURF PAINT AND PLAY 2697	\$18.95
SUESS FIX UP	
PUZZLE 2699	\$18.95
MONKEY ACADEMY 2694	\$18.95
TELLY TURTLE LOGO	
GRAPHICS 2698	\$18.95
DUKES OF HAZZARD	\$18.95
ROCKY BOXING	\$18.95
ANTARTIC ADV	\$18.95
WARGAMES	\$18.95
CABBAGE PATCH PIC SHOW	\$18.95

## 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-11 #BNDVI-11 (11 different volumes)
SMARTLogo	Volume I #LNDVI
ADAMCalc	Volume I #ANDVI
BASIC Utilities	Volume I #UNDVI (INCLUDES BACKUP UTILITY PROGRAM)
CPM 2.2	Volumes I-16 #CNDVI-16 (16 volumes available)
JEOPARDY	
PINBALL/ MACK	
TROLLS TALE	
ADAM DIAGNOSTIC (NOTE: Requires 64K Memory Expander)	
SUPER SUB ROC	

### II. 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 SOFTWARE FOR SMARTWRITER /FILER (AVAILABLE FOR MOST PRINTERS)	\$ 20.00

### \*\*\*\* NIAD SPECIALS \*\*\*\*

EVE SS-CC & ME64K	\$ 144.95
EVE SP-1 & PANASONIC 1080 PRNTER	\$ 369.95
EVE SP-1P (PARALLEL ONLY) AND PANASONIC 1080 PRINTER	\$ 309.95
NEW DATA DRIVES (not in boxes)	\$ 29.95
RECONDITIONED DIGITAL DATA DRIVES	\$ 19.95(instructions/30 day guar)
SUPER ACTION SET WITH BASEBALL	\$ 39.95
COLECO HAND CONTROLLERS	2 for \$ 10.00

SIX # 7806 RIBBONS \$ 25.95 DISK

JANE'S RECIPES (REQ'S RECIPE FILER) \$ 7.00 DISK  
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 \$ 2.50 EACH

\*\*\* PRINTERS \*\*\*

\*\* MONITORS \*\*

PANASONIC KX-1080 \$ 249.95  
 . TYPE: 9x9 DOT MATRIX  
 . SPEED: DRAFT MODE -100 CPS (PICA & ELITE);  
 NEAR LTR QUAL - 20 CPS; PROPRITIONL -75  
 . PRINT CHAR:BI-DIRECTIONAL; 96 CHAR W/ASCII DEC'S  
 NORMAL, ELONGATED,CONDENSED,IBM GRAPHICS  
 ITALICS, IBM SPECIAL CHAR'S  
 . MEDIA HNDL:ADJ TRACTOR FEED, FRICTION FEED  
 4" to 10" PAPER  
 . INTERFACE: CENTRONICS 8 BIT PARALLEL  
 . BUFFER: 1K STANDARD - 4K ADD'L OPTIONAL (\$ 69.95)  
 . SIZE: 4.5"x15.9"x11.3"; WEIGHT 14.6 LBS  
 . FEATURES: 2 YEAR LIMITED WARRANTY

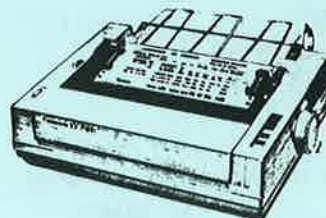
PANASONIC KX-1091 \$ 299.95  
 . TYPE: 9x9 DOT MATRIX  
 . SPEED: DRAFT MODE -120 CPS (PICA & ELITE);  
 NEAR LTR QUAL - 29 CPS; PROPRITIONL -75  
 . PRINT CHAR:BI-DIRECTIONAL; 96 CHAR W/ASCII DEC'S  
 NORMAL, ELONGATED,CONDENSED,IBM GRAPHICS  
 ITALICS, IBM SPECIAL CHAR'S  
 . MEDIA HNDL:ADJ TRACTOR FEED, FRICTION FEED  
 4" to 10" PAPER  
 . INTERFACE: CENTRONICS 8 BIT PARALLEL  
 . BUFFER: 1K STANDARD - 4K ADD'L OPTIONAL (\$ 69.95)  
 . SIZE: 4.5"x15.9"x11.3"; WEIGHT 14.6 LBS  
 . FEATURES: 2 YEAR LIMITED WARRANTY

PANASONIC KX-1092 \$ 399.95  
 . TYPE: 9x9 DOT MATRIX  
 . SPEED: DRAFT MODE -180 CPS (PICA & ELITE);  
 NEAR LTR QUAL - 33 CPS; PROPRITIONL -112  
 . PRINT CHAR:BI-DIRECTIONAL; 96 CHAR W/ASCII DEC'S  
 NORMAL, ELONGATED,CONDENSED,IBM GRAPHICS  
 ITALICS, IBM SPECIAL CHAR'S  
 . MEDIA HNDL:ADJ TRACTOR FEED, FRICTION FEED  
 4" to 10" PAPER  
 . INTERFACE: CENTRONICS 8 BIT PARALLEL  
 . BUFFER: 7K STANDARD - 4K ADD'L OPTIONAL  
 . SIZE: 5.4"x16.3"x13.8"; WEIGHT 19.6 LBS  
 . FEATURES: 2 YEAR LIMITED WARRANTY

PANASONIC RIBBONS # P110 (ALL MODELS) \$ 9.95

STAR SG10 \$ 279.95  
 . TYPE: 9x9 DOT MATRIX  
 . SPEED: DRAFT MODE - 120 CPS; NLQ -30 CPS  
 . PRINT CHAR:BI-DIRECTIONAL, NORMAL,ELONGATED, CONDSD  
 ITALICS, IBM GRAPHICS/ SPECIAL CHAR'S  
 . MEDIA HNDL:ADJ TRACTOR FEED,FRICTION FEED  
 4" TO 8 1/2 "  
 . INTERFACE :CENTRONICS 8 BIT PARALLEL  
 . BUFFER: 2K STANDARD)  
 . FEATURES: 140 DOWNLOADABLE CUSTOM CHARACTERS  
 . ACCESSORIES: RIBBONS \$ 2.95 n  
 4K BUFFER \$ 109.95

PANASONIC COLOR DT-S101 COMPOSITE \$ 199.95  
 . CRT TYPE: 10" 90 DEG INLINE DARK; P22  
 . DOT PITCH: .63 MM  
 . RESOLUTION: 250 HOR x 300 VERTICAL  
 . SIZE: 10.3 x 11.2 x 13.4 "  
 . AUDIO: YES  
 . FEATURES: BLK & WHITE DISPLAY  
 . OPTIONS: TILT SWIVEL STAND \$ 19.95



TRAINING MANUALS/ BOOKS

THE 1985 ADAM RESOURCE DIR \$ 12.95  
 LEARNING EXPRESS AUDIO TRAINER \$ 32.95  
 CP/M USER'S GUIDE BY T. HOGAN \$ 15.95  
 FIRST BOOK OF ADAM - BASIC  
 BY P. ROTH \$ 10.95  
 2ND BOOK OF ADAM - SMARTWRITER \$ 7.95  
 THE COLECO ADAM USER'S HANDBOOK \$ 8.95  
 THE BASIC ADAM : A SELF TEACHING  
 GUIDE BY ABIKOFF & CORNELL \$ 14.95