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MULTI-FUNCTION USER GROUP

MONTHLY NEWSLETTER-PUBLIC DOMAIN LIBRARY
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Welcome to SPRING !!

Picking up our study of the book of Romans with Chapter 3, verse 9 -

9 What then? Are we Jews any better off? No, not at
all; for I have already charged that all men, both Jews and
Greeks, are under the power of sin, 10 as it is
written:
"None is righteous, no, not one;
11 no one understands, no one seeks for God,
12 All have turned aside, together they have gone wrong;
no one does good, not even one."
13 "Their throat is an open grave, they use their
tongues to deceive."
"the venom of asps is under their lips."
14 "Their mouth is full of curses and bitterness."
15 "Their feet are swift to shed blood,
16 in their paths are ruin and misery,
17 and the ways of peace they do not know."
18 "There is no fear of God before their eyes."
19 Now we know that whatever the law says it speaks to
those who are under the law, so that every mouth may be
stopped, and the whole world may be held accountable to
God. 20 For no human being will be justifeid in his
sight by works of the law, since through the law comes
knowledge of sin.
21 But now the righteousness of God has been manifested
apart from the law, although the law and the prophets bear
witness to it, 22 the righteousness of God through
faith in Jesus Christ for all who believe. For there is no
distinction ; 23 since all have sinned and fall short
of the glory of God, 24 they are justified by his grace
as a gift, through the redemption which is in Christ Jesus,
25 whom God put forward as an expiation by his blood,
to be received by faith. This was to show God's
righteousness, because in his divine forbearance he had
passed over former sins; 26 it was to prove at the
present time that he himself is righteous and that he
justifies him who has faith in Jesus.

Wow, the above is a summary of God's plan for the redemption of mankind and there is a tremendous amount of information to absorb in these verses. The statements in the first few verses establish the fact (per God, not me) that "None is righteous, no, not one;" Paul stated that this applied to the Jews as well as the Gentiles (non Jews). This statement of God's is difficult for many to accept because of human pride. We want to think of ourselves as "good", not "bad" people deserving of the title sinner. This is a much greater problem for the well intentioned, honest person who "prides" themself in being "good" then for the bum or thief who would readily admit their faults. God states that all our human striving through actions (works) can not justify us as righteous in his eyes. This striving is usually an attempt to prove to ourselves and others that we are "good". God sets the standards, not us. It would really be a mess if each of us set our own rules as to what qualified one for salvation ! Verse 20 states that the law (Ten Commandments) was given to provide knowledge of sin. God has proven that man, through his own nature and striving, can not keep the laws established by God. This was done to establish that fact that all men have sinned. God knew that man's prideful nature (this was not given by God, but by you know who) would fight this admission. Let's face facts, none of us has kept all Ten Commandments and hence we have all sinned. We can argue and say that the Ten Commandments are false or make up our own, but God sets the rules and if we are honest we'll own up and admit our sinful nature.
Verse 21 begins the explanation of God's wonderful plan of redemption. He has provided redemption and salvation as a gift ! Yes, he gives all of us the opportunity to have our sins forgiven, once we admit that we have sinned. God gives us this gift through his son Jesus Christ, his expression of love for his creation. Won't you reach out and accept this gift of God's love ?
God bless you all.

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NIAD NEWS/ UPDATES

I constantly marvel at the staying power of our little orphaned ADAM. Here we are more then two years after Coleco dropped the ADAM, going stronger then ever. The ADAM owner has a large variety of quality software to choose from, three times what was available when Coleco dropped it. Additionally, third party hardware suppliers have sprung up to supply our needs for memory expanders, parallel printer/ modem interfaces, 80 column video under CP/M, speech synthesizers, etc. There is a variety of basic supply products available as well. Who would have thought in Januaray of 1985 that in May of 1987 we would have such a plethora of available products. With the fine support of highly technical software developers we can now print high resolution graphics on any dot matrix printer, even color on the Okimate 20 printer. We now have a fully integrated multi-function package in MICROWORKS and a soon to be released spelling checker. I could go on and on. A feature article was printed in the March 29, 1987 edition of the Hartford Journal (right in Coleco 's back yard) on our orphaned ADAM. They interviewed several local ADAM owners who were utilizing their ADAMs and happy with them. One of those interviewed is a NIAD member who expressed their satisfaction with their ADAM and how it is put to good use for writing and record keeping.

This is what it's all about folks, getting the most out of your ADAM. That is why NIAD was started and why we are still publishing needed information and providing quality services today and will be for along time in the future.

. ANNOUNCEMENTS

- Chicago local chapter meetings are held the second Thursday of each month, 7:30 PM at the College of DuPage, Student Resource Center, which is the large glass building containing the cafeteria on the east side of Lambert road. The college is located at the intersection of Lambert and 22nd streets in Glen Ellyn, Il, just west of highway 53 on highway 56 (Butterfield Rd) and then north on Lambert; or take Rt 38 (Roosevelt Rd) west from 53 and go south on Lambert. Call the college at 858-2800 for more directions if required.

The next meeting will be held on May 14th in room 1042A. We'll be giving demos of new programs, instruction for Basic programming, answering questions and in general have a good time with fellow ADAMites. I'll have basic supplies for sale - tapes, ribbons and some of the new software. The April meeting was attended by about 30 people who got to see a demo of a prototype of an ADAM "flight simulator". You are really missing out if you don't attend these monthly meetings !

- We have had several inquiries regarding people who are looking for new/ used ADAMs to buy and those who want to sell used ADAMs. We will make these referrals as we can. NIAD will also buy any used WORKING ADAMs for $150 - contact us for more information.
- SASE's are required for all requests for information and correspondence. Please help us by addressing and stamping a return envelope. Also, if you are requesting multiple pieces of information include extra postage.
- Your renewal is due if the first 4 digits of your member number as displayed on your envelope are 0587.
- Sharon McFarlane has volunteered to be our new CP/M 2.2 librarian. Sharon is a good "techie" who has configured many CP/M programs for the ADAM and is working to bring MANY more CP/M Public Domain programs to our library. Sharon is an avid ADAMite who is devoted to our little machine. I think she has just about every hardware peripheral and piece of software that came out for her three ADAMs !! Thanks much Sharon for your support. Since Sharon lives in Canada and mailing from the US is somewhat cumbersome, send NIAD any CP/M PD exchange programs and we will forward them on to her. Make sure you enclose a self addressed, stamped return mailer.
- Bob Tarnowski came up with a great idea - NIAD BASIC GOLD PDs. These will be a series of top notch Basic Public Domain volumes. They will all be self loading and menu driven. Bob has volunteered to take the best of you now 20 Basic PD volumes and organize them into this GOLD series.
- Lee Smith has volunteered to start a RLE picture file Public Domain library. See this months PUBLIC DOMAIN WORKSHOP for information. Rules for submitting are the same as the other libraries. We have added three RLE volumes to our PD list ($5 disk/ $7 DDP). Thanks Lee for the great idea and support of your fellow ADAMites.
- Be advised that Coleco will still replace defective ADAM merchandise (even disk drives) sales invoice and it is within the warranty period as stated in the literature that came with the product. Return the defective merchandise and a copy of the sales invoice to:

Coleco Consumer Returns
37 Prospect Street
Amsterdam, NY 12010

- We have purchased some of the best and hardest to find ADAM cartridges including DAMBUSTERS, TAPPER, TARZAN, WARGAMES, HERO and BEAMRIDER. Get them while they last.
- Our suppliers are raising prices on some of the ADAM parts such as keyboards, hand controllers and

data drives.
- Some of the early copies of ADDRESS BOOK/ CALENDAR were bad. If you are having any problems with this program, return it for recopying.
- We published an index of our back issues in the Dec/ Jan 87 combined issue and the Feb/87 issue. You new members should pick up these two back issues to help you in finding articles on subjects you are interested in.

. SOFTWARE

More high quality software product are now available for our "orphaned" ADAM.
We have reviews this month on -
- BASIC SYSTEMS MANAGER/FASTRUN from Practical Programs, an excellent program that helps the novice/ beginner better use ADAM SMARTBasic.
- BASICAIDE from Mr. T Software, a nifty little program for the SMARTBasic programmer.
- LAB MOUSE from Reedy Software, a great FIRST person perspective game (yes, you are the mouse !).
- STATES & CAPITALS from Parallel Systems, an educational program.

We also have a review on the Coleco ADAM Entertainer book in this issue.
. Next month we'll have reviews on -
- SMARTYPE 2, a word processor printing program from Reedy Software.
- SHOWOFF II, an enhancement to the SMARTWRITER word processor for dot matrix printer owners.
- GREAT INVENTIONS from Parallel Systems
- New software under development include a spelling checker for SMARTWRITER files, a greatly improved version of the MEDIA AID utility program and a flight simulator Basic program, plus who knows what else in the future.

. HARDWARE

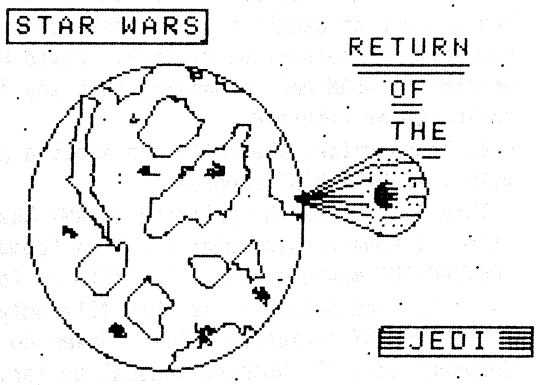
. Status quo on the disk drive situation. We have not heard any firm reports on the planned drive that Don Pearlman is developing. As we said last month, we do not recommend you paying for any disk drives that are "in development". Wait until we have verified they are being produced and work as advertised.
. Orphanware is selling a 300/1200 baud, Hayes compatible external modem for the ADAM. Price is $175 including a serial interface to attach it to the ADAM. A $25 trade in allowance will be given for any ADAMLINK modem. CP/M 2.2 modem software is included as well. At this point you must have (and know how to use) CP/M 2.2 to make use of this modem.
Order from Orphanware at PO Box 324, Canal Fulton, OH 44614 (216) 882-4720.
- We just received an improved version of the hardware/ software device that will provide for formatting of blank audio tapes directly on the ADAM. We'll review for next months issue.

. ITEMS OF INTEREST

- See the TELECOMMUNICATIONS WORKSHOP for some additional ADAM BBS numbers.
- On page 27 of the April/87 issue of Family Computing magazine is a listing of a neat little error trapping routine for ADAM SMARTBasic programs submitted by a long time ADAMite, Greg Noblett.
- There is a cute music program for the ADAM on page 59 of the May/87 Family Computing issue. In the same issue there is a reference to a software house that is supplying ADAM CP/M 2.2 software - Workman & Associates, 1925 E. Mountain St., Pasadena, CA 91104 (818) 791-7979.
- David Carmichael, former Chairman of the Kansas ADAM Users Group has asked us to inform you that a "Fund Raising" compaign being run by the ADAMLand Users Group on behalf of the Kansas group is NOT sponsored or authorized by them. David has written to ADAMLand, demanding that any funds collected be returned.
- E. Trapp writes the following about a problem with the POWERPRINT program.

This fix allows the printing of ANY SmartWRITER file. I have created what I call a 'ppmaster (POWERPTINT master) file. This file is formatted as instructed below. I use this file only to set up POWERPRINT formatted files. Never do I enter a document into it. Nothing unusual so far. Here is what I do differently. I create my document as I always did without POWERPRINT. I edit away to my hearts content. When I am ready to print I

'store' the SmartWRITER file. next I clear the workspace. NOW I 'get' the 'ppmaster'file. It consists of one carriage return. Next I 'get' the just stored SmartWRITER file. It loads in after the 'ppmater' carriage return. I am sure that this has been tried by many without success. It is necessary to go one step farther. Move the curser to the END of the file worspace. AGAIN 'get' the 'ppmaster' file. It merges in with the end of the document and shows itself as a carrige return. NOW 'store' this entire document on preferably a different data pack used just for'powerprinting'. It could be named 'ppdocument'. I have now created a 'POWERPRINT compatible' file that can be 'powerprinted'. This 'ppdocument' file is used only for printing. Never for editting. If I wish to do further editting I call up the original SmartWRITER file, edit it then rebuild it as outlined above and reprint it. Works just fine as this document shows.
I hope that this information can be used to help someone feeling frustrated with the POWERPRINT program.
- S. Molner provides the following as an adjunct to our "maintenance" article last month.
In Niad issue #28(April 1987) you state on page 3 that if the ribbon is not advancing-it must be serviced by Honey Well. I had this problem and found under the ribbon carriage a box, which could be opened by removing 2 screws. The box contained the advance solenoid and associated hardware. I found that a plastic block had broken loose and when I glued it back in place to hold the advance spring(leaf) against the ratchet wheel, it worked perfectly again. About 5 minutes work and no service call!



PUBLIC DOMAIN WORKSHOP

ERRATA - We have mentioned before that the fine CATMENU program on Utilities volume #2 occasionally locks up for no apparent reason. We were given a tip (sorry, forgot who) that if line 14 was removed no lock ups would occur. Line 14 is just a rem statement, but it does contain the "heart" graphic symbol that could somehow mess up Basic. Seems to work ok now !! Live and learn, I guess.

As mentioned in the NIAD NEWS section we will be introducing a new series of Basic PD volumes, titled "NIAD GOLD". Watch for more information next month. We think you will really enjoy this "best of" PD series.
We now have a new CP/M 2.2 librarian, Sharon McFarlane (see this months CP/M 2.2 WORKSHOP for descriptions of several CP/M PD volumes with some great programs on them). Since Sharon lives in Canada, send your CP/M PD submissions here to NIAD and we will forward them on to Sharon. You must include a self addressed stamped return mailer.
Thanks to Lee Smith, we now have a series of RLE picture file Public Domain libraries. Each volume comes with an enhanced program for converting the RLE formatted pictures to a SMARTBasic high resolution screen for viewing. If you have the GRAPHIX PIX I product you can save these high resolution screens for later "instant" viewing, rather then having to reconvert them each time you want to view them.
Send your RLE picture file submissions to:
Lee Smith
Box 159
Terre Hill, PA 17581

Here is a description of the files in Basic PD # BNDV19. As you see, we even have some pictures that can be printed out on your ADAM printer with no additional software ! Thanks so much to all of you who submit such fine PD software and to Bob Tarnowski for compiling this volume.
-

```
(((            NIAD PUBLIC DOMAIN          )))
((((       BASIC VOLUME # BNDV 19         ))))
   (((      PROGRAM DESCRIPTIONS        )))
```

NOTE: Files in lower case are RUN in Basic (A) or printed with SmartWRITER (H). The "H" files in capital letters are binary files and are run by entering "BRUN <filename>". BEFORE RUNNING PROGRAMS, READ THE "readme" AND "docfile" FIRST. "patiscore" and "MLMOD" are system files and are run from other programs.
*** strtr - Used for the initial setup of OLLEH. Be sure and read the docfile before using.

*** HELLO - For use with the OLLEH file.
*** OLLEH - Nice program to be used with a NEW Basic tape or disk will create a phone book, appointment book and programs directory. Run by booting (or RUN HELLO) or BRUN OLLEH. See docfile.
*** panther - VERY nicely done graphic to be printed on the ADAM printer. You'll be impressed! This one is the Pink Panther.
*** ghostbuster - The Ghostbuster emblem - see above.
*** starship - The USS Enterprise - use fan-fold or 14" paper - see above.
*** starwars - Produce your own "STARWARS" poster - see above.
*** clown - See above.
*** bluejays - For baseball fans - see above.
*** snow - Interesting hi-res presentation of a snowfall.
*** averaging - this program will average any number of entries for you.
*** ship - graphic animation of a plane taking off and landing on a ship.
*** 2wayprint - Great program for hackers that demonstrates bi-directional printing.
*** inchworm - Simple shape table animation demo of and inchworm.
*** NERM - One of the best games in the P.D. - great fun, sound and graphics. BRUN NERM.
*** GHOSTS - Another good game - avoid the green ghosts as long as you can. BRUN GHOSTS.
*** vcr - Colorful introductory menu for your vcr tapes. Set up screen then plug into VCR.
*** art - interesting hi-res demo program.
*** crossed - Demonstrates the random placement of strings running in all directions.
*** kutenkamen - This text adventure takes you thru the Temple of KutenKamen in search of treasures.
*** HAUNTED - Another text adventure that takes you through an abandoned house. BRUN HAUNTED.
*** xmassongs - a collection of 4 christmas songs - menu driven.
*** PATIENCE - Treeemendous ADAM version of the solitaire card game. Very well done but you can't cheat with this one. With scoreboard. BRUN.
*** patiscore - Scoreboard file used by PATIENCE.
*** blockedit - A handy utility for editing blocks.
*** MLMOD - Machine language file for "blockedit".
*** scrutil - A useful utility for removing the REM and DATA statement space bumps. Works well.
*** addresser - Nice program for addressing small or large envelopes.
*** animate - Hi-res animation using DRAWs.
*** bouncestk - Animation demonstration of a bouncing stick - useful routines.
*** wedbells - Music to walk down the aisle by.
*** serpinski - Intricate hi-res design.

TELECOMMUNICATIONS WORKSHO

Tim Nunes of the CLUB forum on Compuserve informed me that there are two new files on Data Library 9 that provide directory information relative to the files on DL 9.
DL9.DIRTXT contains a listing of the filenames of all items on DL9.
DL9BRO.S1-4 (there are 4 individual files) contains the name and description of each of the files. You can download these files (using the read option) and print them for future reference in selecting which files you want to obtain.
There are good documentation files in the description section of DL9 and DL10, which describe how to upload and download files.

Compuserve has reduced its daytime rates to equal its night time rates ($6.25/ hour) until May 31 ! Also, Compuserve does not charge you for any time spent uploading a file. So, let's get some good stuff up on the CLUB forums (ADAM is on DL9 and DL10).
Many of you have inquired about the "RLE" pictures we have been printing in the last several NIAD issues. Many of these pictures were obtained from Compuserve's PICS forum and converted from the RLE format to an ADAM high resolution basic screen.
An enhanced version of the CBPIC RLE conversion program can be obtained by purchasing GRAPHIX PIX I (you also get 12 already converted pictures) or by getting one of the three NIAD RLE PD volumes (see PUBLIC DOMAIN WORKSHOP).
Here is the process for getting these programs off of the Compuserve PICS forum.
1. After getting into the PICS forum..
2. Get to the Data Library containing the type of pictures you want (a menu is displayed for you).
3. BROwse through the file names and find one you like.
4. Before selecting an option, open a file (you must have ADAMLink II of course).
5. Go back to terminal mode by hitting WILDCARD and select the option to READ the file.
6. A message will be displayed indicating you can't correctly display the picture, but hit Y to proceed anyway.
7. Alot of jibberish will be displayed - this is the RLE formatted data.
8. Close the file when the display stops.

Now you have to convert the RLE file format to a high resolution Basic screen using the CBPIC program, see the GRAPHICS WORKSHOP this month.

Note that steps 1-5 should be used to download any non-CP/M file from the ADAMania section (DL 9) of the CLUB forum. After entering the number of the Data Library you desire, choose the BROwse or

DIRectory options, NOT the DOWnload option, find the file you want and select to REAd the file after you have set up the receiving file.

ADAM BBS'

One thing you need to be aware of when calling ADAM BBS' is that if the BBS is running on an ADAM, there are optional ways that the ADAM BBS software may require you to set the configuration of your ADAMLINK I or II software. As your ADAMLINK manual explains you need to change the default (normal) settings if you are going to call another ADAM computer. Most of the ADAM BBS' require these same changes. However, some require you to set the number of data bits to 8 (not 7)and then parity to none (not even). So, if you call an ADAM BBS, get a connection but see some "garbage" characters on the screen, you may need to hang up, make these changes and call them again. If we are aware of the specifics required for a particular BBS, we will provide them.
We are trying to compile a current list of ADAM BBS', we would appreciate any input you could give us.
Here are some new/ revised BBS':

Hudson ADAMLINK (201) 224-5763 [ADAM BBS 7-Even]
Chatanooga Library of Data (615) 843-1066, Hours are now 24 per day; Section 3 is for the ADAM BBS 8-none]
(415) 346-3799 Hours 5PM to 6 AM Pacific time
Canada Adamport (416) 588-0877 24 hours/ day
ADAMQuest Florida (305) 859-2752; Hours are 8PM to Midnite week days and 8AM to Midnite Sat/Sunday

GRAPHICS WORKSHOP

Using WAMODRIVE By W. Motel

We recently received a question from one of our members concerning the use of WAMOdrive for setting his Panasonic printer to do Auto Justify from his Basic program. I thought I would use this question to review how to use WAMOdrive to send the printer commands. I'll also explain what the different types of justification do and you'll be able to see them for yourself. The commands used are for the Panasonic KX-P1080 series (or equivalent), although you can alter it for your own printer.

The sample program is a revised version of the one used in the Panasonic manual. If you need to review what WAMOdrive is and does, review the October and Novemebr 1986 NIAD issues. The printer commands used are the Auto Justification (ESC+a+3), the Right Margin set (ESC+Q+value), and the Set PICA draft mode (ESC+P). I poke in the decimal code values for each of these, so thats what you'll see in the sample program.

The program is listed at the end of the article. It is set up to do AutoJustification and the right margin is set at 38, We will use this same program to do all are examples.

First a quick review of WAMOdrive. Address 40 thru 55 is the printer buffer area used. We can POKE our values into it and do a CALL 90, which sends them to the printer. The buffer area is terminated by an ETX value of 3. This denotes the end of what you are sending to the printer. As with our example, we want to really send the value of 3 to the printer (part of the AutoJustify command), therefore we change the ETX value to 255, by changing the actual Machine Language of WAMOdrive. The value checked is stored at address 72, therefore you will see the POKE 72,255 to change the ETX value. After our CALL 90, we change it back to 3, since this is what SmartBasic and most standard coding conventions use. If you don't change it back, the Basic print statements won't work properly.

The 4 types of Justification are all done by the ESC+a+value command, where the value denotes what type of Justification.
3 does AutoJustification (Lines are attempted to be spread between the Left/Right Margin). This usually occurs unless the line is too short.
0 does Left Justify. All lines align on the right.
2 does Right Alignment.
3 does center. Lines spread out from center.

When you run the samples, note the AutoJustification usually does not wrap a word from one line to the next, it all fits on one line. The other 3 will get a wraparound. You will notice this on the word your at the end of the

last sentence.

The program contains comments, to help you follow along with what the code is doing. You do not have to type these in to run, unless you want to.

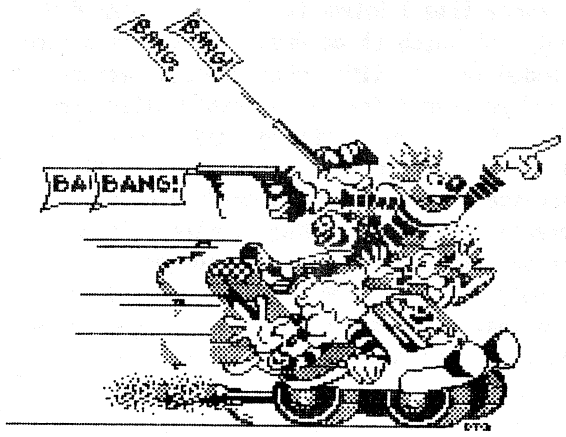
After you type it in and have paper in the printer and ready, do the following:

1. Run program as is, This does AutoJustify using printer positions 1 to 38 (Right Margin at 38).
2. Change line 21, value 38 in data to 40 and RUN. This does AutoJustify in 1 to 40.
3. Change line 21, value 40 to 45 and RUN. This is AutoJustify in 1 to 45.

At this point, compare the printouts from the 38, 40 and 45 margins. You can see how the lines are spread out to fit in the margins. The printer does this by inserting spaces. Note on the 45 list, the word your now fits on the 2nd sentence from the end.

4. Keeping the margin value at 45, change line 20, value 3 in the data to 0 and RUN. This will print the lines aligned to the left.(Right margin 1).
5. Change line 20 value 0 to 2 and RUN. This prints the lines aligning them at the Right Margin of 45. These lines are jagged on the left side.
6. Change line 20 value 2 to 1 and RUN. This does center alignment. This is not the same as AutoJustification. The line is spread out from the center and results in jagged left and right sides.

I hope this gives you some ideas for using the printer commands with WAMOdrive in your BASIC programs. Try running the sample changing the margin value to see how it effects the printed output.
NOTE: We tried setting Autojustification and then loading SMARTWriter and printing a document using the SMARTWriter Custom software. We did get autojustified margins on the left and right but we also got some strange results like extra blank lines and breaking of lines at odd places, especially if the line began with a space.




```
   1 REM   Set Auto Justify on Panall rem Example of Au
toJustify on Panasonic p
rinter
   2 REM   Using WAMOdrive
   3 REM   NIAD 5/87 W. Motel
  20 DATA   27,97,3: REM   Auto Justify Mode
  21 DATA   27,81,38: REM   Right margin set at 38
  22 DATA    27,80: REM    Use draft mode pica print (P
rinter on StdPgm)
  23 DATA   13,255: REM   Print stream end (13) and ETX
 value 255
  25 POKE 72, 255: REM   Change WAMOdrive ETX value to
255
  26 FOR x = 40 TO 49: READ v: POKE x, v: NEXT x: CALL
90
  27 REM   The above loads all print commands in WAMO b
uffer and sends to print
er
  28 REM   The following reset ETX value in WAMO M.L. b
ack to standard 3
  29 POKE 72, 3
  30 PR #1
  40 PRINT "A sample text for auto justification"
  50 PRINT "The quick brown fox jumped over the lazy do
g"
  60 PRINT "This printer has versatile features for WOR
D PROCESSING."
  70 PRINT "     Perhaps they can be useful to you in y
our programs"
  80 PRINT CHR$(10); : PR #0: END
 100 REM   Try the above with different margin values b
esides 38
 105 REM   Change data at line 21, 38 to a different ma
rgin (I.E. 40 or 45)
 110 REM   Run and compare to the 38 margin and see how
 the lines are spread ou
t
```

BEGINNER'S BASIC WORKSHOP

I would suggest that many of you newer members who are novices when it comes to computers in general or the Basic programming language, pick up a copy of the Dec/ Jan 87 back issue. We did a nice review of some of the ADAM SMARTBasic commands that are real important ones, but are well hidden in the Coleco Basic manual !
Also, see our review of the BASIC SYSTEMS MANAGER program in this issue.

Here is a real nice graphics program that uses the COSine function to generate various sine waves.

```
  0 &  NIAD PUBLIC DOMAIN                    BASIC # BNDV16

  200 DIM map(254)
  210 TEXT: HOME
  212 PRINT: PRINT "RIPPLES": PRINT: PRINT "1 SINEWAVE RI
PPLES": PRINT: PRINT "2
 SQUARE WAVE RIPPLES"
  214 PRINT: PRINT "3 TRIANGLE WAVE RIPPLES": PRINT: PRIN
T "SELECT ONE"
  220 GET a$: IF a$ <> "1" AND a$ <> "2" AND a$ <> "3" TH
EN 220
  230 HGR2: HCOLOR  = 14: HPLOT 1, 1: POKE 27410, 6: HCOL
OR  = 8
  240 FOR x = 0 TO 254: map(x) = 191: NEXT: FOR y = 179 T
O 11 STEP -6: FOR x = 0
 TO 254
  242 d = .2*SQR((139-x)^2+(95-y)^2): GOSUB 350
  250 p = y-12*f: IF p > 191 THEN  p = 191
  260 IF p < 0 THEN  p = 0
  270 IF p < map(x) THEN  map(x) = p: GOTO 290
  280 p = map(x)
  290 IF x = 0 THEN  HPLOT x, y
  300 HPLOT  TO x, p
  310 NEXT: NEXT: GET a$
  312 VTAB 21
  320 PRINT: PRINT "CONTINUE - (Y/N)?"; : GET a$: IF a$ <
> "Y" AND a$ <> "N" THE
N 320
  340 END
  350 IF a$ = "1" THEN  f = COS(d)/(.08*(d+(d = 0))): RET
URN
  360 IF a$ = "2" THEN  f = (COS(d)-.333*COS(3*d)+.2*COS(
5*d)-.143*COS(7*d))/(.0
85*(d+(d = 0))): RETURN
  370 f = (COS(d)+.1111*COS(3*d)+.04*COS(5*d)+.0204*COS(7
*d))/(.094*(d+(d = 0)))
: RETURN
```

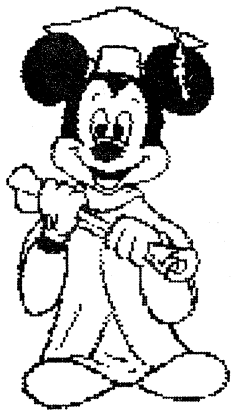
SMARTBASIC WORKSHOP

The Trouble With "basicmodif"

By M. Bogress

Printed in the October 1986 issue of the NIAD newsletter was a correction for the basicmodif program. This pgm is found on BASIC PD#4 and on the Utilities vol #1. If you have ever used that program, this will be especially interesting to you.
I have been one of those ADAMites that has learned almost everything I know about computers through my ADAM and affiliation with groups like NIAD. I have been particularly fascinated with the "neat stuff you can do" with pokes even if I have no use for the changes. It's a learning process I really enjoy. Because of this I have used 'basicmodif' a great deal.
'basicmodif' is a program that lets you alter your SmartBASIC tape by reading an address from the tape (or disk) then writing a value change in that address from the tape (or disk). But, did you ever wonder what could happen if the program didn't work? The answer is ANYTHING!
The recent barrage of BASIC changes in that published in both NIAD NEWSLETTER and NIBBLES and BITS has kept me busy with basicmodif and UTILCOPY. It is only now that I have realized the impact that the error in basicmodif has created. Even at first I noticed that some of the changes didn't appear to work as they were supposed to. I assumed that the problem was in the correction instead of in the basicmod pgm. That was a big mistake. When you change your BASIC Interpreter you can make changes that are not very obvious. And when you use a defective interpreter to run a pgm like UTILCOPY you can compound the problem.
Here is an example of what can happen:
I ran a program that displays the inverse fonts upside down. In the middle of the pgm, a flashing character would appear on the screen in the upper left corner. Both HOME and TEXT had no effect on it. The SAVEdpgm retained the flaw and it would occur every time I RUNed it. I finally ran down the point at which it occured. It was in a line that ended in a ':PRINT' statement. I retraced the line and entered a <cr> immediately after the T in PRINT. I then reRUNed the pgm and it worked fine. There was nothing on the screen after PRINT so I had errased nothing but it seemed to make a difference in the way the pgm worked. (it no longer put the character in the corner)
That isn't the only problem I'm having. I've noticed that sometimes when I LOAD a pgm that some of the lines are omitted from the LISTing. Last

night I LOADed a pgm to SAVE it on another medium (tape to disk). The original was 5k and the new version was only 2k on the catalog.
The problem by now has become obvious. I've compounded the problem every time I've LOADed or SAVEd afile. And the problem had become worse every time I've manipulated BASIC with the 'basicmodif' program. On top of that, when I made copies of those tapes and disks using 'UTILCOPY', the problem was probably compounded even worse BECAUSE the BASIC interpreter wasn't doing it's job correctly.
I've even had pgms that ran OK, but when I added a few lines of code, the program bombed and I got a FATAL SYSTEM ERROR.
My advice to all of you that have been POKing into the BASIC interpreter using 'basicmodif' is to check the program to see if you have the non-corrected version. To do this simply:
boot BASIC
LOAD basicmod (or basicmodif)
LIST 320
At this point, you can tell which is which .
non-corrected:
320 B= INT((2048+a)/1024)
corrected:
320 B= INT((2048+a-256)/1024)
If you have the non-corrected version and have used it, YOU ARE IN TROUBLE.
It should be underscored that I have been using the program for over a year. I am only having notable problems in the last 3 months.
By the way, I don't feel like NIAD should be held accountable for any problems you or I may have because of this one bug. One of the rules with the PD volumes is that you get'em like they got'em. And most of the time you more than get your money's worth.
This time, when I get my new version, after I use 'basicmodif' I'm going to reBOOT BASIC and then? PEEK(address) to make sure the correction was accurate. Live and learn you old hacker, you.



MENUS

Here are two excellent programs for setting up menus for your SMARTBasic tapes/disks that will allow you to automatically run any program from a main menu screen. By naming the menu program HELLO and placing SMARTBasic on the tape/disk you can create an auto boot tape/disk. This is especially nice for use by children since all they have to do is put in the tape/disk, pull the reset and then select which program to run from the menu.
Sharon McFarlane has enhanced these PD programs and they are quite nice. There are two programs. MENU #1 is for running regular SMARTBasic programs and MENU #2 is for bruning "fast load" programs that were bsaved. You can put both menus on the save tape/disk and call one from the other if you have a mixture of both types of programs. These programs are on NIAD PD #BNDV18.

```
]
    0 &  NIAD PUBLIC DOMAIN                Volume # BN
DV 18
    2 REM ******************
    3 REM *    MENU  #1    *               * adapted b
y SAM *
    4 REM * Sept. 30, 1985 *
    5 REM ******************
    6 REM --------------------
    7 REM MUST be saved as HELLO/Additional Menu as
HELLO2.
    8 REM Delete ALL REM lines to reduce File size.
    9 REM --------------------
   10 bl$ = CHR$(7): c1% = 17059: c2% = 17115: c3% =
 17126: cs% = 16953: POKE cs
%, 32: POKE c1%, 5: POKE c2%, 71: TEXT
   15 GOSUB 700: GOSUB 500
   20 POKE c1%, 7: TEXT: VTAB 1: HTAB 12: INVERSE: P
RINT SPC(9): VTAB 2: HTAB 12
: INVERSE: FLASH: PRINT " M E N U ": NORMAL
   25 VTAB 3: HTAB 12: INVERSE: PRINT SPC(9): NORMAL
: PRINT
   30 x = 4
   31 REM --------------------
   32 REM Line# 35 MUST agree with # of Files in Cat
alog.
   33 REM --------------------
   35 FOR i = 1 TO 15
   40 x = x+1: VTAB x: HTAB 8: PRINT opt$(i)
   45 NEXT i
   50 PRINT bl$: VTAB 23: HTAB 5: PRINT "Use <ARROW>
 Key & Press"
   55 VTAB 24: HTAB 5: PRINT "<RETURN> To Select Fil
e";
   60 VTAB x: HTAB 6: PRINT a$; : VTAB 1: HTAB 1
   65 GET sel$
   70 IF sel$ = r$ THEN 100
```

```
   71 IF sel$ = u$ THEN 75
   72 IF sel$ = d$ THEN 85
   73 FOR bl = 1 TO 3: PRINT bl$; : NEXT: GOTO 65
   75 IF x = 5 THEN 65
   76 VTAB x: HTAB 6: PRINT " "; : x = x-1: VTAB x:
HTAB 6: PRINT a$; : VTAB 1:
HTAB 1
   80 GOTO 65
   85 IF x = 19 THEN 65
   86 VTAB x: HTAB 6: PRINT " "; : x = x+1: VTAB x:
HTAB 6: PRINT a$; : VTAB 1:
HTAB 1
   90 GOTO 65
  100 x = x-4
  102 REM -------------------
  103 REM Use Line# 115 as a QUIT Option - otherwise
 discard!
  104 REM -------------------
  115 IF x = 15 THEN  POKE c1%, 0: POKE c2%, 240: TE
XT: POKE cs%, 95: PRINT bl$:
 VTAB 4: HTAB 6: PRINT "<< SESSION ENDED >>": END
  116 REM -------------------
  117 REM Line# 120 MUST agree with the # of actual
Files listed in lines 1000-1
015
  118 REM -------------------
  120 FOR i = 1 TO 14: READ file$(i): NEXT
  125 HOME: VTAB 4: HTAB 3: PRINT "ONE MOMENT PLEASE
 ..."
  130 VTAB 7: HTAB 3: PRINT "Loading "; opt$(x)
  135 PRINT CHR$(4); "run "; file$(x)
  140 POKE c1%, 0: POKE c2%, 240: TEXT: POKE cs%, 95
: CLEAR: END
  494 REM ------------
  495 REM  INITIALIZE
  496 REM ------------
  497 REM -------------------
  498 REM File$ = Number of actual Files in lines 10
00-1015.
  499 REM -------------------
  500 DIM opt$(16), file$(16)
  505 u$ = CHR$(160): d$ = CHR$(162)
  510 a$ = CHR$(27): r$ = CHR$(13)
  515 REM -------------------
  516 REM Line# 520 MUST agree with # of Files in Ca
talog.
  517 REM -------------------
  520 FOR i = 1 TO 15
  525 READ opt$(i)
  530 NEXT i
  534 REM -------------------
  535 REM FULL TITLES should be placed in the follow
ing DATA statements.
  536 REM These will reference actual Filenames list
ed in lines 1000-1015.
  537 REM -------------------
  540 DATA The Warlock's Den,Tennis Pro,Robin Hood's
 Quest,
  550 DATA Wild & Wooly,Space Junk, The Old Rat Race
,
  560 DATA Barrier Ball,Hangman,Pandoras Revenge,Sta
r Patrol,
  570 DATA Tic Tac Toe,Missile Monitor,The Fruit Det
ective,NEXT MENU,Quit
  600 RETURN
  696 REM -------------------
  697 REM A Loader Title can be entered - Lines 700-
760.
  698 REM A very simple Screen Display follows:
  699 REM -------------------
  700 HOME
  705 VTAB 3: PRINT " [][][][][][][][][][][][][][][]"
  706 VTAB 4: PRINT " [][]"; : HTAB 6: INVERSE: PRIN
T SPC(21); : NORMAL: PRINT "
[][]"
  707 VTAB 5: PRINT " [][]"; : HTAB 6: INVERSE: PRIN
T SPC(21); : NORMAL: PRINT "
[][]"
  708 VTAB 6: PRINT " [][]"; : HTAB 6: INVERSE: PRIN
T SPC(21); : NORMAL: PRINT "
[][]"
  709 VTAB 7: PRINT " [][]"; : HTAB 6: INVERSE: PRIN
T SPC(21); : NORMAL: PRINT "
[][]"
  710 VTAB 8: PRINT " [][]"; : HTAB 6: INVERSE: PRIN
T SPC(5); : FLASH: PRINT " G
 A M E S ";
  711 INVERSE: PRINT SPC(5); : NORMAL: PRINT "[][]"
  712 VTAB 9: PRINT " [][]"; : HTAB 6: INVERSE: PRIN
T SPC(21); : NORMAL: PRINT "
[][]"
  713 VTAB 10: PRINT " [][]"; : HTAB 6: INVERSE: PRI
NT SPC(21); : NORMAL: PRINT
"[][]"
  714 VTAB 11: PRINT " [][]"; : HTAB 6: INVERSE: PRI
NT SPC(5); "1-2 Players"; SP
C(5); : NORMAL: PRINT "[][]"
  715 VTAB 12: PRINT " [][]"; : HTAB 6: INVERSE: PRI
NT SPC(21); : NORMAL: PRINT
"[][]"
  716 VTAB 13: PRINT " [][]"; : HTAB 6: INVERSE: PRI
NT SPC(21); : NORMAL: PRINT
"[][]"
  717 VTAB 14: PRINT " [][]"; : HTAB 6: INVERSE: PRI
NT "copyright 1985 by SAM";
: NORMAL: PRINT "[][]"
  718 VTAB 15: PRINT " [][]"; : HTAB 6: INVERSE: PRI
NT "  (S.Basic on file)  ";
: NORMAL: PRINT "[][]"
  719 VTAB 16: PRINT " [][]"; : HTAB 6: INVERSE: PRI
NT SPC(21); : NORMAL: PRINT
"[][]"
  720 VTAB 17: PRINT " [][][][][][][][][][][][][][]
"
  750 VTAB 24: HTAB 3: PRINT bl$; "Press <RETURN> to
 Continue"; : GET a$
```

```
  800 RETURN
  997 REM ------------------
  998 REM Actual Filenames MUST be listed in DATA li
nes 1000-1015.
  999 REM ------------------
 1000 DATA WlockDen,Tennis,RHoodQuest,
 1005 DATA WildWooly,Space.Junk,Rat.Race,
 1010 DATA Barri.Ball,Hangman,PandoraRev,StarPatrol,
 1015 DATA TicTacToe,Missile.Mt,F.Dtective,HELLO2
```

```
    0 &  NIAD PUBLIC DOMAIN              Volume # BN
DV 18
    1 REM +----------------+             +    MENU
#2    +
    2 REM + adapted by SAM +
    3 REM + Sept. 30, 1985 +
    4 REM +----------------+
    5 REM
   10 bl$ = CHR$(7): c1% = 17059: c2% = 17115: c3% =
 17126: cs% = 16953: POKE cs
%, 32: POKE c1%, 4: POKE c2%, 244: POKE c3%, 111: TE
XT
   15 GOSUB 500
   20 HOME: VTAB 1: HTAB 6: INVERSE: PRINT SPC(20):
VTAB 2: HTAB 6: PRINT SPC(20
): VTAB 3: HTAB 6: PRINT " ++ TOOLKIT MENU ++ "
   25 VTAB 4: HTAB 6: PRINT SPC(20): VTAB 5: HTAB 6:
 PRINT SPC(20): NORMAL
   30 x = 8
   35 FOR i = 1 TO 6
   40 x = x+1: VTAB x: HTAB 6: PRINT opt$(i)
   45 NEXT i
   50 PRINT bl$+bl$: VTAB 23: HTAB 5: PRINT "Use <AR
ROW> Key & Press"
   55 VTAB 24: HTAB 5: PRINT "<RETURN> To Select Fil
e";
   60 VTAB x: HTAB 4: PRINT a$; : VTAB 1: HTAB 1
   65 GET sel$
   70 IF sel$ = r$ THEN 100
   71 IF sel$ = u$ THEN 75
   72 IF sel$ = d$ THEN 85
   73 PRINT bl$; : GOTO 65
   75 IF x = 9 THEN 65
   76 VTAB x: HTAB 4: PRINT " "; : x = x-1: VTAB x:
HTAB 4: PRINT a$; : VTAB 1:
HTAB 1
   80 GOTO 65
   85 IF x = 14 THEN 65
   86 VTAB x: HTAB 4: PRINT " "; : x = x+1: VTAB x:
HTAB 4: PRINT a$; : VTAB 1:
HTAB 1
   90 GOTO 65
  100 x = x-8
  115 IF x = 6 THEN  POKE cs%, 95: HOME: VTAB 6: HTA
B 6: PRINT bl$; "<< SESSION
ENDED >>": VTAB 23: END
  120 FOR i = 1 TO 6: READ file$(i): NEXT
  125 POKE c3%, 79: TEXT: VTAB 4: HTAB 2: PRINT "ONE
MOMENT PLEASE ..."
  130 VTAB 7: HTAB 2: PRINT "loading "; opt$(x)
  135 VTAB 24: PRINT CHR$(4); "brun "; file$(x)
  140 END
  500 DIM opt$(16), file$(16)
  505 u$ = CHR$(160): d$ = CHR$(162)
  510 a$ = CHR$(27): r$ = CHR$(13)
  520 FOR i = 1 TO 6
  525 READ opt$(i)
  530 NEXT i
  540 DATA Uncle Ernie's ToolKit,Quick BackUp Utilit
y,Catalog Dump,
  550 DATA Block Peek,Fix SmartBasic V.79,QUIT
  600 RETURN
 1000 DATA ToolKit,Quick.BkUp,CatlogDump,
 1010 DATA Block.Peek,FixBasic79,Menu
 5000 REM --------------------
 5010 REM This Menu is a shortened version of MENU1
& may be used alone or in co
njunction with MENU1 as MENU2.
 5020 REM If used as MENU2, remember to add 'MENU1'
as a Filename in MENU2's DAT
A statements to allow both Menus to access each ot
 5030 REM DELETE ALL REM LINES!
```

CP/M 2.2 WORKSHOP

Please refer to the NIAD NEWS section for information about our new CP/M librarian, Sharon McFarlane.
Sharon has some great ideas for articles and we will be putting more of an emphasis on CP/M 2.2 in future issues because many of you are "into CP/M". See the description of the file CP/MHELP.DOC in volume # CNDV18 below. This well done documenation file will be a big help to the CP/M novice (once you have read the basics in the CP/M manual). Order this Public Domain volume and follow the instructions in the CP/M 2.2 manual for printing out a documentation file.

NIAD CP/M PUBLIC DOMAIN DISK #17

By S. McFarlane

BDLOC.COM - Lists the Base Page Address of ADAM's BDOS and the Base Page Address of the CCP.
CRC.COM - This COM file is required to validate the CRC values for all files on a disk which have been previously stored in a file named either: 1> CRCFILE 2> CRCKFILE or 3> -CATALOG.
EDFILE.COM/EDFILE.DOC - An excellent utility that provides on-screen display and byte-for-byte editing of all CP/M disk files. EDFILE features Hex/Ascii display of record data; Editing of

selected file records; Hex or Ascii input in Edit mode; Programmable cursor control; Powerful file search capabilities; Forward or Backward record scrolling; Address and/or Record number referencing; Hex or Decimal numeric input; Disk reset on startup preventing disk R/O error; and full online abbreviated as well as expanded Help Menus. EDFILE is very easy to use, especially with the online Help Menus. **TIP: Use the ADAM CONFIG Utility to activate the <ARROW> Keys so that they may be used directly instead of the various Control Key sequences to which they correspond - simplifies cursor movement when in the Edit Mode. EDFILE is invoked by inputing: EDFILE <Filename.Ext> <Drive:>. The adequate DOC file is self-explanatory.

FIND51.COM/FIND51.DOC - Locates strings of characters in a file, then displays the entire line or lines where the string was found. Used with wildcards, FIND will automatically search through numerous files for a specified combination of characters. This utility is especially useful with the LCAT.CAT or MAST.CAT catalog programs to check a disk and/or disks for a particular program. FIND will note how many copies of a file are available, permitting housecleaning of extra programs. This feature is helpful when updating files with newer versions & erasing those no longer needed and/or with similar names. FIND offers some advantages over using a normal Editor search, as each line is displayed rather than merely stopping each time the combination appears. Searches made with FIND may be printed or saved to disk for later viewing/printing. DOC file.

FTNOTE12.COM/FTNOTE12.DOC - A formatting utility for WordStar files. WordStar documents may be printed with page-bottom footnotes with the added bonus of improved block formatting. FTNOTE features automatic separation of text & notes; Sequential footnote numbering from 1 - 99; Page mode or continuous footnote numbers; Long notes continued on next page & many flexible formatting options. FTNOTE is compact & fast - formatting about 20 pages in only 1 minute! The program does not attempt to duplicate the existing capabilities of WordStar which still must be used for editing, reformatting or printing. FTNOTE can be run from WordStar with the Main Menu <R> command. NOTE: Files prepared with earlier versions of FTNOTE are upward compatible, but not vice versa. The comprehensive DOC file describes FTNOTE's many options with clear step-by-step instructions.

LCAT20.LBR - The series of programs found in this Library will read all CP/M disk directories as well as the directories of the Library files on the disk. It will even read Library directories imbedded in Libraries! The disk directory structure for the LCAT series is similar to the FMAP, UCAT and MAST.CAT series & requires a title file that begins with a '-'. This version of LCAT has been modified to determine available memory space at the time it is executed. There is a maximum file limit of 320 files per disk including .LBR members, however any number of disks may be used. In summary, LCAT is a 'complete' catalog maintenance utility & should satisfy most user's needs. A terminal installation routine is provided that will configure LCAT to ADAM. Run LCAT2INS.COM which will automatically install LCAT20.COM. DOC file included.

NIAD CP/M PUBLIC DOMAIN DISK #18

By S. McFarlane

AREACODE.COM - Lists all the regional area codes for Canada & the U.S.

BANNER.COM - Prints large characters/headings on your printer. Useful for identifying program listings or just for fun! BANNER is invoked by inputing eg: 'BANNER NIAD' which would print 'NIAD' on the printer & then return control to CP/M.

BISHOW.COM - A buffered bi-directional file list/dump utility. Very useful for viewing text and/or .ASM files that literally 'run off the screen' when the TYPE Command is invoked.

BUGS.COM - This one will really drive you buggy!

CP/MHELP.DOC - An ADAM CP/M enthusiast provides this useful overview of CP/M as well as tips 'n tricks for new Modem users. The author guides the user through the various steps required to download a file from a BBS (specifically CompuServe) for the first time.

DBL.COM/DBL.DOC - A utility that allows double column printing of most text files. Very useful with text files that were not formatted for 80 column printout. The program prints 2 pages at a time on a single sheet of paper. DBL was designed for the Epson RX-80 printer in the compressed mode only! It is also compatible with the Panasonic KX series & the Gemini printers. NOTE: Not for use with the ADAM printer.

DISK.COM - DISK 7.7 is a file manipulator with the following features: <C>opy file; <D>elete file; <G>oto filename; <J>ump 22 files; <L>ength of file; <M>ass transfer; <N>ew DIRectory; <P>rint text file; <R>ename file; <S>tat disk; <T>ag file; <U>ntag file; <V>iew text file; <X> Exit to CP/M. The SpaceBar advances files/text & <B> reverses.

EPRO.COM/EPRO.DOC - This is a small E-Prolog system for CP/M 2.2. As the DOC file does not teach the user how to program using Logic, the author recommends the purchase of 2 books, namely:

1> Programming in Prolog by Clocksin & Mellish & 2> Micro-PROLOG: Programming in Logic by Clark & McCabe. E-Prolog does not have the special features of the large systems described in these books, but neither does it have the large price tags of those systems. Recommended for experienced CP/M programmers only.

LIST.LBR - A printer utility program that lists any requested file on your printer as well as providing a screen display of the list. The program is Menu driven & offers several options: <1> Tear tabs to use Roll Paper? <2> Number of spaces to augment left margin (0-99)? <3> Accept Form Feed? <4> Heading/Date is? <5> Start at Page #? <6> Quit at Page #?. DOC file included.

M.COM - A Menu program that lists all .COM files found in the disk directory in a 3 column format with assigned numbers. Simply input the appropriate number & the file will automatically execute.

PROBE.LBR - This utility reports the CP/M version currently being used & displays the I/O byte if appropriate. PROBE then displays the addresses of the CCP, BDOS & BIOS. The BIOS jump table is then displayed followed by the disk parameter blocks, disk parameter headers, group size, total disk size, number of directory entries, space required for directory entries, total usable space on the disk & the disk space allocation vectors for any selected drive. PROBE was written in 'C' to help decode the disk formats of a number of different computers to aid in transportability. This information might prove helpful to an industrious ADAM programmer in writing a utility that could read/write several different disk formats.

SAP43.LBR - SAP reads the disk directory tracks, sorts the entries alphabetically & then rewrites the new directory back to the disk. All unused or erased areas in the directory are reformatted. Besides providing a 'neat' directory listing, disk access is speedier when running programs such as DU & SD. DOC file included.

TINYBAS.COM/TINYBAS.DOC - As the filename suggests, this is a Tiny Basic Interpreter (V 3.1) modified & enhanced by the Sherry Brothers from the original 'Wang's Palo Alto Tiny Basic'. An extensive DOC file is provided.

TRS/ADAM.COM - Converts a TRS 80 disk program to a file that can be read by ADAM. CAUTION: Reading a file does not necessarily mean that the file can be executed. Use this program with care.

WC.COM/WC.DOC - Counts characters, words & lines in an Ascii Text file. Ambiguous file names are accepted & grand totals are given when multiple file names are specified. If the text file was produced by WordStar or a similar word processing program, it should be processed with FILT6 prior to executing WC in order to get an accurate count. DOC file included.

XF.COM - Version 1.0. XF is a fully featured file transfer program that provides the following options: <A> Retag files <B> Backup one file <C> Copy file <D> Delete file <E> Erase T/U files <F> Find file <G> Back 11 files <I> Inquire tagged files <J> Jump 22 files <K> Kill files <L> Log-in drive <M> Mass copy (tagged) <N> Mass copy (NT) <O> Mass Output <P> Print text file <Q> (Un)Squeeze tagged <R> Rename file(s) <S> Stat drive <T> Tag file <U> Untag file <V> View text file <W> Wildcard (un)tag <X> Exit to CP/M <Y> Set tagged file attribute. This utility should be added to every user's library!

NIAD CP/M PUBLIC DOMAIN DISK #23

By S. McFarlane

The majority of the files on this disk are from the DZLSTAR.LBR, a Z80 Disassembler 'DAZZLESTAR'. An import from Great Britian, this program is one of the most professional & useful programs I have ever seen in the Public Domain. The COM file has been configured for ADAM & I have extracted the files from the Library as follows:

DZLSTAR .COM	DZENGHLP.OVR
DZENGMNU.OVR	DZINSTAL.COM
DZINSTAL.CF1	

DZLSTAR.COM - DazzleStar takes a CP/M binary file, ie. a .COM or .OVR file & produces Zilog Z80 mnemonics either as a listing on the printer or as a .MAC file for use with Microsoft M80 or any other assembler. Programs seldom contain nothing but instructions, so DazzleStar keeps a break table to specify how each part of a program should be disassembled. There is also a symbol table, which allows user specified labels & values. The screen display is arranged with several windows which are independently updated. Along with a Status Line, there is a Menu Window, Break Window, Disassembly Window & a HEX/ASCII Dump Window or 2nd Disassembly. Experienced users can suppress the Menu window to expand the other windows. The command keys chosen are based on WordStar commands, so many users will readily adapt to this program. On-line help is provided. Some of the command codes are 2 characters long, again similar to WordStar where analogies are possible. They are loosely grouped, according to the first character of the pair. The command groups are:

Cntl K = Various File Commands
Cntl O = Onscreen: How screen is arranged
Cntl D = Display other information

Cntl Q = Quick: Move quickly to another part of the file
Cntl S = Build Symbol Table
Cntl B = Build a Break Table
Cntl J = Help!

DazzleStar's break table simply decides how each part of the input file will be disassembled, and the terminology should not be confused with specifics like DDT breakpoints. The break table can be modified with Cntl Bx sequences, summarized in the Menu. The Symbol Table can be thought of as several independent symbol tables. When an instruction is decoded, DazzleStar decides what kind of symbol is involved. When the instruction is displayed, your symbol name is only used if you asked for it to be used for this type of symbol.

Other features include the ability to fine tune the screen display, insert 'Comments' in the file, etc. Although there is enough information provided to adequately use the program, apparently there is an extensive User's Manual available from the author for a minimum fee. The author refers to 2 files, DZ-READ.ME & DZ-FORMS.DOC which would obviously provide further information & an Order Form. Unfortunately, when I obtained this version of DazzleStar, these 2 files were missing from the Library. If there is any interest in such a manual, I would suggest you contact the author at the following address:

IJ Washington,
33 Turnoak Avenue,
Woking, GU22 0AJ, U.K.

RESOURC2.LBR - A Text Data Management Program, Resource is a command file written in the dBASE II applications lanaguage. Resource is designed to allow complete management of the database within a single command file. The program uses 3 indexes, AUTHOR.NDX, TITLE.NDX & SUBJECT.NDX, with the TITLE index as the default index. Additionally, the program uses a multiple keyword search routine to allow screen listings of all items with up to 4 keywords as qualifiers. dBASE II is required to run this program, & if large databases are planned a 2 drive system is recommended. The DOC file is fully commented & structured, demonstrating a number of different searching techniques.

REVIEWS

MICROWORKS...ADDENDUM

I want to correct some misstatements made in our review of MWs.
MICROFILE has a maximum of 15 categories per record, not 6 as I stated. Obviously, the more categories per record reduces the total number of records possible in any one database.
MICROCALC can handle up to 15 columns, not 10 as stated in the review.
I stated that MICROEDIT is similar, but more limited then the editor contained in SIGNSHOP. This is not exactly true because the editor is the same, it is just the printing of the picture that is more limited in that the special overstriking print that is done in SIGNSHOP is not available in MWs.
I also stated that MICROWRITE takes a very long time to load a print file, which is very true. However, I did not intend to indicate there was a bug in the program, just that you should not be concerned when this occurs.
MW's has strengths and weaknesses, just like any software program. Our extensive two part review in the March and April issues provides the potential purchaser with the facts to make an intelligent decision.

STATES AND CAPITALS By L. Marschand

This is another in the series of economically priced educational software from Parallel Systems. Load SMARTBasic, then run the program. A menu gives you three options:
. State given, you enter the capital
. Capital given, you enter the state
. Study mode which lists out all the states and capitals, either on th screen or printer

You are given the option to have a hint if you don't know the answer.
Although the premise of the program is simple, it does provide a useful drilling exercise with the addition of sound and color that is alot more fun and stimulating then studying a list in a book !!

RATING - B

BASICAIDE By L. Marschand

This is the latest release from Mr. T Software (TRIVIA PACK, KID'S TRIVIA PACK).
This program modifies SMARTBasic Version 1.0 and adds some enhancements.
This product is geared to the intermediate/ advanced Basic programmer since it provides some programming oriented utilities that will be quite useful. It is not a comprehensive set of utilities (like MEDIA-AID), but rather some development tools that are very useful.

Here is what is included:
BUGS CORRECTED
. DATA/ REM FIX - There is a bug in SMARTBasic that adds one space to any line with a DATA or REM command in it each time you save the program. If you save the program many times these extra spaces will cause strange problems to occur when running the program.
. H FILE RECOVER - SMARTBasic will not allow an "h" file to be recovered, only "a" type files can now be recovered.

NEW COMMANDS PROVIDED
BRITE - This command provides a dark blue border around a light blue screen display. You can select to go back to the normal black background by entering the command NOBRITE.
EXTEXT - Provides for a 40 column text display in all SMARTBasic programs. A new, slightly smaller character set is used to provide this expanded display which makes Basic programming alot easier. This is the main feature of BASICAID that is a big plus for the SMARTBasic programmer. You do lose the INVERSE and FLASH commands, but everything works the same.
CHAIN - Provides the ability to automatically append one SMARTBasic program from tape/disk to one already in memory. This is a real nice feature when using subroutines to add to an existing program.
BIN - This new command automatically generates a command line that will allow you to save the current program in memory in a "fast load" binary format. By using this feature you can decrease the time it takes to load a SMARTBasic program by 11 times !! See the Binary Conversion article on page 8 of the November/86 issue for more information on this "fast load" feature.

In addition to these fixes/ enhancements to SMARTBasic two additional programs are included as a bonus.
EZSOUND is a program that provides some nice sound routines that you can incorporate in your own programs. All the necessary pokes are listed for you as you vary the generated sounds from the keyboard.
EZKEYS is a program that activates the SMARTKeys to change the currently active device and list a catalog with one key press. Keypress sounds in 4 tones are also provided. Control V turns these features on and off, but they must be on if you run the EZKEYS program prior to using the EXTEXT command.

I think you Basic programers will agree that BASICAIDE gives you some nice development tools for a very reasonable price.

RATING - A

LAB MOUSE by W. Motel

This is the latest new program from Reedy Software. It is a maze game, but unlike most maze games that have you looking down onto the maze, you have the perspective of the actual lab mouse, INSIDE the maze. This is known as "FIRST PERSON PERSPECTIVE and really puts you into the game ! You view the maze,as if you were looking down a hallway, only seeing what is straight ahead or what openings go off to the left or right.

You control your movement by the UP arrow, which moves 1 step ahead. You turn with the LEFT or RIGHT arrows. To turn around, you would do 2 Left or 2 Right turns. The object is to find the cheese in the least number of moves, or steps. A move is counted when you take a step forward, not on a turn.

Your clue is the DISTANCE value shown. This is the number of steps (using the shortest straight line) to get to the cheese. This helps you determine if you are getting closer or farther away shile you move or wind around corners.

The program is self-loading. You have 5 skill levels. The higher the level, the more difficult it is to find the cheese and the bigger the maze. Skill levels 1 to 3 ALSO show you your footprints in the halls you've already traveled. This helps in seeing if you are traveling in circles. Each game generates a new maze and a new cheese location, so you won't get tired of the same mazes.

Although a simple premise, the game is well done and provides ADAM woners with a different type of maze game, with the first person perspective. The game is simple, yet fun to play.

There is enough skill levels and random maze generation to keep you busy for a long time. I also think a game like this is sometimes useful as an "educational" tool, for it teaches you or your children to learn, as the mouse would, logical reasoning and deduction. The price is attractive and I think a very good buy.

RATING - A

The Coleco ADAM Entertainer

By Brian Sawyer

This book contains 30 ADAM programs of varying types and complexities. Each program is documented with an explanation, program description and definition of each variable in addition to the program listing. Enough information is given to understand the basics of the program and give you a lead to make modifications if you have Basic programming experience.

I would categorize the programs as follows:

1. Routines that can be used in other programs -
. Shape Maker - aid for designing shapes
. Controller - for learning how to use the hand controller keys as input
. Standard Introduction - puts an intro onto any program
. Dice - drows dice
. Boom - graphics and sound
. Circles - draws circles of any size
. Keypad input - creates a 10 key pad
. Cards - draws playing cards

2. Games
. Memory Mix - displays colors and sounds which you must replicate
. Fruit Detective - quess a pattern
. Rat Race - maze game
. Hangman - color graphics word game
. Space Junk - shooting game
. Missles - defend your neighborhood
. Blackjack
. Barrier Ball - breakout type of game
. Arena - surround type with a bee chasing you
. Mr. Helpful - cute game with "people" graphics
. Robot Hunt - trap a runaway robot
. World Conquest - battle ADAM in military strategy
. Pig Feeder - shape program

3. Displays/ Tools
. Junior Artist - simple drawing program
. Senior Artist - more comprehensive drawing
. Face Designer - draw faces, change them
. Banner - print out large letters
. Calendar - prints a calendar for any month
. Greetings - print out a greeting card
. Rotator - graphics display
. Web - "
. Graph Maker - draws very nice graphs

Overall, I think this is a good book due to the number and variety of programs in it. Everyone can get something out of this book.

Discovering Science on Your ADAM

By Talcott Mountain Science Center

This is a real nice book, designed for both children and parents and containing 25 science oriented programs. Not only is each program explained and well documented, but the subject of the program is taught with excellent diagrams and pictures. This is really a teaching book.

Section 1 - Contains a brief introduction to entering, loading and saving Basic programs. Helpful for beginners.

Section 2 - Astronomy programs (5) covering planetary distances, diameters, orbits, escape velocity.

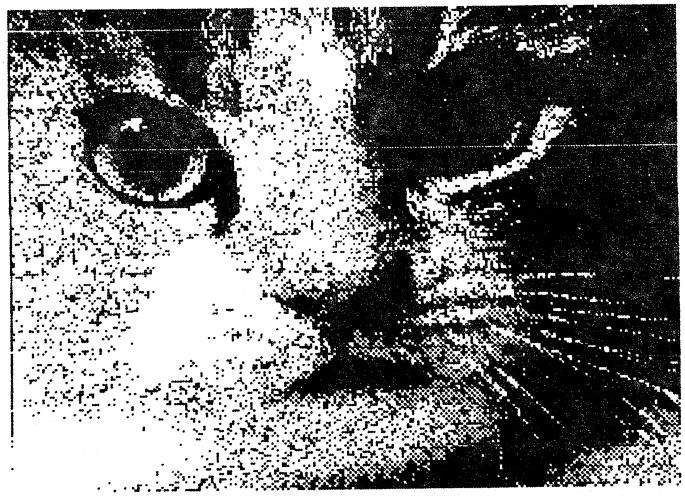
Section 3 - Earth Science programs (5) covering geological time, rocks, clocks, earths circumference

Section 4 - Life Science programs (4) covering biology, relative strengths of insects, evergreens, populations.

Section 5 - Mathematics and Computer programs (5) covering number base converter, height finder, scientific notation, alphabetizer.

Section 6 - Physics programs (4) covering frequency, wavelength, speed of light, pendulums, metric conversions.

This is a really nice book due to the comprehensive way they cover a subject to really teach the child as well as provide the programs.

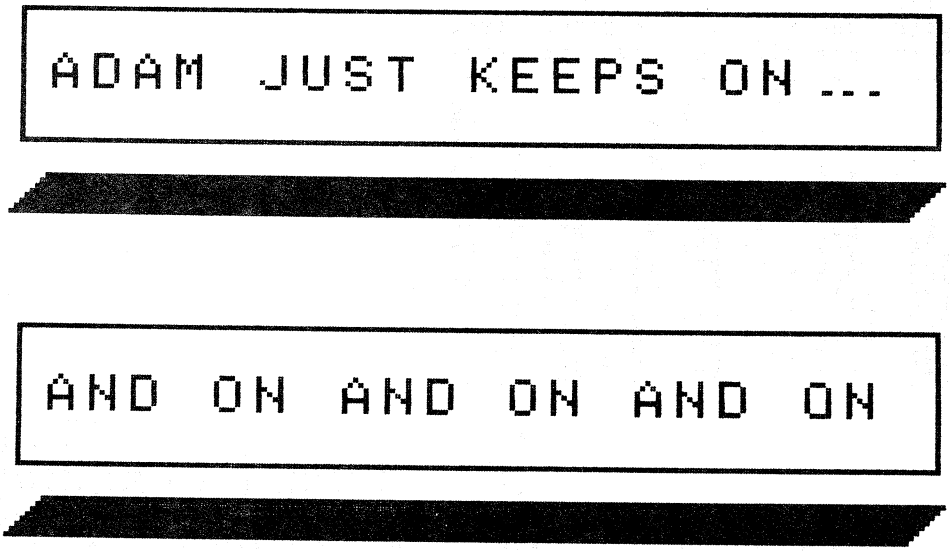


The Hartford Courant

BUSINESS

Owners support orphaned Adam

300,000 use Coleco's abandoned computer



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PLEASE NOTE: *Specify VOLUME # and DISK/DDP*
COST per VOLUME:
$ 5.00 DISK - $ 7.00 DDP

SMARTBASIC # 1 - 19 (19 Different)
BNDV1 - 19 (Vol numbers)
SMARTLOGO # 1 - 2 (2 Volumes)
LNDV1 - 2
ADAMCALC # 1 - 2 (2 Volumes)
ANDV1 - 2
BASIC UTILITIES # 1 - 2 (2 Volumes)
UNDV1 - 2
(Vol 1 includes backup utility)
CPM2.2 # 1 - 28 (28 Volumes)
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SMARTBASIC REPLACEMENT DDP
SMARTBASIC V2.0 with Doc. file
NIAD BACK ISSUE INDEX - Smartfiler file
EOS DISK MANAGER - (Replacement on Disk or DDP)
RLE PICTURE FILE # 1-3 (3 volumes available)
CUSTOM PRINTER SOFTWARE $ 7.00

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Everything you need to hook it up	
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3 1/2 x 15/16 PIN FEED ADDR. LBLS	$ 8.95/1000
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SUPER GAME CONVERSION to DISK	$ 4.00 EACH
NOTE: You must send label card from game as proof of purch: Family Feud, Best of Broderbund can be copied directly by most copy programs	
SMARTFILER COPY WITH LATEST VERS.	$ 4.00
Includes Label Print Fix	
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BACK ISSUES of NIAD from 1/85	$ 3.00 EACH
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RIGHT DIR TAPES for SUPERGAME COPY	$ 2.50 EACH
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SUPPLIES

RIBBONS

ADAM REPLACEMENT		$ 4.95 EACH
PANASONIC 1080/1090I		$ 9.95 EACH
OKIMATE 20 RIBBONS	*Black*	$ 4.95 EACH
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COVERS

3 PIECE for COMPLETE ADAM	$ 18.95
DISK DRIVE ONLY	$ 8.95
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PRINTER WHEELS	$ 5.55
SPECIFY FONT STYLE for the ADAM printer Gothic 12, Script 12, Elite 12, Emphasis, Courier 72, Pica	
TAPE DRIVE HEAD CLEANING KIT	$ .50
DISK DRIVE HEAD CLEANING KIT	$ 19.95
Contains 2 cleaning diskettes/fluid	

DISK/DIGITAL DATA PACKS

COLECO/LORAN DDP		$ 4.75 EACH
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NIAD/LORAN DDP		$ 4.25 EACH
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NIAD (Non LORAN) DDP	10 for	$ 19.00
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9 1/2 x 11 OKI 20 THERMAL PAPER	$ 9.95 /250
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KIDS TRIVIA	*(DISK)*	$ 12.95	NEW
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RECIPE FILER	7814	$ 10.95	SPECIAL
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Requires ADAM CP/M software DISK only

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ZORK I	$ 29.95	SPECIAL
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DEADLINE	$ 39.95	
HITCHHIKERS GUIDE	$ 29.95	SPECIAL

HARDWARE & ACCESSORIES

NOTE: SEE SPECIALS ON NEXT PAGE AS WELL

DOUBLE SIDED DISK DRIVE UPGRADE $ 139.95
Send in your Coleco disk drive to be upgraded to 320K (270K in CP/M 2.2) capacity. Send in your complete drive with cables. If your drive requires repair you will be charged $39.95 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.
NOTE: Order ADAMLink II software from Public Domain list which will allow upload/ download of programs.

COMPUSERVE STARTER KIT $ 25.95
Includes account number, password and five free hours of connect time to the popular compuserve information system.

DIGITAL DATA DRIVE # 2409 $ 29.95
NEW (but not boxed) digital data drive which can be used as a replacement or as a second drive.

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$ 39.95*
(Parallel cable required - see next item)

PARALLEL OR SERIAL CABLE SP-1C $ 15.95
Second cable required to attach SP-1 or PIA2 interface to other 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-colum video output from the ADAM to a monochrome 80-colum monitor. Also includes separate power supply & expansion slots for attaching other EVE products. Expands ADAMS capability for CP/M SOFTWARE ONLY requiring 80-colum display.
** Includes Word Processing and Basic software programs **

ORPHANWARE 80 COL VIDEO UNIT
. Standalone unit $199.95
. Unit to attach to Eve Serial Port$179.95
Provides 80 column video output for CP/M software. Emulates various terminals.

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-colum 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 plastic 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.

* SPECIFY DDP OR DISK FOR SOFTWARE PROVIDED

PRINTERS

PANASONIC 1080I $279.95

. TYPE:	9x9 DOT MATRIX
. SPEED:	DRAFT MODE - 120 CPS NEAR LTR QUALITY - 24 CPS
. PRINT CHR:	COMPATIBLE W/ EPSON RX80, IBM, FULL GRAPHICS
. MEDIA HNDL:	ADJ TRACTOR FEED
. INTERFACE:	CENTRONICS PARALLEL
. FEATURES:	2 YEAR LIMITED WARRANTY

PANASONIC 1090I $339.95

. TYPE:	9x9 DOT MATRIX
. SPEED:	DRAFT MODE - 160 CPS NEAR LTR QUALITY - 32 CPS
. PRINT CHR:	COMPATIBLE W/ EPSON RX80, IBM, FULL GRAPHICS
. MEDIA HNDL:	ADJ TRACTOR FEED
. INTERFACE:	CENTRONICS PARALLEL
. FEATURES:	2 YEAR LIMITED WARRANTY

OKIMATE 20 COLOR PRINTER $199.95

. TYPE:	24 PIN THERMAL
. SPEED	DRAFT MODE - 80 CPS NEAR LTR QUALITY - 40CPS
. MEDIA HNDL:	LIMITED ADJ TRACTOR FEED
. INTERFACE:	NONE STD - PARALLEL PLUG N PRINT MODULE SUPPLIED THAT ATTACHES TO EVE OR ORPHANWARE PARALLEL INTERFACE
. FEATURES	BLACK & WHITE OR COLOR PRINTING. 8K BUFFER; SPECIAL PAPER REQ'D

PANASONIC RIBBONS - $9.95
OKIMATE 20 RIBBONS- $4.95 BLACK
- $5.95 COLOR

SEGA GAME SYSTEM

NOT COMPATIBLE WITH ADAM

BASE GAME SYSTEM $99.95
. 2 HAND CONTROLLERS
. COMBO MEGA CARTRIDGE
- HANG ON GAME
- ASTRO WARRIORS

MASTER GAME SYSTEM $129.95
. 2 HAND CONTROLLERS
. LIGHT PHASER GUN
. COMBO MEGA CARTRIDGE
- HANG ON GAME
- SAFARI HUNT GAME

SEGA SPORTS PAD CONTROLLER $49.95

SEGA CARD SOFTWARE (256K) $24.95
. F-16 FIGHTING FALCON
. MY HERO
. TEDDY BOY
. TRANSBOT
. SUPER TENNIS (sports pad not req'd)

SEGA MEGA CARTRIDGES (1048K) $29.95
. CHOPLIFTER
. ACTION FIGHTER
. BLACK BELT
. FANTASY ZONE
. WORLD GP
. PRO WRESTLING
. MARKSMAN/ TRAP SHOOTING
. GREAT HOCKEY (SPORTS PAD REQ'D)
. RAMBO
. BASEBALL (SPORTS PAD NOT REQ'D)
. QUARTET
. SHOOTING GALLERY (FOR USE WITH GUN)

SPACE HARRIER (TWO MEGA) >>>>>> $ 39.95

TRAINING MANUALS/ BOOKS

. LEARNING EXPRESS AUDIO TRAINER $ 32.95
. CP/M USER'S GUIDE BY T. HOGAN $ 15.95
. WORD PROCESSING WITH YOUR ADAM $ 8.95
. THE COLECO ADAM USER'S HANDBOOK $ 8.95
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. BASIC BASIC PROGRAMS FOR THE ADAM BY KNIGHT, TIMOTHY ORR $ 8.25
. DISCOVERING SCIENCE ON YOUR ADAM, WITH 25 PROGRAMS BY TAL MOUNTAIN SCIENCE CENTER $ 9.95
. THE COLECO ADAM ENTERTAINER BY BRIAN SAWYER $ 12.95
. HACKER'S GUIDE TO ADAM VOL I $ 11.95
. HACKER'S GUIDE TO ADAM VOL II $ 11.95

PROGRAMS FOR BOTH VOL I & II OF HACKER'S GUIDE ON 1 TAPE OR DISK $ 3.00 DIS
$ 5.00 DDP

. 2ND EDITION ADAM RESOURCE DIRECTORY$ 13.95

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PLEASE DO NOT WRITE IN THIS SPACE
PR 1 2 3 D/R

BUYING SERVICE ORDER FORM

YOUR MEMBER # ----> _____

NAME	SHIPPING ADDRESS (IF DIFFERENT)
ADDRESS	NAME
	ADDRESS
PHONE ( )- -	

QTY.	ITEM NAME / NUMBER	DDP/DISK	PRICE EA.	TOTAL PRICE

SUB TOTAL _____

ILLINOIS RESIDENTS ADD 6.75% SALES TAX TO
HARDWARE ACCESSORIES AND CARTRIDGE SOFTWARE ONLY ---> $ _____

ALL MEMBERS PLEASE DO NOT FORGET SHIPPING/INSURANCE

	[]US UPS	[]US MAIL	[]CANADA
$ 1.00- 50.00 -	$ 2.50	$ 4.00	$ 6.00
$ 50.01-100.00 -	$ 4.50	$ 7.00	$10.00
$100.01-200.00 -	$ 7.50	$10.00	$16.00
$200.01-and up -	$10.50	$15.00	$22.00

---> $ _____

INITIAL ANNUAL MEMBERSHIP FEE REQ'D FOR BUYING SERVICE ---> $ _____

MEMBERSHIP RENEWAL ---> $ _____

BAL. OR CREDIT DUE ---> $ _____

TOTAL INCLUDED ---> $ _____

US FUNDS ONLY

Payment Method:

☐ Check or money order enclosed Charge my: ☐ VISA ☐ MasterCard

$25 minimum charge

Write Credit Card Account Number in boxes below:

Expiration Date _____

Signature _____