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The best to you in 1988...

Continuing our study of Romans chapter 6 -

12 Let not sin therefore reign in your mortal bodies, to make you obey their passions. 13 Do not yelld your members to sin as instruments of wickedness, but uetid yourselves to God as men who have been brought from death to life, and your members to God as instruments of righteousness . 14 For sin will have no dominion over you, since you are not under the law but under grace. 15 What then? Are we to sin because we are not under law but under grace? By no means! 16 Do you not know that if you weild yourselves to any one as obedient slaves, you are slaves of the one whom you obeu, either of sin, which leads to death, or of obedience, which leads to righteousness? 17 But thanks be to God, that you who were once slaves of sin have become obedient from the heart to the standard of teaching to which you were committed, 18 and, having been set from sin, have become slaves righteousness, 19 I am speaking in human terms, because of your natural limitations. For just as once yielded your members to impurity and to greater and greater iniquity, so now yield your members to righteousness for sanctification. 20 When you were slaves of sin, you were free in regard to righteousness. 21 But then what return did you get from the things of which you are now ashamed? The end of those things is death. 22 But now that you have been set free from sin and have become slaves of God, the return you get is sanctification and its end, eternal life. 23 For the wages of sin is death, but the free gift of God is eternal life in Christ Jesus our Lord.

Paul is explaining the fact that once we have accepted Jesus' forgiveness of our sins we no longer have to yeild to sin, although this will be our tendency because of bad habits we have formed. Once we have accepted Jesus as our personal saviour, we become righteous through Him; our sins are forgotten by God, as if they had never existed because we take on Jesus' righteousnes. This is difficult to understand, but it helped me to look at it as an exchange – we gave Jesus our sins and he paid the price for them; Jesus gave us his righteousness in exchange. Hence, we became righteous at the time we accepted Jesus. Righteousness simply means "right

standing before God" or "free from sin". Paul is saying that once we have become righteous, we are reconciled with God and will have eternal life in Heaven once physical body dies. However, just because we have becom righteous does not mean that we won't be tempted by sin. In fact temptations may increase and become more difficult to deal with once we are saved. God will help us, but we must determine to not yield to these sin temptations. Paul gives the example of being a "slave" to what ever master one serves - either sin or righteousness. Once we have accepted Jesus we can choose which master to serve. Satan is very tricky and will try to convince a newly saved person that they can't conquer their sin nature. He plays on our minds which may not easily accept the fact that God has freely forgiven—our sins, we think we must do something to earn such a gift, but this is not true - in fact we can't earn it, it is only through faith in Jesus' sacrifice on the cross that our sins are forgiven. If we stand on this fact then Satan can't trick us. Sanctification is a long word that simply means the ongoing process of cleansing results of sin. This process starts when us from the we first accept Jesus and continues as we read the B能le and God's spirit grows within us to make us more like Jesus. Don't be discouraged or impatient, this process of sanctification takes years but God is faithful to complete it if we are obedient to Him. There are two major areas of obedience that will aid us in our spiritual growth and the process of sanctification: 1. Reading God's words to us - the Bible 2. Finding and attending a church which is Bible based that will teach us and provide fellowship with other Christians, God Bless you all.

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NIAD NEWS/ UPDATES

Well, we hope you all have recovered from the holidays!! What a hectic time of year for everyone, NIAD was especially busy filling our Christmas orders that were heavier then last year I do believe. Yes, the ADAM goes into its fifth year and is stronger then ever. I still find it hard to believe, but more and more people are coming to find that their ADAM is a fine little system that has great potential.

NIAD has entered its 4th year and I'm happy to say that we are also going stronger then ever. I am especially grateful to my wife Julie, whose support, love and encouragement have kept me going when the times get tough. Thanks to Mary, Sandy, Eileen, Gene, Gerry, Shana, Ajay, Julie, Bobby and Bret for their super commitment to NIAD and their diligent work to meet the ever growing order volume. Believe me, without their commitment and overtime work this year we would not have been able to meet the 805 orders we received in Nov/Dec!! Thanks also to Wayne Motel, Sharon McFarlane and Bob Tarnowski for their significant contributions to NIAD and to the many others who have supported NIAD throughout the past year.

ANNOUNCEMENTS

. 1988 will be BETTER then ever ...

There are more exciting new software and hardware products. See our reviews in this issue as a start! POWERPAINT is one of the most fantastic ADAM programs we have ever seen - more on this later in this issue, and what is GODOS?

- . The NIAD newsletter will be taking on a new look (as you might have noticed). We are experimenting with some different ideas and this issue is somewhat of a variety pack as a result. Let us know what you think we welcome your ideas.
- . I am VERY sorry for any inconvenience we caused by not getting our Bulletin board system up as we had promised in the November issue. We have had problems getting the right software and were too optimistic that things would go smooth. I had hoped to get it going during the holidays but could not due to other priorities. As of now, the NIAD BBS is on hold until we can spend the time to get it going correctly. I will announce its availability AFTER it is up and running!!
- . I also apologize for the lateness of this issue. We were waiting on some of the new products, which did not

arrive unit1 the middle of January and our new format took some extra time as well.

. Some of the first orders we filled for the new PD games, FALLGUY AND YOLKS ON YOU were versions that required the 64K expander to work correctly. We have corrected these games so they do not require the 64k, so return them if you haven't already for a replacement. NOTE: Before you play the game YOLKS ON YOU, power off your ADAM and turn it back on. YOLKS will not work if you were running other programs prior to running it.

. We now have instructions for FALL GUY, VIDEOHUSTLER, MATHWIZ & YOLKS as well as revised instructions for the SUPER SUB ROC PD game. Send in a SASE requesting them or request on your next order for NC. Thanks to Jim Goebel & John Moerch for these.

- things happening in the CP/M cP/M world. In the February issue we will be starting an ADAM CP/M 2.2 training course. CP/M offers ADAM owners the opportunity to utilize a wealth of additional software, but it is a little difficult to work with if you don't have prior computer experience. This course will hopefully help many of you get over this hump.
- . NIAD now offers a conversion service for ADAM CP/M conversions. We can convert almost any other CP/M format and most other formats (such as IBM PC) to or from ADAM CP /M 2.2 format. Note that this only applies to the ADAM CP/M 2.2 format, NOT the regular ADAM format used in SMARTWriter or SMARTBasic.

Send in the disk (no datapacks, just diskettes) you want converted and \$5 for each disk that will be created (if you send in one IBM double sided disk, two ADAM disks will be created if there are programs on both sides of the IBM disk).

. We will be testing a CP/M version of WORDSTAR 4.0 on the ADAM. This is the latest release of this fine commercial program, which is a sophisticated word processing program. You would need the 80 column video board to run it on the ADAM, under CP/M. Price, through NIAD, will be \$199.95. Let us know if you are interested.

We will also have the SUPERCALC spreadsheet program available in ADAM CP/M 2.2 format for only \$49.95.

Sharon McFarlane has been working feverishly on a whole bunch of new CPM PD programs she recently obtained. We will have a complete list in the next issue.

- . We are also continuing our SMARTBASIC ecucational course, originally developed by L. C. Austill and modified by John and Francis Terry of the Metro Orlando ADAM User's Group. Note that SMARTBasic Public Domain volume *BNDV25 contains this complete course 10 chapters worth.
- . Some of you have asked whether we plan to print an updated version of our Product Review Summary as we did in Sept/86. The answer is no, the list is too long at this point and we created the Product Review Book that contains detailed reviews of over 100 ADAM programs. This book is available for \$19.95 from NIAD.

As mentioned above, we processed a tremendous number of orders over the last 2 months, but we made a few more errors than we should have. Hence, we have instituted a new quality control program which will eliminate this problem.

- . See our Public Domain Workshop for some information on new volumes containing some great programs.
- . We had a problem and lost all our member updates

done since early November! We have rebuilt the database for everything EXCEPT address changes. Anyone that sent us an address change since | | | | | must send us another one ASAP.

USER GROUPS/BBS'

We are still compiling a list of ALL ADAM User Groups and Bulletin Board Systems. I know there are more out there, you guys are just not sending them in to us. This is important, so please send us this information.

We are preparing a member survey to get a better feel for what you need from NIAD. Our goal is to meet the needs of a wide range of ADAM owners from



novice to expert, so get your thoughts together to complete our survey which will be in the February issue.

- . E&T has started an ADAM newsletter.
- . ECN has discontinued their bi-monthly newsletter.
- . Digital Express will be putting out even more products in 1988 because the principle, S. Swift will now be devoting full time to ADAM. This is great news because of the superb products developed by this company.

SOFTWARE/HARDWARE UPDATES

- . POWERPAINT was a little late, but well worth it. It is truly a fantastic program the most powerful drawing and dot matrix printing program available for the ADAM. See Wayne's review in this issue.
- . Digital Express is also finalizing a new operating system for the ADAM. GODOS will be SMARTKey driven, include dialog boxes, pull down menus, icons, etc. Many features are planned which will furthur expand the ADAMS capabilities tremendously, allowing even more powerful programs to be developed.
- . See our review of NEWSMAKER in this issue. This "desktop publishing" program is for the standard ADAM printer, but will support dot matrix printers with a patch. E&T has already developed a set of 35 SNAPSHOT picture files that can be used with this new program.
- . Walter's Software is working on a new program that will be a great productivity tool for most ADAM owners more next month.
- . See our reviews of some of the new PD games mentioned last month.
- . Digital Express has put a great disk formatting program called the "1 MINUTE FORMATER" in the Public Domain. It will format on 1 or 2 drives, single or double sided drives. A great timesaver.
- . We have a whole bunch of the CENTIPEDE and DEFENDER cartridges for only \$12.95
- . Telegames has a complete line of Coleco cartridges available. NOTE: SOME INDIVIDUALS AND USER GROUPS HAVE BEEN SELLING COPIES OF CARTRIDGE AND DDP GAMES. TELEGAMES IS SELLING THESE SAME TITLES COMMERCIALLY AND WILL PROSECUTE ANY ONE FOUND SELLING COPIES!!
- . Orphanware's 256k memory expander is selling well, and will be used by many of the new ADAM software products. Orphanware is also working on a hard disk drive interface for the ADAM.
- . NOTE: NIAD will buy give a \$30 credit for 64K expanders towards a purchase of a 256K expander.

ITEMS OF INTEREST



. Our COMPUKINGDOM store was on WGN, one of Chicago's major radio stations. Evidently a caller inquired about Coleco ADAM products and a NIAD member called back giving

information about the store. We had many walk-ins as a result of this !! Our current hours are Tuesday & Wednesday 11 AM to 6 PM; Thursday & Friday 11 AM to 7PM and Saturday 9 AM to 5 PM. Call us at 961-5011 for directions if you need them. We have a full display of ADAM products.

- . NOTE: Due to the falling US \$, Panasonic printers have gone up in price (as have most other Japanese articles).
- . NIAD monthly meetings are held at the store on the second Thursday of each month, at 7:30 PM. We have demos of new products, answer questions and have specials on ADAM products.
- . If your NIAD member number begins with either 1287 or 0188, then this is your last issue. Send in your renewal now to prevent any discontinuance of issues.
- . Ray Dougherty states that even ADAMCALC has a suprise screen. Once AC is loaded, it asks you if you want HELP. At this time press the UP & RIGHT ARROW keys at the same time, then type "surfnazi" (lower case and no quote marks) SUPRISE!

Rick Lefko writes the following interesting true story: Why Adam?

About two months ago one of my friends at work asked me about computers. He said, "Rich, my wife and I are considering getting another computer for the kids, but I don't really know a lot about them. Can you help?" I said, "Another?" He explained that about a year ago ge bought a used Commodore 64. Since that time it has remained in the hall closet. I asked him why he wasn't using it? He explained that no one can understand how to use it. I asked him if he hooked it up correctly and read all the manuals. He responded, "Yes". So I asked again, "Why aren't you using it?" then he made this key statement: "We don't know what to do with it!" So what do we have Illiterates, stupid people, mutants? No. of course not. What we have here is the typical reaction to a computer like Commodore, that requires more than a keyboard to be useful, from people who don't really know what to do with a computer.

Anyway, I said, "Well if you don't know what to do with the Commodore, what makes you think another computer is the answer? What do you think you want to use it for?" He said his kids would like one to write reports on for school and eve his wife would find one useful for many reasons. So I told him, "It sounds like you need a word processor that's easy to learn and use, yet fairly comprehensive. Also, you'll need a printer and some kind of data storage." He said, "Yeah, that's what I need." (here it comes) Then I said, "You need an ADAM", and he said, "Why ADAM?" So I began to explain the ADAM PC to him. Now imagine for a moment, trying to explain a computer to someone who has NO idea what you are talking about. Think back to that time long ago, and maybe not so long ago, when you were this very same person and someone was trying to make you understand. Remember? I do. I think if someone had been listening the first time that "computer expert" tried to explain an ADAM to me, it probably seemed a lot like Mr. Spock talking to an amoeba. So I said. "Come on home with me after work, and I'll answer your question." You know, I've always thought that it was amazing how people react when they first see an ADAM. They want one! Of course though, one has to be careful to explain that ADAM "doesn't come with those disk drives and no, ADAM doesn't come with that color monitor or those covers or that high speed printer", but folks are usually truly amazed with what the ADAM does come with. So, after bringing my friend home and letting him look at ADAM, he said, "Yeah, that's what I need." So I told him I'd try and find one for him and it probably wouldn't be new. He said, "Do your best." Well, after looking in the papers for a few weeks and leaving messages all over Compuserve, I actually managed to locate one locally. The price was right and it even came with some software. I went to this fellow's house that night and met him, his wife, and kids. He explained that he was getting a KAYPRO because it was what he used at work. As we packed ADAM up in that huge box, he remarked several times that he wished he could keep his ADAM, and if the house he was renting was bigger he would definitly keep it. As I carried ADAM out his kid cried and I felt like some kind of Scrooge running down the walk with that huge box. Well, my friend has had his ADAM for a couple of months now and his wife and kids love it! He just remarked to me the other day that everyone is fighting to get on it. Sounds like heaven to me! Why ADAM? Because nothing else even comes close, that's why.

COPY PROGRAMS

I cut off the last sentence of my article last month on copy programs. The last sentence was to read "In summary, for the novice I recommend QUICKCOPY for its ease of use. The more advanced will find BACKUP +3.0 a better deal because of the additional utilities that are included with the program.

Here is an article on copy programs that Rick Lefko supplied that gives some more information you will find helpful:

Let's discuss WHY you would want a copy program. As I read the MOAUG newsletters one piece of excellent advice keeps popping out: back yourself up! It's amazing how many of us won't heed this simple bit of advice, until it's too late. Oh, how I hate to type, and just the thought of having to type it twice is enough for me. Yes, I'm guilty of not following my own advice. I remember working away on my ADAM one night, typing a report for work that was due the next morning and deciding to run a draft copy on the printer without saving it first. Much to my horror, it didn't print out and the screen just locked up! It was incredibly frustrating to just sit there and look at all of my work on that screen knowing full well that there was NO WAY to retrieve it. After picking my head up from my desk I briefly entertained the idea of snapping a picture of the monitor screen and submitting that to my boss, but decided not to because unemployment compensation benefits aren't high enough to pay my bills. I'm sure you are wondering what this has to do with copy programs. Well, it's the same advice for your media; back

yourself up! Disks and digital data packs aren't immune to the same ills that kept your homework from being handed in, i.e. my dog ate it! Spilling a drink on a disk, leaving a datapack in a sunny location or on top of the television is as good as throwing them away, only in this case you'll be losing an entire program or set of programs. With the price of software these days who can afford that? Copy programs can help you avoid this. For example, whenever I purchase a new program the very first thing I do is make a backup. Then the original becomes my MASTER. This way if my dog happens to find my disk to be some kind of culinary delight I'll be able to pull out my MASTER and make another WORKING disk or DDP. I don't keep my masters in the same place as my working disks. These should be locked away in a different room, if possible. This way if your roof should leak you won't lose everything. Remember though, the copies you make are for your own use. Selling copies of copyrighted software is against the law. Making copies for your own use is permitted. Now I'm sure that if you made a copy of copyrighted software and sold it the F.B.I. probably wouldn't be knocking on your door, but the people who developed that software will lose that money and chances are they won't develop any more. Now that's the real danger here, if the software developers don't see all the time they've spent producing this stuff turning a profit for themselves they simply won't bother. Would you? That would surely be the end for ADAM. So please, let's not let this happen.

PUBLIC DOMAIN WORKSHOP

So many of you have taken advantage of our Public Domain library offerings, especially with our recent Christmas special, that you had us working more then the regular amount of overtime to make the DDP/ Disk copies. Our library is growing more then ever in both quantity and quality of programs. We have programs covering about anything you could imagine, from games to graphics, business, educational, art, music, etc. If you haven't taken advantage of our PD volumes yet, you're missing out on a great deal of great software for a very reasonable price!! For you PEEKS & POKES people, volume BND24 contains a much expanded list recently completed by Sharon McFarlane. This list contains much valuable information for the intermediate/ advanced SMARTBasic programmer. Below is a brief description of the programs contained on our SMARTBasic volume * BNDV22.

PUBLIC DOMAIN BASIC VOLUME #22 PROGRAM DESCRIPTIONS by Bob Ternowski

NOTE: This volume contains a revised version of SmartBASIC. SEE DOCFILE FOR DETAILS. To use, pull the <RESET>. After a moment a program menu will allow you to select your program choice. All of the

programs were BSAVEd using BASICaide for fast loading. If you do not use the MENU, then enter "BRUN <filename>. The SmartBASIC contained on theis medium may not be compatible with some other programs - particularly utility programs.

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*** HELLO - This program RUNs the MENU program. *** MENU - Used to select and RUN the programs on this medium. RUN HELLO or BRUN MENU or reboot the system by pulling the <RESET>.

*** FileMgr2.1 - A corrected and revised version of FILEMANAGER will allows the use of a ramdisk.
*** STATE&CAPS - Test your knowledge of the State's capitols and see your score.

*** DAYgr - A GR graphics display of a rural scene.

*** CHAINreact - An interesting and challenging game in hi-res for 1 or 2 people - instructions.

*** CRYPTOGRAM - A terrific assist from ADAM in decoding those most challenging magazine cruptograms.

*** GOBLIN - Another interesting game challenges you to get the monsters before hitting obstacles watch the faces of the goblins!

*** CONNECT4 - An ADAM version of the famous CONNECT 4 arcade game - well done in HGR.

*** CANON - Well done musical program done in 3 voices.

*** BARgraph - Create a bargraph with up to 29 entries nicely displayed in hi-res graphics.

*** HPLOTdemo - A hi-res design program.

*** REALCLOCK - Creates an on-screen digital clock which can be displayed at any time by CALLing 27700 - self instructing.

*** BLAST - A high-res explosion demo program. *** FUGUEmusic - A well done musical done in 3 voices using terrific routines.

*** SOUNDER - This program will enable you to copy music from music sheets and play it.

*** SPARKLE - An interesting GR graphic design demonstration.

*** B BALL - Simulates the path of a bouncing ball in high-res graphics.

*** ROCKETS - Press any key for a graphic display of sky rockets.

*** PUFF - Well done arcade type game for 1 or 2 players using sprites.

*** LOOM - Weave your own web of design with this interesting program and print it!

*** CIRCUS - Move the trampoline so the little man will bounce up and break the balloons.

Enjou!!!

NEW STUFF

As mentioned last month, we have placed many new games in the public domain - see reviews in this issue. Also, the 1 MINUTE FORMATTER from DEI is on our list. Next month we will be adding more RLE picture files as well. The NIAD library was the first major PD library for the ADAM and most other libraries started with our volumes as their base. There are so many great PD programs available to the ADAM owner, that it must be hard to pick. Here is a neat little program called rockets -







2 & NIAD PUBLIC DOMAIN

VOL. # BNDV

22

4 ONERR GOTO 5000

9 REM -- WHEN PROGRAM PAUSES, PRESS ANY KEY YOU

10 HGR2

20 FOR t = 1 TO 5

30 READ ua, la, ub, lb

 $40 \times 1 = INT((ua-la+1)*RND(1)+la): \times 2 = \times 1$

50 y1 = INT((ub-lb+1)*RND(1)+lb): y2 = y1

60 GOSUB 1000: HPLOT 128, 191 TO x1, y1

70 FOR r = 1 TO 15

80 x1 = x1-1: x2 = x2+1: y1 = y1-1: y2 = y2+1

90 xa = INT((x2-x1+1)*RND(1)+x1): xb = INT((x2-x1+1)*RND(1)+x1)

100 ya = INT((y2-y1+1)*RND(1)+y1): yb = INT((y2-y1+1)*RND(1)+y1)

110 GOSUB 1000: HPLOT x1, ya: HPLOT x2, yb

120 GOSUB 1000: HPLOT xa, y1: HPLOT xb, y2

130 NEXT r: NEXT t

140 GET as: RESTORE: GOTO 20

1000 hc = INT(RND(1)*15)+1: IF hc = 4 THEN 1000

1010 HCOLOR = hc: RETURN

2000 DATA 170,85,80,20,105,20,145,80,230,105

2010 DATA 145,80,85,20,80,20,240,170,80,20

5000 TEXT: END



HIGHLIGHTING is a much underused and perhaps misunderstood function of SMARTWriter, but it can be a real benefit once you get the hang of it! I use HIGHLIGHTING to separate and combine documents. It works great for manipulating documents in this fashion. Let's say you have written a document and there is a section of it that you would like to use in another document. First you will have to save the section of the first document that you want to include in the second document. Move the cursor to the start of the section you want to save and hit SMARTKey IV (HI-LITE), move the cursor and mark all the lines/ words you want to save. NOTE: If you are not already in the MOVING WINDOW mode, it is best to do so before HI-LITing because it is easier to HI-LITE several lines at a time in this fashion. If you have 1 or more paragraphs to HI-LITE, use the HOME and UP/ DOWN arrow keys to HI-LITE an entire screen full of lines. If you mistakenly HI-LITE a word or line hit SMARTKey V to erase the HI-LITE mark. Once you have the appropriate sections HI-LITE'd, hit the STORE/GET key and then SMARTKey III, STORE HI-LITE. Give the document a new name and save it to your tape/ disk. You have now created a separate document just containing the HI-LITE'd text from the first document. You can easily add one document to another in SMARTWriter. First, GET the first document to display it on the screen, then move the cursor to the place that you want to place the second document, INSERT a return there. Now press STORE/ GET and select the document you want to add to the

first one. It will be placed in the spot where you had the cursor. Easy, ugh? Now, when you go to save the combined document it is best to give it a new name because SMARTWriter will default to the name of the second document you added.

1 1/2 SPACE PROBLEM - This is the age old problem that if you have a blank line with only a carriage return in a SMARTWriter document, a bug in SW causes 1 1/2 carriage returns to be done instead of only 1. This throughs the spacing of your document off and can cause headaches when you have a multi page document. Our Oct/87 issue had some "tricks" to get around this problem. Ellis Taff recently wrote asking for a clarification on one of these techniques, which appears to work the best. The way to get around this problem is to fool SW into thinking something is on the "blank" line, so it won't put in the 1 1/2 carriage returns. You can do this by putting a period on the line, but this doesn't look real sharp. Sooo, the trick goes like this. On any blank line that has a carriage return only, move your cursor to the front of the line, hit the INSERT key and then hold down the control key and hit the "6" key at the same time. A funny looking upside down "L" will appear. Then hit the spacebar, then the DONE SMARTKey. This will work. Your line should look like this:

7

The line above this one should have a carriage return at the end of it also. Hope this helps.



GRAPHICS WORKSHOP



PRINTER FIX for BASIC VI.O By W. MOTEL

This was prompted by a member concerning the OKIMATE printer, but it can be applied to any dot-matrix printer. With the Okimate 20, using color, it is neccessary to make 3 passes on a line to get desired colors. This can be done by doing a ombination of normal BASIC print commands (for text) with an ending semi-colon and doing a WAMOdrive call to do a line feed, without the carriage return. This could result in printing an 80 character print line 3 times. Even though it's e same print line, BASIC thinks it can only print 80 characters with the print statement, before it forces a carriage return. This is due to the original ADAM printer. Whenever you use the Basic Print command, Basic automatically forces a carriage return after 80 characters are printed, IF you have not done one.

Well, this causes a problem for us using the OKI 20, or any dot-matrix printer if printing more then 80 character per line with the print command.

To fix, address 16176 normally contains the value 80. This is the value Basic compares against after each

character is printed with the print command. To "override", simply poke a large value in it, such as POKE 16176, 255. This will now only have BASIC due the automatic carriage return after 255 characters per line, something not likely to occur. Reset the value in address 16176 to 80 when you're done.





SMARTBASIC WORKSHOP **■** □

Following is Chapter 2 of the SMARTBasic programming course developed by L. C. Austill and revised by John & Francis Terry of the Metro Orlando ADALM UG. This course is intended to take the novice from beginning basics to full fledged programming across 10 chapters. Note that the complete course is on our Basic PD *BNDV25.

CHAPTER II

One of the features of BASIC is that statements do not have to be sequential or in numerical order when they are typed into memory. The computer will sort them out and run each in proper order. Because of this capability, program statements can be added and changed without changing the operability of the program. It is customary when writing a program to skip numbers, or reserve them for future use if needed. An increment of 10 numbers is common although 5 or even less can be used. The choice is up to the programmer.

The editing functions of ADAM: Programs can be typed in the SmartWriter mode and SAVED on a tape or disk. With SmartBASIC installed, you can LOAD the program and it will RUN. Programs are not usually written using SmartWriter as there are no error messages such as those in SmartBASIC. The first time a program written in SmartWriter is run, all of the errors will surface and it may be harder to debug.

SmartWriter can be used for some programming work. Two programs, each saved on tape (or disk) may be combined in SmartWriter and SAVED as one program. The search and replace features can also be useful. For example, it would be easier to replace all GOTO 1000 statements with GOTO 2000 statements. All SmartBasic files (except for BSAVE files) can be viewed through use of SmartWriter.

Reference has beem made to adding a program step. Determine the sequence within the program where the addition should be made, select a number appropriate for that position, and type the statement. This method will be used with the program that is n memory.

There are two ways of deleting a statement:

1. Type the number of the statement and strike RETURN. That number now has nothing assigned to it, so it will be skipped in the future.

DEL x where x is the number to be deleted.

If several sequential or consecutive statements are to be deleted type the command:

DEL x,y where x is the number of the first statement you wish deleted and y the last.

To change a statement, retype the statement using the old number and then press RETURN. The new replaces the old statement. A second way is to enter the command:

LIST x where x is the number of the statement to change.

The statement will now appear on the monitor. Using the arrow keys, move the cursor to the beginning of the statement number and then to the right over the statement until the position where the change to be made is reached. Now strike over the chacter to be changed. To delete a character: With the cursor under the character to be deleted, hold down CONTROL and press the letter "o". Continue until all the characters desired have been deleted. To add characters, hold down CONTROL and press "n" and a space will be created. Continue until there is sufficient space for the addition, return the cursor to the beginning of the space created and type in the new material. After finishing, ve the cursor over the balance of the statement to the end using the arrow key. IT IS A MUST TO DO THIS OR THE BALANCE OF THE STATEMENT WILL BE LOST! Now press RETURN. When ADAM lists a program step, it automatically puts in some spaces that are not neccessary from the viewpoint of the computer. These spaces can be used in the editing process.

A WORD OF CAUTION. There is a bug in the SmartBasic program. If the statement is longer than 31 characters (one line on the monitor), the control "o" and "n" will not carry to the second line. This must be watched when editing a statement.

To make changes to the program in RAM, LIST the program after the changes to see if the changed occured. Reenter the program as shown.

When entering a program statement, an error message may be encountered. It is not necessary to retupe the statement. Using the arrow keys, move the cursor to the beginning number of the statement typed (not the one reprinted by the computer) and then, still using the arrow keys, move the cursor to the point of the error and proceed to correct. Having made the correction, continue moving the cursor to the right with the arrow key until the end then press RETURN. LIST the statement just corrected to make sure its still there. A mistake at this point may result in complete loss of the statement.

Return to the program still residing in memory. A word about the three new commands that were in the program. END in statement number 40 is just that—it told the computer that the task has been finished. In this case, the computer would have stopped anyway because there are no more instructions in memory. It is good practice to use END however as many programs have subroutines at higher numbered locations in the memory and the computer will go on to those if not stopped. Also, some utility programs place END at the last location in memory as a signal for the subroutine to stop.

FOR and NEXT are two commands that go together -if one is used so must the other. They are useful in this program so will be discussed briefly. Statement 10 says FOR the value of the variable "i" from 1 to 10 do all of the things between this point and the NEXT "i" or statement 30. The first time the computer comes to the FOR statement, it sets "i" equal to the first number (1) and proceeds through the program. When it gets to NEXT "i", it increases the value of "i" by one then checks to see if "i" is greater than the second number in the FOR statement, 10 in our case. If it is not, the computer repeats the instructions following the FOR statement. When "i" becomes greater, (11) in this program, it goes to the next step in the program, or statement number 40. In effect, the computer went through these operations ten times in this program and then stopped. Had the second number in statement number 10 been 100, it would have done i 100 times.

The next new command is the word RUN. When this word is typed, the computer will go to the beginning of the program and start running it. Try it!

A computer program has been written and run!

Try running the program a second time.

Once again, the screen is getting cluttered. Why not take care of this in the program? Type the following and ENTER:

5 HOME

To see what happened, first ENTER the word LIST. There is the statement HOME. Try RUN again. It has been illustrated that statements can be added in any sequence to a program and the program can be made

to clear the screen.

Deviating from the topic, examine means of changing ADAM'S speed. There is a command that does this — SPEED = followed by a number between 0 and 255. When SmartBasic is installed in the computer, the value 255 (the fastest) is installed. This value becomes known as the default value — or the value unless you change it. Try typing in the command:

SPEED = 10

Now ENTER RUN. Try several different speeds. Having done that, return the speed to 255.

It is sometimes helpful to slow the computer down when having trouble getting the display wanted on the screen. At a slower speed events can be followed much better.

There are two punctuation marks when used in a print statement that change the formatting on the screen. The first of these is the semicolon. A semicolon in a print statement tells the computer to leave the cursor at that point on the monitor and wait for another print statement. To illustrate, add a semicolon to statement number 20 of the program. To do this, enter LIST 20. Now, using the arrow keys, move the cursor to the beginning number of the statement and then to the right to the end (after the quotation mark). Now type; and then press RETURN. Now ENTER RUN.

Before, John Jones occupied lines 1 through 10 on the screen — in the absence of any instruction to the contrary, the computer dropped down one line each time it finished printing "John Jones". With the semicolon in the program, it continued printing "John Jones" on the same line until the line was full and then it dropped to line 2 and continued.

Can a space be inserted after each John Jones? Yes, a print statement may be continued to include several things. ENTER LIST 20. Move the cursor to the end and add ""; then press RETURN. The computer has been told to print a space after he phrase John Jones and then hold the cursor at that point. Statement 20 should now look like

20 ? "John Jones"; " ";

Tru RUN now.

The screen on the monitor is divided into two zones, each containing 15 columns. The computer can be made to go through each zone. The COMMA is the instruction in a print statement to accomplish this. To illustrate, LIST 20. Now, move the cursor a discussed above to the semicolon and hit a comma which causes the comma to replace it. Use CONTROL o to remove the quotation marks and space then

then press RETURN. The statement now is

20 ? "John Jones",

Now RUN.

When using the printer, the computer recognizes five zones and will use them even though the screen display is dropping a line after each two zones. To illustrate, put paper in the printer and enter the command PR®1 then RUN. The hard copy of omething is not always the same as the screen unless the screen print command (control p) is used in the immediate mode. Don't forget to enter PR®0.

The value of variables may be printed. To illustrate, LIST 20 again. Using CONTROL and n, create a little space after the command print. Now add i;". "; and run the cursor through the rest of the statement then ENTER. Statement 20 should now read:

20 PRINT i; ". John Jones",

Translating, the computer is told to print the value of i (remember it was increasing each time that the computer repeated the instruction) and keep the cursor at that point. Now print a period followed by a space and John Jones. Now move to th next zone. Tru RUN now.

TAB is another command that can be used in formatting a display. This is the same result as hitting the tabulating key on a typewriter — it moves the cursor to the specified column. The format of the command is TAB (x) where x equals the number of the olumn where you wish the printing to start. Columns are number from 1 to 31. TAB must always be used in a print statement. This can be demonstrated by altering the program again. This time, start printing in the fifth column on the screen. Tupe the following:

20 ? TAB(5); "John Jones"

ENTER RUN. The TAB command will also position the printer. There is a bug in SmartBasic that gives the printer trouble if an attempt is made to tab past column 41. That can be overcome by a number of fixes that are available in print and on diskette.

The amount "tabbed" can be a variable. To illustrate, try changing the 5 in statement 20 to the letter i. Now RUN.

Some times it is more convenient to use the command SPC(x) instead of TAB. SPC tells the computer to print the number of spaces shown within the parentheses. The number of spaces can be a variable.

The command will also cause the printer to react. Try changing TAB in statement 20 to SPC and RUN.

There are two formatting commands that will change the display on the monitor, but they are not acted upon by the printer. These are VTAB and HTAB. VTAB tells the computer to position the cursor on a specific line number between 1 and 24. HTAB opitions the cursor in the given column number between 1 and 31. The numbers may be variables if desired. These two commands ARE NOT USED WITHIN THE PRINT STATEMENT.

There are several variations that may be used with this program. Start the print out on the 10th line. First change line 20 back to its original content:



If it is desirable to have the print out start in column 10, the command will be in a different position in the program. Try ENTERING

15 HTAB 10 - RUN. To see the difference, delete statement 15 and add - 8 HTAB 10

Why the difference in the printouts? In the last case, when the program was RUN, the computer cleared the screen, positioned the cursor at line 10 (statement 7), column 10 (statement 8) and then printed the first JOHN JONES. It then moved the cursor own to the next line (number 11) in the number 1 column and printed JOHN JONES again.

Why did the first version (15 HTAB 10) handle it differently?

FOR SALE CORNER

The following USED items are for sale through NIAD, unless otherwise noted:

- 1. Magnavox 80 column amber (not color) monitor - \$50.00
- 2. Roller controller and slither game \$25.00
- 3. Eve SS-CC Speech Synthesizer \$75.00
- 4. Coleco cartridges, many titles \$15 each (request a specific title)
- 5. Used Coleco disk drives \$179.95
- 6. Okidata 182 dot matrix printer-call Bob Kologe for price & shipping - (203) 589-7800

Here is a nice little program written by Bob Tarnowski, our great SMARTBasic PD librarian. This program will create a title screen for your VCR tapes, giving the name of the movies and their counter location (you of course have to figure that first). The screen will be displayed on your TV/monitor and to record it at the start of your VCR tape just plug the output cable from your ADAM into your VCR and hit RECORD – let it record for a few seconds so you have enough time to read it when you play it.



```
O & NIAD PUBLIC DOMAIN
                                       VOLUME # BND
V 19
  10 & \/\// VCR \/\//
  12 & \ Bob Tarnowski
          March 31 1987
  14 & \
  16 & \/\/\/XXX/\/\//
  90 POKE 16149, 255: POKE 16150, 255
 100 \text{ mn} = 0
 110 POKE 17059, 12: POKE 17115, 143: POKE 17126, 95
: TEXT: GOTO 150
  130 POKE 17059, 0: POKE 17115, 240: POKE 17126, 15:
 TEXT: POKE 16953, 95
  140 END
  150 VTAB 10: HTAB 4: INVERSE: PRINT "WHAT IS YOUR F
AMILY NAME?": NORMAL
  160 VTAB 12: HTAB 8: INPUT n$
  MAXIMUM LENGTH IS 18 CHARAC
TERS": GOSUB 210: HOME: GOTO 150
  180 GOTO 300
  200 cc = INT((31-LEN(m$))/2)+1: RETURN
  210 FOR de = 1 TO 5000: NEXT: RETURN
  290 \text{ mn} = \text{mn} - 1
  300 mn = mn+1: IF mn > 4 THEN FLASH: PRINT " SORRY
 - MAXIMUM OF 4 ENTRIES": N
ORMAL: GOSUB 210: mn = mn-1: GOTO 500
  310 HOME: VTAB 6: INVERSE: PRINT " ENTER MOVIE NAM
E:": NORMAL: PRINT
  320 HTAB 5: INPUT ""; mn$(mn)
  330 ml = LEN(mn\$(mn)): IF ml > 25 THEN PRINT: FLAS
H: PRINT "MAXIMUM LENGTH IS
 25 CHARACTERS": NORMAL: GOSUB 210: GOTO 290
  340 PRINT: PRINT: INVERSE: PRINT " ENTER COUNTER N
UMBER: ": NORMAL: PRINT
```

```
350 HTAB 5: INPUT "": cn$(mn)
  360 HOME: VTAB 10: HTAB 7: PRINT "ANOTHER MOVIE Y
/N": GET ky$
  370 IF ky$ = "Y" DR ky$ = "y" THEN 300
  380 IF ky$ = "N" OR ky$ = "n" THEN 500
  390 PRINT CHR$(7): GOTO 360
  500 HOME: VTAB 4: HTAB 16: PRINT "A"
  505 POKE 16953, 0
  510 m$ = n$+" FAMILY": GOSUB 200: VTAB 6: HTAB cc:
  520 m$ = "VIDEO PRESENTATION": GOSUB 200: VTAB 8: H
TAB cc: PRINT m$
  530 VTAB 11: FOR i = 1 TO mn
  540 m$ = cn$(i): GOSUB 200: HTAB cc: INVERSE: PRINT
  550 m$ = mn$(i): GOSUB 200: HTAB cc: PRINT m$: PRIN
T: NEXT
  590 z = 5
  592 VTAB 2: HTAB 16: PRINT CHR$(4); : VTAB 23: HTAB
 16: PRINT CHR$(4);
  593 POKE 64885. 0
  595 FOR x = 1 TO 5000
  600 FOR i = -15 \text{ TO } -1
  605 IF PEEK(64885) <> 0 THEN 700
  610 VTAB 2: HTAB 16+i: PRINT CHR$(z); : HTAB ABS(i)
+16: PRINT CHR$(z);
   612 HTAB 2: VTAB 16+i: PRINT CHR$(z); : HTAB 2: VTA
B ABS(i)+9: PRINT CHR$(z);
  614 HTAB 30: VTAB 16+i: PRINT CHR$(z); : HTAB 30: V
TAB ABS(i)+9: PRINT CHR$(z)
   620 VTAB 23: HTAB 16+i: PRINT CHR$(z); : HTAB ABS(i
 )+16: PRINT CHR$(z);
   625 NEXT
   630 IF z = 5 THEN z = 133: NEXT
   640 z = 5
   650 NEXT
   700 GDTO 130
```



CP/M 2.2 WORKSHOP

NIAD CP/M PUBLIC DOMAIN DISK #34 By S. McFarlane

CPMHLP.COM - An excellent HELP file written by Tim Nunes, the Sysop of ADAMania. This file can be especially useful for newcomers to CP/M, as the HELP file on the ADAM CP/M system media offers no explanation of how the system commands work. And even occasional users could benefit by using this file as a quick refresher. Each command syntax is explained with examples. HELP is available for: DIR/ERA/REN/TYPE/PIP/FORMAT/BACKUP/SYSGEN/CPMADAM/

ADAM.DISK77.COM - The latest update of this useful File Manipulator utility which corrects several bugs found in the previous version. For a more complete file description, refer to the May 1987 issue of this newsletter, Page #11.

DISPLAY.COM/DOC - Displays an ASCII text file on a 24 line terminal with commands similar to Digital's ED.COM, but without any of the editing facilities. Various commands can be issued from the terminal keyboard which will manipulate the isplay of the file. DOC file included.

FORMAT2.COM - V1.1 A new disk/ddp formatting utility for ADAM, written by John Moore. This version of FORMAT makes it much easier to format several disks at one time inasmuch as fewer steps are required. Format Drive & the Verify function re chosen BEFORE executing FORMAT, eliminating these steps for each disk to be formatted. When formatting begins, the screen displays Format Drive & Verification ON/OFF.

NEWCCP.LBR - An absolute "must have" for every ADAM CP/M user. NEWCCP, written by Canadian Tony Morehen, is a completely revised & enhanced CCP (Console Command Processor) for ADAM's version of CP/M. Fully compatible with CP/M 2.2, this NEWCCP upports the following resident commands:

- <1> DIR An alphabetically sorted directory listing for the default Drive/User. All file sizes noted as well as total disk usage statistics.
- <2> COPY Copies a file(s) from one medium to another. Wild cards are permitted for multiple file copying.
- <3> TYPE Displays files on Screen. Supports an end-of-screen pause for easier file viewing which can be installed as an option or as the default.

TYPE DU:ufn P = display with pause

TYPE DU:ufn N = display with no pause

- <4> LIST Sends files to the printer. Can be configured to send form feeds to user specified page length.
- <5> REN Renames old file to new file reversing the standard CCP sequence. Also the "=" delimiter is eliminated.
- <6> SAVE Saves memory to disk.
- <7> ERA Erases file.
- <8> LOG Resets disk system.
- <9> CLS Clears Screen.
- <10>GO Restart last program loaded into TPA or the last program copied with the resident COPY command. The USER command has been eliminated & replaced by the ZCPR2/3 method of changing Drive/User numbers.
 - ie. DU: Change Drive & User Area.
- D: Change Drive only.
- U: Change User Area only. All features/fixes are thoroughly explained in the DOC file & Tony has also provided a step-by-step installation guide. Z8OMR, one of the recommended Assemblers, can be found in the NIAD CP/M Library - Disk #4. ..on a personal note I recently purchased OrphanWare's 256K Memory Expander & was extremely impressed with the fine workmanship of this new hardware product as well as the speedy delivery of same. And as an added bonus, this super-fast RAM Disk comes packaged with yet another quality software utility from Tony Morehen - ADAM BIOS PATCH (ABP12.COM). The primary function of this utility is to modify the CP/M system to properly support single or double- sided disk drives or any combination In his words. Disk Drive #1 can be configured as a double-sided drive leaving Disk Drive #2 as single-sided & CP/M will recognize that the two drives are different! A real plus for those of us who do not wish to convert both drives to doublesided as no other patch to date has provided this option. ABP12 also patches the system to provide support for 2 Serial Cards as well as a Parallel printer port. Several errors in the original ADAM corrected have been Hex/Decimal/Ascii/Binaru converter is available whenever the WildCard Key is pressed. In addition, ABP12 provides support for Eve Electronic's as well as OrphanWare's 80 Column display adapters. And a provision for SmartKey descriptions on line 25 of an

80 Column monitor has also been included. Finally, ABP12 provides support for the large RAM Disks (128K/256K/512K) manufactured by OrphanWare. Sustems patched with ABP12 automatically adjust for the larger RAM Disks so there is no need to repatch the system if a larger memory expander is purchased at a later date. Also, the size of the standard 64K RAM Disk has been increased from 56K to 61K. Once installed, the new system will allow the contents of the RAM Disk to remain intact through a computer reset, though not through a power-down. DIR will now report the correct directory whenever disks are changed. CP/M's random write function ill now work correctly under all circumstances. The original ADAM bios had an error that sometimes caused damage to the disk directory which has now been fixed. Now that I have mu 256K RAM Disk & super-charged new system installed, I feel that ADAM has taken up a new lease on life! I am very impressed with the powerful enhancements provided by Tony Morehen & recommend that every serious ADAM user take dvantage of both OrphanWare's very reasonably priced RAM Disks (especially with the recent price reductions announced only a few days after I made my purchase!) & Tony 's sophisticated utilities. Several software developers are planning exciting new software projects to take advantage of these new RAM Disks so bigger & better things are yet to come! I recently spoke to Tony who is presently working on a new commercial program which promises to be a best-seller! And he confirmed to me that his innovative enhancements/fixes to the CP/M system were (believe it or not) developed on his ADAM. Computer world take note!

PATCHES CORNER

The following is a dot matrix printer patch for the MICROWORKS PROGRAM fromStrategic Software. Note: This basic program must be run with the printer TURNED ON. It enables the printer, then run MICROWORKS:

```
10 POKE 16149, 255: POKE 16150, 255
20 DATA 126,254,3,200,245,219,64,203,71,40,250,241
30 DATA 211,64,35,24,239
40 FOR x = 62741 TO 62757: READ mc: POKE x, mc: NE

XT

41 DATA 27,51,18,10,3
43 FOR x = 0 TO 4: READ mc: POKE 56730+x, mc: NEXT
45 DATA 33,154,221,205,99,252,201
47 FOR x = 57000 TO 57006: READ mc: POKE x, mc: NE

XT

49 CALL 57000
50 TEXT: PRINT " PATCH ENABLED ....": PRINT: PRINT
```

NEWSMAKER PATCH

This patch, supplied by Digital Express allows the NEWSMAKER program (reviewed in this issue) to print on a dot matrix printer. These 9 lines must be added to the HELLO program, that runs NEWSMAKER. The easiest way is to rename the existing HELLO program to hello with a utility program and then add the nine lines. Save it back as HELLO if you always want to useh the dot matrix printer. DEI also has a patch to allow NW to be bsave and "brunned". Send in a SASE if you would like these instructions.

```
1 DATA 126,254,3,200,245,219,64,203,71,40,250,24

2 DATA 211,64,35,24,239

3 FOR x = 63089 TO 63105: READ mc: POKE x, mc: NE

XT

4 DATA 27,51,18,10,3

5 HOME: HTAB 8: VTAB 5: PRINT "N e w s M A K E R"

6 FOR x = 0 TO 4: READ mc: POKE 56320+x, mc: NEXT

7 DATA 33,0,220,205,99,252,201

8 FOR x = 57000 TO 57006: READ mc: POKE x, mc: NE

XT

9 CALL 57000: VTAB 1: HTAB 8: PRINT "dot matrix s etup"
```

GAMES By Jim Goebel

Well, another big hello from us over here at the NIAD game central. This month, I am going to describe & give some valuble playing hints for SUPER SUBROC, and also let you in on an interesting little diversion known as PHOTON.

The planet has been invaded! Your mission in this game is to shoot them down. Sounds alot like Space invaders doesn't it? Let me tell you, that it is VERY different. There are two different types of screens in this game, underwater, and the skies. The game is in a first person perspective, and is very intersting graphically. I have some hints to share with you, but if you have any, send them in.

When I first recieved a copy of Subroc, I had much trouble playing the game. Through patience, and determination, I had gotten some pretty good scores. So the biggest tip that I can give anyone that applies to all games, is to experiment and keep track of what you find! Hint *1, Avoiding the net: Right after you select the skill level, push and hold the joystick foreward. Your sub will move up and surface without interference from that blasted net. Hint *2, avoiding missles: If a missle appears at the left or right of the screen, move the opposite direction, or position the missle in your crosshairs and blast it. Hint *3,

Destroying ships on the horizon: Position your crosshairs so that the bottom line just touches the horizon and blast away. This also destroys things just below the horizon. Remember that the aircraft carrier takes approx. 4 its. Hint #4: Stay above water as much as possible for bigger points. Underwater for a safer passage. Hint #5: When you see the word 'sensors' on the message board, DIVE DIVE DIVE!

Those are all the hints that I have found. If you

have any for any ADAM game, send them in.

System update. New games now out: SEGA: Enduro Racer, Out Run, Zaxxon 3-D, Zillion, Golf, Soccer, Volleyball. Nintendo: Mike Tyson's Punch Out, 3-D Rad Racer, Legend of Zelda 2: Adventures of Link, Super Pitfall, Breakthru, Karnov, Karate Kid, Top Gun, Jaws the Revenge, Goonies 2. No info on Atari's systems.

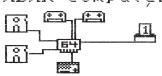
Send hints & things of the like to : Games c/o Jim Goebel Jr. 2904 Kellogg st. Joliet, IL 60435.

PRODUCT REVIEWS

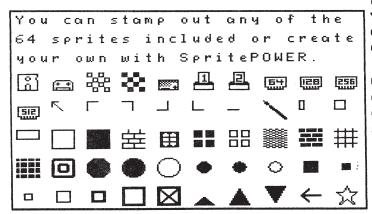


REVIEW PART I By W. Motel

The advanced graphics package for the ADAM computer.



This is the latest in a series of graphics software from Solomon Swift of Digital Express. It is an excellent, professional 80K machine code program that gives you HI-RES graphics capabilities and features equal to those avail able n other home computers. We've just received this, so this will be an abbreviated review. I'll go into a more in- depth discussion next month as I work with it more, BUT I SURE LIKE WHAT I SEE SO FAR.



All of the graphics on this and the next page were done with POWERPAINT. Powerpaint does require at least the 64K memory expander, but you can use the Orphanware 128K, 256K, or 512K board. This will let you use more features, specifically a larger graphic workspace. If you wish to print the graphics, you'll also need the Centronics parallel interface, such as the Orphanware PIA 2 or EVE's SP-1 or SP-1P. This is to connect the EPSON FX or IBM 5152 compatible printer (Panasonic 1080 or 1091 is OK). It even supports the EVE Speech synthesizer if you have it, by having spoken

error messages. You can use up to 2 data drives and/or 1 or 2 disk drives (160K, 320K, or 720K).

Due to the ADAM color bleeding problem, Powerpaint lets you work around it by having most features using at least 8 pixels, but you can design in BOTH the foreground and background. You can also draw in 1 pixel thickness. Eveything's Smartkey driven, with main and sub options available. Control can be via keyboard or the keypad. Full color selection is available for both foreground and background. Graphics are drawn in graphic CELLS (similar to SmartPAINT, PaintMASTER RLE, GraphixPRINT screen). Each cell is 240 pixels across by 160 down. What's different is that your graphics WORKSPACE (total printable area) is a combination of cells. With the normal 64K expander, you get 4 cells, 2 across and 2 down).

This will print roughly 8 inches across by 4 1/2 inches down (1 half page). With the larger expander, you get 8 cells or a full printable page. Most design is in 1 screen CELL, but scroll options allow you to scroll thru the workspace in all directions. Although it does not contain a word-processor, it can definitely be used as a primitive, but effective page design program.

In doing your design, not only can you do free hand drawing, but much design is done by the use of inserting existing art or small pre-designed shapes. If you've worked with LOGO, this is similar to stamping the sprites onto the screen. Although not needed, it is compatible and enhanced by the use of 3 of their other new programs. CLIPPER (full review NOY, 87) allows you to create 'clip art' files. These are smaller (64 by 64 pixels) mini pictures either awn or clipped from larger pictures, such as RLE, SmartPAINT, or PaintMASTER. SpritePOWER (Nov. 87) is used to create 16 x 16 pixel sprites (or mini clip art). Although SpritePOWER is used for creating program sprites, these are also very useful for stamping in background graphics or creating CAD/CAM type designs. An example might be flowchart symbols. They can also be used for your paintbrushes. FontPOWER (Sept, 87) lets you create various styles of fonts for text insertion.

Included with PowerPAINT is 4 CLIPPER clip-art files, 2 SpritePOWER sprite art files (total of 64 designs), 14 brush designs, and 8 text font sets. 4 of them can be rotated left, right, or upside down and can be printed in ha If, full, or double width, or double size. Their is a normal, bold and script font which can be used in normal or inverse mode. 2 special user fonts are available for creating special designs (such as the ADAM logo). This can be easily inserted int our design or overlaid on existing graphics.

Besides normal graphics design, you can easily do global color change of all foreground or background colors. You can even change only a specific color to a

Halfwidth Full width

DOUBLE SIZE

They can also be rotated

NMOO #

new color in the foreground or background. Predefined functions allow you to do 4 sided, 3 sided figures, straight lines, filled or empty circles.

Printing options include printing one cell, the entire workspace, printing labels (on 1 7/16 by 4 or 5 inch





width labels). You an print graphics in quick draft, light/dark copy, normal, mirror, or inverse fashion.

Files can be retrieved (up to 11 picture formats, such as PaintMASTER, GraphixPAINT, RLE, etc.), Stored, Renamed, Deleted. Volumes can be INITed either as 160K, 320K, or 720K. A 49 page instruction manual (very well done) explains everything. Beside the before mentioned included files, five picture files are included, including a Label Form. A loader and saver program to show you how to use pictures in your own martBASIC programs, with REMarks to explain. Pix.mgr which lets you load and store SmartPAINT, load RLE, or store HOR screens in SmartPAINT format. EZcalendar will draw a hi-res calendar of the month and year of your choice.

This has it all. Just from the little bit I've worked with it, I'm really impressed. This is something you must not only see, but a MUST HAVE. Sol has obviously spent considerable time and care in creating this package. This is by far his best work. Not only will you be impressed with the many, many features, but also by the quick, smooth way it operates. More next month on details and what you can do with this.

WELL RECOMMENDED A+++
and a GOOD VALUE

NEWSMAKER (NM) is a page layout program that is used for designing and printing text and "pictures" on a single page. NM is designed to work on the ADAM printer, but there is a patch available that will allow it to work on a dot matrix printer attached via a parallel printer interface (see below).

The "pictures" that are printed are SIGNSHOP type, using characters on the ADAM printer to create designs.

Page layout is accomplished by creating blocks on a screen representation of the page. I did not encounter a limit on the number of blocks allowed per page.

A block can be either text or a picture. You can position and set the size of each of the blocks to achieve the layout of the page. Blocks can be any size within the page as long as they don't overlap another block.

Blocks can be moved or resized process if later in the layout Once the blocks are required. layed out, you can enter text in place the text blocks and a picture in the picture blocks. When you're all done, the layout is saved along with the text/ pictures. The page can then be printed, the text/ pictures will be printed on the page in the place you set the corresponding blocks. An excellent feature is the VIEW option, which displays a reduced version of the page on screen showing the placement of the text/ pictures as it will print. Text blocks have the following options:

. No justification or full justification (straight left and right margins)

. Flow - OPEN to allow text to flow into the next text block or

CLOSED The text editor used to good. entry of text is very provided include Functions wordwrap, insert/ delete space/ line, backspace, home and reformat page (used after spaces/ lines are inserted or deleted). Text entry is smooth and the only problem I noticed was that a couple characters would be lost when I hit the end of a line and the automatic word wrap jumped to the next line. I just had to go back and retype the characters were missed (a slow typist might not encounter this problem). I up two vertical side by side text blocks and set the flow to open so the text would automatically flow from the first to the This is a great feature of block. program. The horizontal the NM block at the top is a picture large containing block "pictures". The picture editor automatically generates one of two different size block letters when you hit that key. The size above is the smaller of the two. editor can be used to draw any picture freehand as well. included conversion program is that will allow you to The print SIGNSHOP pictures. program is a separate program that reads the block and contents data from tape/ disk and formats it to the printer. Text is printed first then you reinsert the paper to print any picture blocks. has alot of potential. Samples are included on the NM media and one company is already working on

This is an excellent program that furthur expands ADAM's utility for text work. This page was done with NM.

a series of predone pictures and

layouts.

The print ing on page 15 was all done with NEWSMAKER, on a dot matrix printer.

RATING - A

MICRO STUFFER 64K

This is a great little piece of hardware that can save you dot matrix printer owners alot of time!

Simply, it is a 64K memory box that you plug your printer cable into. It has a cable included that then plugs into your printer. When you go to print your document (from SMARTWriter , BASIC or any other software), the Micro Stuffer receives the print ouput as fast as the computer can send it, stores it in the 64K of memory and then feeds it to the printer. This frees up your computer as soon as the output has been received by the Micro Stuffer, which is super fast. Hence, while the document is printing, you can go on to other work on the computer. Any printer is the slowest part of a computer system, do the mechanical movement required. Additionally, there is a REPEAT button that allows you to print another copy of what ever was last printed. This is geat for printing multiple originals in a fraction of the normal time. I highly recommend this device for every dot matrix printer ownwer, it saves you alot of time, especially when you're in a rush. RATING A+

PUBLIC DOMA IN GAME REVIEWS Bu J. Goebel

I'm sure that many of you have by now heard of the new PD games that we have gotten in. For those of you that don't remember, they are FALL GUY/VIDEO HUSTLER and YOLK'S ON YOU/MATH WIZ (two games on each tape/disk).

FALL GUY In this game you are Colt Seavers, bounty hunter/stuntman extrodinaire. The object of the game is to put the bad guys in jail. That is easier said than done! First you must find the bad guys, so how do you find them? Jump into your trusty pick-up and find them! That too is easier said than done. You must avoid driving over the speed limit in some areas and in others, you have to speed to make it past the obstacles. Driving does not require the Coleco driving module, just the joystick. Not any ordinary obstacles mind you, but stuntman obstacles such as ramps and flaming roads!

Once you find the badguys, the screen changes from the highway to the inside of a building. Here you enter from the top, and must make your way to the bottom of the building to arrest the criminal. First you must jump over some obstacles, such as crates. The trick here is to land on your feet. What happens next is beyond me. I have not made it that far yet. Overall, it is a very well-dene, if not interesting game. The graphics on the driving sequence are adequate, but the graphics in the warehouse ar pretty darn good.

VIDEO HUSTLER

The second game on the first tape is called Video Hustler. It is a pool game (olympic sized? No billiards! Pardon the joke.) and is one of the best PD games strategywise there is. The object of the game is to sink all 6 balls into the pockets. The different difficulty levels make the oue ball have more effect on what it hits. You can also control the speed of your shots. Ball action is excellent and very true to life, the sounds (what little there are) are interesting. I also like the accuracy of the controls. When playing this game, take the time to think out your next move. This is one very relaxing game.

MATH WIZ

This is a very well done educational game. game casts you as a lizard of some sort who has to make mathematical equations to get the entrance to the next room. There is also a little wizard who tries to hamper you in your goal. Even though he is unable to move objects, he can (pardon me while I look for a suitable word...Ahh, just the word!) eliminate one of your lives. This game has everything from simple addition problems to basic algebra based on the age entered for each player. The graphics are very interesting, most notably the elevator and the spinning cubes. The sounds are some of the best ones I've heard yet. I play this one over and over sometimes. This is a very addictive game, but a very educational one as well. All age groups can play, which is another advantage.

YOLK'S ON YOU

Just what I need, another comedian. But actually, this is a whimsical little game in which Papa Rooster must attempt to push Mrs. Hen's eggs into the hen house. It gets harder. The eggs hatch, and the resulting chicks move around, Mr. Hawk tries to steal your eggs and chicks, Mr. Wolf tries to burrow under the fence to steal the eggs, and Mr. Mole creates holes in the ground which little chicks can fall into. The graphics are good and the gameplay ok for kids, but it is a little tough for the young ones.

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