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Issue #53 May, 1989  
Editor: Lyle Marschand  
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Single Copy: \$3.00  
Annual: (U.S. 3rd class) \$19.00  
(U.S. 1st Class/Canada) \$26.00

Continuing our study of Romans Chapter 12...

I appeal to you therefore, brethren, by the mercies of God, to present your bodies as a living sacrifice, holy and acceptable to God, which is your spiritual worship. <sup>2</sup> Do not be conformed to this world but be transformed by the renewal of your mind, that you may prove what is the will of God, what is good and acceptable and perfect.

<sup>3</sup> For by the grace given to me, I bid every one among you not to think of himself more highly that he ought to think, but to think with sober judgment, each according to the measure of faith which God has assigned him.

<sup>4</sup> For as in one body we have many members, and all the members do not have the same function, <sup>5</sup> so we, though many, are one body in Christ, and individually members one of another. <sup>6</sup> Having gifts that differ according to the grace given to us, let us use them: if prophecy, in proportion to our faith; <sup>7</sup> if service, in our serving; he who teaches, in his teaching; <sup>8</sup> he who exhorts, in his exhortation; he who contributes, in liberality; he who gives aid, with zeal; he who does acts of mercy, with cheerfulness.

<sup>9</sup> Let love be genuine; hate what is evil, hold fast to what is good; <sup>10</sup> love one another with brotherly affection; outdo one another in showing honor. <sup>11</sup> Never flag in zeal, be aglow with the Spirit, serve the Lord. <sup>12</sup> Rejoice in your hope, be patient in tribulation, be constant in prayer. <sup>13</sup> Contribute to the needs of the saints, practice hospitality.

<sup>14</sup> Bless those who persecute you; bless and do not curse them. <sup>15</sup> Rejoice with those who rejoice, weep with those who weep. <sup>16</sup> Live in harmony with one another; do not be haughty, but associate with the lowly; never be conceited. <sup>17</sup> Repay no one evil for evil, but take thought for what is noble in the sight of all. <sup>18</sup> If possible, so far as it depends upon you, live peaceably with all. <sup>19</sup> Beloved, never avenge yourselves, but leave it to the wrath of God; for it is written, "Vengeance is mine, I will repay, says the Lord." <sup>20</sup> "No, if your enemy is hungry, feed him; if he is thirsty, give him drink; for by so doing you will heap burning coals upon his head." <sup>21</sup> Do not be overcome by evil, but overcome evil with good.

In Chapter 12, Paul begins a discussion regarding instructions and guidelines for man's conduct in several different areas. He first covers the focal point

and basis for man's relationships and conduct in every area - his relationship to God.

Romans 12:1 is one of the most quoted verses because of the symbolism of its words. Paul uses the term "living sacrifice" to describe the total commitment needed when we give ourselves to God, the fact that we should worship God by presenting ourselves to Him as holy and acceptable. We can only become holy and acceptable to God by accepting forgiveness for our sins through the sacrifice of God's only Son Jesus.

Verse 2 gives all of mankind the instruction to not be "conformed to this world".

Paul is hitting the heart of the issue here. Even after we have received salvation through accepting Jesus as our Lord and Saviour, ***we must make a choice to follow the teachings of the Bible or the "worldly" system.***

The remaining verses of Chapter 12 describe God's instructions for relationships and conduct, most of which are in conflict with the "world's" system of acceptable conduct.

Read verses 3 through 21 above and you will see that these values have been laid aside for the most part, especially over the last several years. They are considered "corny" or old fashioned and not the way to succeed and get ahead in the world.

God's rules of operation are much different than those of the world. The world's rules seem to result in wars, turmoil, great human suffering and a general decline in the human condition.

Look around you and if you take an honest appraisal, the world is a mess. Our youth are being corrupted and in some cases destroyed by the lure of drugs and a lifestyle that leads to major problems. Many of us try to ignore the enormity of the problems in the world so we won't have to face the ugly truth of what is happening. However, it is happening and at an ever increasing rate.

What's the answer? Read above, Paul has some "different" rules of conduct that will yeild results we could never dream possible.

God bless you all.



# NIAD NEWS *and* UPDATES



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### CONTRIBUTORS:

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 Herrington, T. Fowler



## From The Editor's Desk:



I know that summer is close at hand because my son is counting the days until school is out and making excuses as to why he doesn't have to do homework !! He has big plans to work here at the store to make megabucks - boy is he in for a shock!!

Well, as usual there is lots of news and happenings in the world of ADAM. Rumors of the death of ADAM are highly exaggerated and just not true.

In this issue we have a review of SUPERBASIC +, which is probably the finest modified version of ADAM basic we have seen. It truly is a developer's dream and will make possible even more sophisticated ADAM software.

The MEGARAM memory expansion board is almost done and *the price has dropped* !! Walter's Software, Pitman Software, MMSG and T. Clary all have new products under development. Reconditioned complete ADAM systems are now available at fantastic prices, an 800 toll free ADAM BBS is up and running and plans are being made for an ADAM convention!!

**Yes, ADAM is very alive  
 and well in 1989.**

Long time ADAM supporter and MOAUG editor, Pat Herrington has **actually seen GODOS run !!**

Her letter is on page 5 and gives some good insight into this mysterious product and where it stands. Although I think she is overly optimistic about a late May/89 release date, it does seem that GODOS and GOBASIC will be released in the next few months. I am very happy to hear this and can tell you that NIAD will support this product fully once we have an opportunity to see it and test it out.

Regarding the situation with Sol Swift and Digital Express, evidently Sol is trying to finish GODOS and get his newsletter (NIBBLE & BITS) back into production. A letter from Sol Swift, explaining the situation, was to have been released by now. NIAD has copies available if you send in a SASE.

We received many letters thanking us for the ADAM MAINTENANCE articles in the last 2 issues. Please write and give us any additional hints, fixes or ideas you have on using and maintaining the ADAM so we can share them with all members.

See our specials and new products this month for some great deals. See the Public Domain Workshop for a great new utility PD volume.

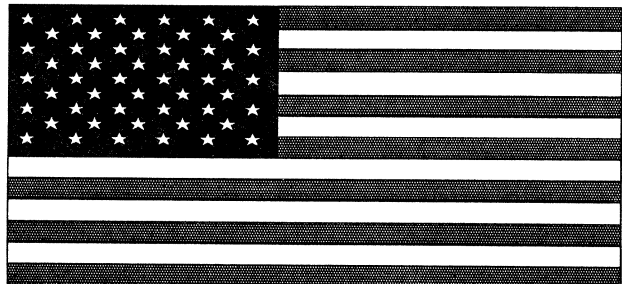
The Panasonic 1180/ 1191i printers have been getting rave reviews in several of the PC magazines, indicating that the features offered for the price are hard to beat ! See Terry Fowler's review in this issue.

Next month we'll have a review of a program from the author of SPEEDYWRITE, that will convert ADAM programs to IBM PC disk format !!

I want to thank Jim Notini of the NIAD staff, who has taken over the majority of the creation and production of the newsletter over the last two months. Jim has done a super job - let him know how you like his work.

The staff here at NIAD is here to help you better use your ADAM, figure out problems with software/ hardware and overall support you as a NIAD member. Write or call with your questions and problems and we'll do our best to help you. Read your past newsletters, there is a wealth of information in them that can help you as well.

Before you buy software, check out our reviews so you know what the program will do before you spend your money.





## Notice



⇨ E&T Software will now be making available an **Addressor Card** for their MegaRAM Expansion Card. This is great news for those ADAMites who don't own a parallel interface for hookup of a dot matrix printer and to complete the addressing of memory expanders larger than 64K. The Addressor Card will retail for \$19.95.

⇨ E&T Software (or should we say Hardware), is also working on adding a **battery version of their MegaRAM Board** which will allow the user to store their favorite programs on the ramdisk permanently (SmartBASIC programs, utilities, etc.)! The battery is said to be the size of a watch battery, very high quality and will last for up to 5 years. They will also offer an upgrade for those ADAM owners who purchase the MegaRAM Expansion Card without the battery option. *Projected completion is July 1.*

⇨ We have now added the MegaRAM Expansion Card to our product list. The board is the size of a 64K Memory Expander and comes with 4 sockets for the chips (memory modules), one of which is already used for 256K of memory. See the product reviews for more details.

⇨ Steve Pitman, game programmer extraordinary, will be releasing his fourth package, titled **DINOSAUR DIG**, in the coming months. Sorry, no details yet. Here are some secrets for ADAM BOMB: *Secret #1: Skipping Screens* - On any screen, bomb a diamond twice. You will get both bombs back, 1000 points and after you clear the current screen, you will skip the next two. *Secret #2: Extra Men* - When you see the title screen (where it says 'PRESS FIRE BUTTON TO START'), type the word 'adam' in lowercase and you will start the game with 10 extra men.

⇨ ADAMLink III by Tom Clary has been one of the best selling products for ADAM since it was released. Now **ADAMLink III+** is nearing completion. Some of the added features will be: 80 Column support for those with an 80 Column Card, external 1200 and 2400 baud support, more advanced XMODEM support, phone number library, etc. Watch for news on this great new EOS telecommunications package in the coming months.

⇨ Walters Software Co. has announced a new program called **'The Label Works.'** The program is modeled after the many label utilities available on the IBM PC and will use SmartKEYS. The Label Works, for use with a dot matrix printer, will allow for the importing of clip-art and font sets to be used in the label. There will also be available a 200 label database with the ability to mark certain labels for printout or mark all. Watch for a review in an upcoming issue.

⇨ Walters Software Co. also has tentative plans of making all three SmartDSK programs they have produced available on a cartridge. If you would like to see this become available, please write to the Walters and let them know that there is interest for such a product.

⇨ Details on the *ADAM Convention* are being finalized by the Metro Orlando AUG. The convention will be held from October 7-10 in Orlando, Florida. If you are interested in attending please write to Monte Neece for further details (enclose a SASE for a reply) at the following address: 1048 Winter Springs Blvd. - Winter Springs, FL 32708.

⇨ To any members who have ordered the Magnavox 40 or 80 Column monitors in the past 2 months, we apologize for the delay in shipping. Magnavox enhanced the monitors and our supplier was out of stock until these new modules were released. **Good news though, NO PRICE INCREASE!**

⇨ We have also added the new Panasonic printers to our product list. The 1180 & 1191 are fully compatible with the 1080i & 1091i and offer a multitude of options not found on the earlier modules. See the review by Terry Fowler on the 1180.

⇨ **MORE GREAT NEWS!** We now have an ample supply of Complete ADAM Systems and also Expansion Module #3 ADAM Systems for sale. These systems include everything that was included when the ADAM was released back in '84 including the original boxes. Price for the Complete ADAM System is \$250 and includes shipping and handling charges. The Expansion Module #3 ADAM System, including shipping and handling, retails for \$200. If you are looking for a second ADAM System for backup or for a friend, this is the time to get one.

⇨ We have reviews of some exciting new products for use with our little orphaned ADAM including SuperBASIC PLUS by TCR Software, Disk Doctor and File Indexer by AJM Software, MegaRAM Expansion Card by E&T Software and the new Panasonic 1180 Dot Matrix Printer.

⇨ Check the New Products/Specials section for some great deals on Buck Rodgers (Right Directory) DDP's, New Tan Hand Controllers, New ADAM Keyboards and also great prices on three new software packages; SuperBASIC PLUS, EOS File Indexer and Disk Doctor!



⇨ Don't forget that we are offering a free public domain volume/program for any articles (written by yourself) contributed to the newsletter. Send in the article on ddp or disk and we will return the media to you with your public domain selection. Remember, this is as much your newsletter as it is ours.

⇨ NIAD accepts advertising for ADAM products and services. Cost is **\$50 for a half page ad** and **\$75 for a full page ad** for one month. Contact us for multi-issue discounts. Well over a thousand ADAM owners receive our newsletter each month and many more get to see it second hand, so

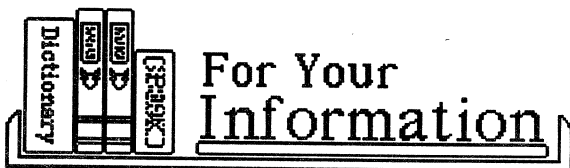
don't pass up the opportunity to get your product/service into the spotlight.

☞ NIAD welcomes software developers to submit their programs for us to evaluate for possible commercial sale. Send in your products and ideas for us to evaluation.

☞ Our Chicago Local Chapter meetings are a great way to learn more about our beloved ADAM. You have the opportunity to meet fellow ADAM owners, ask us questions and see live demonstrations of new products. We meet here at the store on the second Thursday of each month at 7:30 PM. We also have surprise specials on products.

Once again the summer months are upon us and we have ceased our monthly meetings for the months of June, July and August. The next meeting will be held on September 14th. Have a great summer!

**We have exercised due care in the preparation of this newsletter. No warranty expressed or implied with regard to the information contained herein is given, either by interpretation, use or misuse. The opinions expressed herein do not reflect those of the editor or staff.**



\* ADAM Disk Drives are becoming very scarce again, therefore we will be removing them from the Product List. If you are still in the market for a disk drive you may either contact American Design Co. at 1-800-524-0809 for an 160K Single-Sided Disk Drive for \$199.95 or check with us from time to time to see if we can get a hold of one for you. The 5 1/4 320K Double-Sided Disk Drive retails for \$259.95 and the 3 1/2 720K Quad-Sided Disk Drive retails for \$289.95. *This may be your last opportunity to get a disk drive so don't delay!*

\* Here is yet another new ADAM Vendor that has been listed in numerous ADAM publications: ADAM Software Consortium - c/o Dr. Henry Mullaney - 41 East Ridge Rd. - Merrimack, NH 03054 - (603) 424-1967. Enclose a SASE for a catalog of products and services.

\* **FINALLY!** There is an ADAM operated BBS up with an 800 number! The ADAM Connection has recently switched to the 800 number and has been in operation for the past couple of weeks. This is tremendous news for all modem owners since they no longer have to worry about long-distance charges. Due to the expense of maintaining the 800 number, Steve Major will be setting up a subscription in order to use his

BBS. The charge will be very minimal compared to the long-distance charges (\$5 a month for a 4 call limit per week along with other rates per the number of calls per week). Let's show Steve our appreciation and really support his BBS. The number is **1-800-282-8193** and if you are using ADAMLink software, leave the parameters at their default.

\* The **Image Scanner** is now progressing toward completion, but the major factor in it's release will be the response that E&T Software receives. Walters Software Co. will be writing the software for this product. We need an accurate count of those desiring to purchase the scanner so please write to E&T Software at 1010 Westminster - Garland, TX 75040 and include a SASE so that Ed Jenkins can contact you as soon as the scanner is available. For those who have written in to us about their desire to purchase this product when it is available, please write to E&T Software also.

\* Computer Shopper continues to carry columns by Paul Pappas and Faye Deere which have been very good reading (We would also like to thank Paul for mentioning NIAD in a past issue). If you haven't picked up a copy lately, check your local newsstands. We really appreciate their support for ADAM.

\* Here is another publication that also supports the ADAM and is operated by a Timex Sinclair User's Group. Their publication is split between the two orphaned computers: Sinclair Louisville User's Group - 4122 Wallingford Ln. -Louisville, KY 40218-2365.

\* Data Backup is still around and have a large quantity of Tractor Feeds still available for the ADAM Printer. We have received word that they will not be producing anymore tractor feeds after they are sold out of their current stock. So if you are in the market for one, **DON'T DELAY!** The Tractor Feed is retailing for around \$80. Contact: Data Backup - Box 335 - Iona, ID 83427 - (208) 523-2505.

Dear NIAD,



I still think the ADAM has the biggest value/price ratio of any computer on the market and unless your entering big time computing such as opening your own business, which would require more power/speed and greater software mobility, people are just plunking their money down the drain to fill a void called prestige.

I can get a big kick out of seeing how much computer power can be accomplished on our small computer.

As data processing supervisor for my company, I get occasionally teased and asked why I still have the "THING" as they call it. My answer to them is, what do "YOU" do with your computer that mine can't do? I rarely hear them state anything of great importance or need. It's a great ego buster when they hear that your computer costs between \$200-\$300 with a daisy wheel printer and that the software is around \$14-\$22.

Now, I am not trying to kid anybody and tell them that the ADAM is the best computer in the world because it is not. What I am saying is based on actual dollars spent and actual needs for computing. The ADAM wins hands down because it fills even more than the average needs.

You should all be proud to own one. Please utilize it to it's full potential and don't be belittled or goaded into buying something that's not going to do anymore than the ADAM could do (**EXCEPT MAKE YOU BROKE PAYING FOR SOFTWARE**) just because everyone else owns one. Be your own person. Decide what your needs are. Don't just follow the crowd because everyone else does it or has it.

I just thought you might like to get my insight. Once again, thanks for your support and your contribution to this small, but versatile computer.

Best regards to all the staff at NIAD.  
Jack Scatena



Dear NIAD,

Just received the most recent issue of NIAD! WOW! Super work. Your ADAM Maintenance column is a veritable jewel. Much improvement overall in the past few years since I have been a member of NIAD. Keep up the good work.

By the way, one thing that wasn't brought out clearly in your Maintenance column: if someone has a problem with their ADAM and there's work/data in the CPU, have them try to print it out before they turn the thing off. Also advise them to try to SAVE what they have before they turn the machine off. They've nothing to lose...and it might work. The other day I had just finished typing a long letter on my ADAM at work when someone flipped the switch to make a fresh pot of coffee. The resultant power surge (line drop, whatever) left my screen in a disheveled checkerboard pattern. I was about to turn it off and start all over, but decided to try to print it first. It worked! I then saved it to tape and was able to recall it off the file...letter perfect! Of course, I was lucky enough to know what SmartKEYS to push. But, even if they have to go back to the book, have them try to save the work first.

Another thing that wasn't mentioned, but has been in the newsletter before is that when the printer loses track of the left hand margin, look at the underlining. If the first word in a new line is underlined, it'll sometimes throw the printer into a tizzy, too; so it may not be ALL due to overheating.

Finally, some time back I wrote NIAD and asked about underlining on the ADAM printer using SpeedyWrite V2. I was told that it couldn't be done. Not easily discouraged, I tackled it again. You can do underlining, BOLD, and automatic centering if you hit CONTROL-v and then type in the codes...all on the ADAM printer! The codes are invisible in SpeedyWrite V2, but do appear in SmartWRITER. So that's a drawback of sorts.

R.D. Symonds, MD

Dear NIAD,

To continue the saga of my difficulties with the SpeedyWrite V2.0 and SW Spell programs. I have determined that if I first load any program which sets up a RAMDISK, then the Speedy programs will load and work.

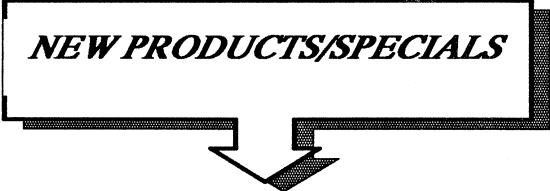
On the other hand, if after turning on my ADAM, I attempt to load the SW Spell disk, I invariably get the "BAD DISK" report.

I was speaking the other day with Terry Fowler of AIM and he confirmed that my difficulties were not unusual and that my solution had been discovered by others. Terry stated that the problem actually is with the printer interface card, but not with every card. This fact has made it difficult to pin down the actual cause and it's correction. It may be related to the particular manufacturer and his circuit.

In any event, using a RAMDISK set-up program first is a positive fix insofar as being able to load the spelling checker. I am somewhat surprised that, if the problem is as common as Terry has indicated, that some notice of it has not (to my knowledge), appeared in the many SpeedyWrite Workshop articles which have been printed in the newsletters I receive. (I subscribe to both NIAD and AIM.)

Obviously, you were not aware of this problem and although you were not able to provide me with a solution, you certainly tried and in my book get an "A" for the effort.

Terry Keenan



- \* Panasonic 1180 Dot Matrix Printer - \$229.95
- \* Panasonic 1180 with Parallel Interface & Cable - \$269.95
- \* Panasonic 1191 Dot Matrix Printer - \$289.95
- \* Panasonic 1191 with Parallel Interface & Cable - \$289.95
- \* 64K Memory Expander with chips - \$49.95
- \* MegaRAM Expansion Card (256K on board-1 SIP) - \$169.95
- \* SIP Memory Module for MegaRAM Exp. Card (1 SIP gives you an additional 256K of memory) - \$79.95
- \* MegaRAM Addressor Card - \$19.95
- \* Complete ADAM System - \$250 (includes shipping)
- \* Expansion Module #3 ADAM System with S/H - \$200.00
- \* New Tan Coleco Hand Controller - \$5
- \* 10 Buck Rodgers (Right Directory) DDP's - \$10
- \* New ADAM Keyboards - \$10.95

**SOFTWARE**

- \* SpeedyWRITE V2.0 & SpeedyWRITE SPELL - \$57.95
- \* Disk Doctor by AJM Software - \$9.95
- \* EOS File Indexer by AJM Software - \$9.95
- \* SuperBASIC PLUS by TCR Software - \$9.95
- \* Formatter II by Walters Software Co. - \$12.95
- \* Addictus by Reedy Software - \$15.95

*I Have Seen The Future  
And The Future Is GoDOS!*

*By Pat Herrington  
Editor of the MOAUG Newsletter*

On April 22, 1989, at a gathering of the ADAM clan hosted by Joe Quinn and the Gulf Coast ADAM Users in Mobile, Alabama, I saw with my own eyes that GoDOS not only exists, but it exceeds expectations.

GoDOS is a machine-language operating system for ADAM. As such, it is similar to the EOS that is built into ADAM, the modified DOS that comes with a disk drive, and CP/M 2.2 that was developed by Digital Research. But GoDOS is a vast improvement on any of those operating systems. It makes full use of all the latent capabilities of ADAM that could formerly be accessed only by convoluted programming routines or graphics languages such as LOGO. Built into GoDOS are features formerly available on no other ADAM system, such as icons and pop-up menus, accessible through the keyboard OR by using the game controller as a "mouse". GoDOS stands for "Graphics Oriented Disk Operating System", and it unleashes ALL of ADAM's music and graphics capabilities. Don't let the word "disk" fool you... GoDOS operates beautifully with only tape drives. You do, however, need at least a 64K Memory Expander to use it.

GoDOS is, in fact, complete and ready to go. But it will be awhile longer before it is released. When you find out why, I think you will agree that it's going to be worth the wait. The reason is that it's creator, Solomon Swift, felt that since he had taken much longer than expected to finish GoDOS, his customers deserved something special. In it's original form, GoDOS was simply an operating system, with no immediate applications for anyone who was not a machine language programmer. Sol did not want us, after waiting so long, to receive a package that could not be used until we had application programs. So, he developed GoBASIC to go with it. GoBASIC is complete in concept, but it will take some time (Sol estimates about a week) to be completely integrated with GoDOS. And because GoBASIC is going to be part of the GoDOS package, Sol needed to change most of the addresses in GoDOS so that BOTH GoDOS AND GoBASIC CAN BE IN MEMORY AT THE SAME TIME. He is working on those addresses as fast as he can.

The final obstacle will be to complete a manual for GoBASIC. Tony Patterson is helping him to write the manual. Personally, I believe a good, clear manual is going to be crucial to your enjoyment of GoBASIC, so this is a VERY important step. Fortunately, Sol is a skilled writer whose documentation has always been excellent. With Tony to help him, we can expect the manual to be pretty good. But, it will probably add another week to the completion of the package. We are looking at about three weeks... probably the end of May. **EVERY COMPONENT OF THE PACKAGE IS READY TO BE PUT INTO FINAL FORM.** All we are waiting for is for everything to be put together and polished. These final stages are critically important and cannot be rushed too much if the package is to be of maximum value

and easy to understand. Tony Patterson (whom most of you know as a superb artist and creator of Temple of the Snow Dragon) is also developing demo programs that illustrate various animation features of GoDOS and GoBASIC. We previewed two impressive displays in Mobile.

At this point, let's take a closer look at GoBASIC. Your first question will no doubt be, "Is it compatible with SmartBASIC?" In a word, NO. The addresses will all be entirely different. But you can adapt your BASIC programs for use with GoBASIC. And it will be much easier than you think, because **YOU WILL NOT HAVE TO REMEMBER ANY PEEKS OR POKES.** All the functions that you previously could access only by poking different values into specific addresses are now instantly available to you as commands. There are more than three times as many "English commands" in GoBASIC as in SmartBASIC... 330 in all! For example, if you wanted to change the shape of your cursor, you used to have to poke the ASCII value into a certain address. Now, you only have to type in "cursor =" and the ASCII value. There is a command for underlining text, and there are seven built-in character sets (fonts) that you can access by merely typing in the command "textfont" and a number from 1 to 7. The seventh of these fonts is a user-defined set, which means you can use any of the myriad of font sets that were developed for PowerPAINT. Most such sets are already in the public domain... widely available and very inexpensive. Or you design your own.

There are two commands for "catalog". You can display the standard catalog or you can have your catalog displayed in a double row. There are built-in commands for switching back and forth between the options. You can show deleted files, and you can recover deleted files. You can set multiple user-defined pop-up windows wherever you like on the screen, both for graphics and for text. You can access up to SIX DISK DRIVES, ramdisk, and even a HARD DISK DRIVE from within GoBASIC. You can alternate between 32 column text mode, 40 columns, and graphics, and you can use both graphics and text in all three modes. You can insert text anywhere on the screen, not just the bottom of the screen as in SmartBASIC. There are commands for drawing squares, rectangles and circles (filled or empty) and for erasing all those shapes. For example, you would enter the line [radius=50: circle 128,96] to draw a circle in the exact center of the screen, with a radius of 50 pixels. The same line, using the command "XCIRCLE" instead of "CIRCLE" would erase the circle. The effect on the screen would be that a circle would appear and then disappear.

If you are one of the many ADAM users who have enjoyed drawing those fabulous graphics in SmartLOGO, you will easily adapt to GoBASIC. If you are one of the many who have SmartLOGO, but have never used it much, you can preview the features of GoBASIC by dragging LOGO out and running the demo programs. LOGO has always been a favorite for music and graphics, but it runs much too slowly and takes up too much memory for most people, because it's a "structured interpreter" (doesn't use line numbers). GoBASIC will give you the same effects, but because it is still a line-numbered interpreter, it will take much less memory. Sprite animation is just as good as LOGO "turtle" animation, but faster. GoBASIC includes commands for flipping sprites

Continued on page 16...

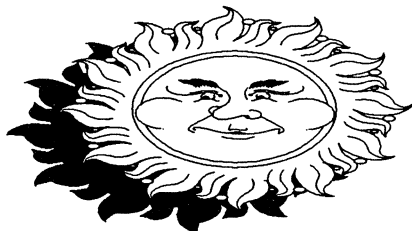


**ADAMCON '89 UPDATE**  
*by Pat Herrington*  
*Editor of the MOAUG Newsletter*



ADAMCON '89 is shaping up! Monte Neece is coordinating this project. He has come up with dates and a game plan. There are still details to be worked out, but it's looking good so far!

Early October was chosen as the ideal time to invite guests, for several reasons. First of all, we can usually expect some of the year's best weather in October. It shouldn't be too cold for the beach, nor too hot to stand in line at Disney, Sea World, or whatever attractions our guests may wish to visit. And October is as close as we get to an "off-season"; those lines should be shorter, there will be less crowding, and rates for hotels and car rental will be reasonable. Also, planning this far in advance will allow people to work the trip into their schedules (and budgets!) and will give us ample time to get it all organized.



Of course, there are drawbacks, too. Those who bring school-age children will have to weigh the consequences of taking them out of school

for a few days. (For some, this could be an incentive to do well in school during September!). Many schools will cooperate with parents who wish to take their children on an educational trip; a trip to Epcot usually falls into that category. We do want families to be able to come, and to have a good time while they're here, whether or not their into computers. Between the beaches and the attractions, that should work out well.

Among the people who have expressed an interest in attending are several other AUG members, vendors, newsletter editors, and people who are not really affiliated with any of the above, but want to meet other ADAMites. We have firm commitments from Sol Swift of DEI and Jim Notini of NIAD. We may even have guests from out of the country, if our Canadian correspondent Jim Clements gets his way! In fact, nearly everyone we've heard from is hoping to make it. This started out casually, but it's turning out to be a more interesting prospect each day. It DOES seem to be past time for all of us to finally meet each other. Long-distance sharing has worked to our advantage for years... Just try to imagine how much we have to talk about in person and how much fun we'll have, too!

***PRELIMINARY REPORT:***

**DATES:** October 7-10  
**COST ESTIMATE:** \$179.00 PP DBL  
**SPOUSE:** \$99.00  
**CHILD:** \$39.00

**INCLUDES:** 3 nights hotel/2 Breakfasts/1 Lunch/1 Dinner/ Meeting Room

Transfers not included. Suggest that attendees who are not driving share a rental car. We will arrange.

Those flying will receive a 5% discount off the lowest available airfare on American Airlines.

Special door prizes will be awarded. (We will contact all ADAM vendors and clubs for donations of merchandise, programs or services that will be given at a drawing at the closing dinner.) Special speakers and workshops will be featured at the sessions. Keynote speaker will be featured at lunch.

Free time will be scheduled for optional side trips. We will arrange hotel.

A deposit of \$50 per person will be due July 1; balance is due September 1. Monte's plans call for a reception Saturday evening, breakfasts both Sunday and Monday, lunch and dinner Monday. The closing dinner is presently scheduled for 7:00 -11:00 PM. Other meals are left open for individual and group arrangements at the discretion of the guests.

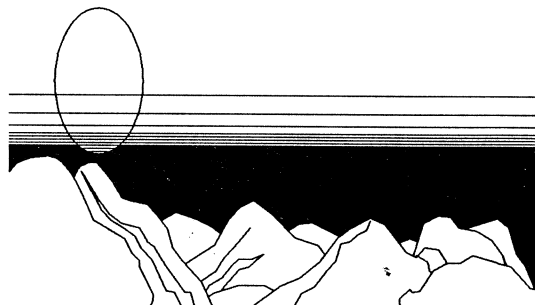
To fully take advantage of area attractions, attendees may wish to extend their visits for one or more days.

If you have comments or suggestions to offer, please contact:

**Monte Neece**  
**1048 Winter Springs Blvd.**  
**Winter Springs, FL 32708**  
**(407) 699-6887**

***DO NOT SEND MONEY AT THIS TIME!!***

We will be appointing committees at the May meeting to take care of details. We do not want deposits before then.



# BLASTS FROM THE PAST

Reprinted from U.K. Mini-Reviews public domain SmartFILER database compiled by the U.K. ADAM Subscribers in England with additions by Jim Notini. Also, check out the NIAD Product Review Book for complete reviews of over 100 software and hardware items (\$19.95) or the NIAD newsletter back issues.

**Item:** VideoTunes                      **Manufact:** FutureVision  
**Type:** Music                              **Price:** \$26.95 (D/DP)  
**Description:** Compose, play and save music to ddp or disk. Contains pre-composed music including an excellent Bach composition. Really excersises the sound capabilities od ADAM. One of the best 3rd party software developers program with tremendous graphics display.

**Item:** Fantasy Gamer                      **Manufact:** Martin Consulting  
**Type:** Game/Construction              **Price:** \$22.95 (D/DP)  
**Description:** Play two graphic adventures or create your own with Adventure Creator. Explains the operation of the parser and teaches the use of sprites to create animated graphics.

**Item:** SmartBASIC Bonanza **Manufact:** Martin Consulting  
**Type:** Various Basic                      **Price:** \$22.95 (D/DP)  
**Description:** 15 Basic programs including Othello, Disassembler, Mini-assembler, Filer, Database, Breakout, and Surprises. Great for the SmartBASIC beginner for learning programming.

**Item:** Softpack I V2.0                      **Manufact:** E&T Software  
**Type:** Home Business                      **Price:** \$18.95 (D/DP)  
**Description:** 4 home management menu driven programs. 3 are for checkbook handling. The other creates address files for printing labels and envelopes. Also supports dot-matrix printer or ADAM printer.

**Item:** LVAC Archives I **Manufact:** Las Vegas ADAM Club  
**Type:** Various Basic                      **Price:** \$9.95 (D/DP)  
**Description:** A unique pack of 10 basic programs from games to applications by the ADAM Club of Las Vegas.

**Item:** Reedy Software Library **Manufact:** Reedy Software  
**Type:** Various Basic                      **Price:** \$15.95 (D/DP)  
**Description:** Contains 12 SmartBASIC programs and subroutines including text adventure, low-res picture editor and much more.

**Item:** Business Pack V2.0                      **Manufact:** E&T Software  
**Type:** Business                              **Price:** \$18.95 (D/DP)  
**Description:** Contains 3 SmartBASIC programs designed for the small business. Two are for creating and printing address files. The other is for inventory control. Supports dot matrix or ADAM printer.

**Item:** Quickcopy V3.0                      **Manufact:** GJMG Enterprises  
**Type:** Utility Copier                      **Price:** \$15.95 (D/DP)  
**Description:** Written in machine language, therefor very fast and uses a 40K buffer or 104K with 64K Memory Expander causing less ware on tape and disk drives. Use Block Copy or File Copy. Now supports double-sided drives.

**Item:** Elect. Game Pack I & II              **Manufact:** Ape Software  
**Type:** Arcade Games                      **Price:** \$17.95 @ (D/DP)  
**Description:** 4 arcade games: VOL I - BACKGAMMON, MASTERMIND, 3D TIC-TAC-TOE and MINERS. VOL. II - CAR WARS (dodge'em), CRATER TAG (pac-man), SKY KING (shoot'em up) and SNAKEWEED. Both of these packs are a great addition to anyone's software library.

**Item:** Number Bumper                      **Manufact:** Sunrise Software  
**Type:** Educational/Action                      **Price:** \$15.95 (D/DP)  
**Description:** A rollicking good time for math beginners who wants to improve maths skills while utilizing their arcade reactions. For the whole family.

**Item:** Reedy Enter. Pack                      **Manufact:** Reedy Software  
**Type:** Arcade/Strategy                      **Price:** \$15.95 (D/DP)  
**Description:** 3 strategy oriented games which make good use of ADAM's graphics capabilities. Games included are CONNECT 4, BLOCKADE and SLIDE PUZZLE.

**Item:** Jeopardy Quest. Pack **Manufact:** Walters Software  
**Type:** Game Supplement                      **Price:** \$14.95 (D/DP)  
**Description:** Add more question to the original Jeopardy program questions. Great if you play Jeopardy a lot and have begun to come across the same questions.

**Item:** Family Feud Quest. Pack **Manufact:** Walters Software  
**Type:** Game Supplement                      **Price:** \$14.95 (D/DP)  
**Description:** Add more questions to the original Family Feud program questions. Great if you play Family Feud a lot and have begun to come across the same questions.

**Item:** Trivia Pack I                              **Manufact:** Mr. T Software  
**Type:** Game                                      **Price:** \$12.95 (D/DP)  
**Description:** 6 categories - Music & Stage, TV & Screen, Times & Events, Art-Literature and Science and Sports. Hit the wildcard to pass and the answer will be displayed. Great use of colors, ASCII graphics and sound. One of the best.

**Item:** Kids Trivia Pack I                      **Manufact:** Mr. T Software  
**Type:** Game                                      **Price:** \$12.95 (D/DP)  
**Description:** Basically the same program as above but, it is geared towards teens and young adults. Once again, great use of colors, graphics and sound.

**Item:** Backup 3.0                              **Manufact:** MMSG  
**Type:** Copier                                      **Price:** \$16.95 (D)  
**Description:** Fully supports systems with/without 64K expander. Tests memory internal or expansion. Formats disks, image copies any media and more.

**Item:** Pro Football                              **Manufact:** Murdock Games  
**Type:** Game                                      **Price:** \$18.95 (D/DP)  
**Description:** Strategy, simulation, graphics. All based on 1984's pro football numbers. 1 or 2 players or computer versus computer. Nice depiction of the football field with sprites to mark the ball position, 1st down markers and also fireworks when you score.



# P. D. WORKSHOP

## *ADAM UTILITIES*

This is a self-booting CP/M package on data pack or disk which does not require that the user has CP/M to utilize it's menu driven programs. Some of the programs, however, do require that you have at least a 64K Memory Expander (64K or larger). The opening MAIN MENU looks like this:

ZZ - Basic - 1	ZZ - Demo - 6
ZZ - Blank - 2	ZZ - Menut - 7
ZZ - Block - 3	ZZ - Music - 8
ZZ - Buck - 4	ZZ - Test - 9
ZZ - Burn - 5	

It is recommended that, if you have 2 data drive and you have these utilities on data pack, you load these from data drive 2. This is because the options 1,2 and 4 will automatically look for and write to a tape in data drive 1 and if the utility tape is in drive 1, you will wipe out the programs on it. This obviously does not matter if you load from disk drive. You may load from data drive 1 if you will not be using options 1,2 and 4. Here is what each option does for you. If you have 2 data drives, put the UTILITIES tape in data drive 2, pull reset and use keyboard to select:

(1) SmartBASIC Tape Restorer (requires extra 64K memory or more) - While the SmartBASIC restorer program is loading, put the tape you wish to restore in data drive 1 and provided this tape has no bad blocks, it will re-write SmartBASIC V1.0 onto the tape. Pull reset to get back to main menu.

(2) Blank Tape Restorer (requires extra 64K memory or more) -Same as for option (1) in that you must load MAIN MENU from data drive 2 except that all blocks will contain no data and the directory will be wiped clean. THIS DOES NOT PRODUCE AN ADAM TAPE FROM AN ORDINARY AUDIO TAPE.

(3) Disk Drive Burn-In - This is a disk drive head alignment utility which will prompt you for a block to search for on your disk. If it does not find that block, the test has failed and the head will have to be re-aligned. Even works with double-sided drives. Load the MAIN MENU from any drive. E exits to main menu.

(4) Buck Rodgers Tape Restorer (requires extra 64K memory or more) - This operates in the same manner as for options 1 and 2 and will re-write the Buck Rodgers game to your tape with a clean Hall of Fame.

(5) Tape Drive Burn-In (requires extra 64K memory or more) -Tests your tape drive's ability to locate end of tape blocks and some of the more extreme cases of tape search. Tape is also tested for bad blocks in those areas.

(6) Adam Demonstration - Introduces SmartWRITER, SmartLOGO and AdamCALC with some very clever graphics.

Other software titles are also mentioned. This will repeat in sequence and is the demo which shops used to attract customers to the features of the ADAM.

(7) Test Menu (requires extra 64K memory or more) - This tests the ADAM's electronics with the use of a menu which looks like this:

- 1) TEST EVERYTHING - Goes through tests 2 to 9 below
- 2) TEST HAND CONTROLLERS - Each number or symbol that is pressed is cancelled and disappears off the screen picture of the controller. The Super Action Controller is also supported. Pressing # goes back to MAIN MENU.
- 3) TEST PRINTER - Makes sure the ADAM can communicate with it's printer.
- 4) TEST VIDEO AND AUDIO - A graphic color bar screen will be displayed and a serious of tones will be heard if all is well.
- 5) TEST TAPE DRIVE 0 - For this you must have a tape drive in the first drive slot and the program will make sure ADAM can detect it and read from it.
- 6) TEST RAM - Tests the ADAM's internal RAM.
- 7) TEST ROM - Tests the part of memory which holds the operating system and SmartWRITER program.
- 8) TEST KEYBOARD - Test the keyboard output for faulty keys
- 9) TEST TAPE DRIVE 1 - Will test out your second tape drive which should have a tape already in it. Pressing # will bring up the MAIN MENU.

(8) MUSIC DEMONSTRATION - Use the hand controller to select one of 34 music themes from some of Coleco's best software game titles. For example, number 33 is Ravel's Bolero from Front Line's pause music.

(9) ADAM DIAGNOSTIC (requires extra 64K memory or more) -This tests the whole of the ADAM with some stunning graphics and is the same program as the public domain program.

I'd like to extend a warm thank you to Keith Marner for this public domain contribution with the printed documentation. Keith operates an ADAM User's Group in England and publishes a newsletter called "THE U.K. ADAM SUBSCRIBERS JOURNAL" bi-monthly which covers about 36 pages. See AUG REVIEWS article in April issue of NIAD for his address and other details.

## *RLE PICS VOL. #4*

The fourth volume of RLE picture files contains 15 RLE pictures with SmartBASIC V1.0 and also the RLE picture viewing program, CBpicFAST. There are some really tremendous RLE pictures on this volume which you can either view with the program CBpicFAST program or else if you own PowerPAINT by Digital Express, you can load these pictures files up in it, save them as SmartPAINT or PowerPAINT format pictures, print them out and even edit them. Once in SmartPAINT format, you can even load them with pix.mgr and save them as an HGR picture file.

# SMARTBASIC WORKSHOP

*BASIC PROGRAMMING*  
By L.C. AUSTILL

## *Chapter 10*

The last subject that will be covered in this series is random numbers. In dealing with this subject, once again, arrays will be utilized to cast a die or so and shuffle and deal some cards.

RND is the BASIC command for random number generation. Unfortunately, they are not really as random as they might seem. The numbers that are generated follow a pattern, but can not be detected. The trick in programming is to start the series to be used at a different point everytime.

The command RND results in a number being generated between 0 (which it can be) and 1.0 (which it can not be). The starting point is controlled by the number inside the parenthesis of the command. To demonstrate, type the following program.

```
10 for i = 1 to 5
20 ? rnd(0)
30 next
```

Run it! How did it work? Did the same number appear? RUN it again -- same results. Why? The 0 inside the parenthesis tells the computer to always return the same number. This is useful when debugging a program, but not when playing a game!

List 20 and replace the 0 with any positive number. Try 5, now run. This time different numbers appear. RUN again. The same series of numbers appear. Try changing the 5 to some other positive number. Same results again. That wouldn't be much fun if a game was being played, at least the second time that it was played.

Change the program and put in a "seed" number which is a number that can be input when requested. The number will then be "seeded" in as a negative number. Add the following steps to the above program:

```
3 INPUT "ENTER any number 1 to 5000 "; s
5 x = rnd(-s)
```

Make sure that there is a positive number other than 0 in the RND command of statement 20. Now RUN several times using a different seed each time.

There are some other programs that give a random seed. There is one that is based on PEEKing an address in RAM which is steadily changing. There is another in ADAM's COMPANION that makes use of one of the game controllers. So far, numbers between 0 and 1 can be gotten, but those really aren't much good either. More practice is needed. To simulate casting a die, expect to get whole numbers from one to six. Do that with the random number generator by using a statement that reads:  $x = \text{INT}(\text{RND}(1)*6) + 1$

RND(1) generates a number between 0 and .99999999. If that number is multiplied by 6 then there is a number from 0 to 5.9999999. The command INT yields the whole number that is inside the parenthesis. In this program it would be something from 0 to 5. But if 1 to 6 -- was desired add one to the result.

Make more changes to the program and see what results:

```
10 ADD: 7 speed = 50
20 CHANGE 10 to: 10 FOR i = 1 to 100
30 CHANGE 20 to: 20 ? int(rnd(5)*6) + 1
40 ADD: 40 Speed = 255
50 Now RUN.
```

There is a range of numbers between 1 and 6. Are they distributed satisfactorily for purposes of playing games, or should the bet be on a six or some other number? Probabilities and statistics will tell that seldom can a die be cast 12 times and get 2 of each number. In fact, there is an acceptable range of deviation from the ideal. Let's get a feel for what the computer does by making it cast the die over 2000 times in lots of 600 each time and accumulate how the numbers come up. This is the type of thing at which a computer shines.

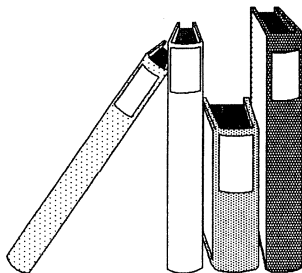
What we are going to do is to cast the die 600 times, keeping track how many times each number comes up. We will then store those numbers in column 1 of an array. We will go another 600 times adding to the accumulated totals for each number and store those totals in column 2 etc., until we have four columns. We will then print out to numbers so we can see if there is a pattern. Start a new program:

```
10 dim n(6), r(6,4)
20 INPUT$ "seed 1 to 5000? "; s
30 x = rnd(-s)
40 for i = 1 to 4
50 for j = 1 to 600
70 x = int(rnd(5)*6)+1
80 n(x) = n(x) + 1
90 ? i; " "; j; " "; x
100 next j
105 ? chr$(7): ? chr$(7)
110 for k = 1 to 6: r(k,i) = n(k): next
120 next i
130 home: tb = 0
140 for i = 1 to 6
150 ? tab(tb); i; : tb = tb + 5
```

```

⇨ 160 for j = 1 to 4
⇨ 170 ? tab (tb); r (i,j);: tb = tb +5: next: tb = 0 : ?
⇨ 180 next i
    
```

RUN this program. You should expect to see the numbers in each column roughly 100 \* column number. While they are not exact, they are close and you can see them shift during the run. There are streaks, but no particular favoritism. Try it several times.



You now have the stage set to cast dice for number games. How about dealing cards. It would be easy enough to

change the six in the program for dice to a thirteen and use it for cards where the one is an ace and the 13 a king, or any other way you wanted to do it. There is a problem with that -there are only four aces in a deck, etc. When four of them have come up, there can be no more until you shuffle again. We can even control the suits if we wish.

The principle we will use in this program is to generate two numbers. The first will be between 1 and 13 and the other between 1 and 4. The first will represent the denomination and the second the suit. We will have two dictionary arrays for our definitions, a deck array to deal the cards into, and an array to check if the card has been dealt. Sound complicated? Not really. Try it. Type the following program:

```

⇨ 10 REM deal the cards - 1 deck
⇨ 15 INPUT "seed no 1 to 5000 ? ";s
⇨ 17 x = rnd(-s)
⇨ 20 dim deck(52,2), suit$(4), card$(13), check (13,4)
⇨ 30 DATA S, H, D, C
⇨ 40 DATA " A", " 2", " 3", " 4", " 5", " 6", " 7", " 8", " 9",
"10", " J", " Q", " K"
⇨ 50 for i = 1 to 4: READ suit$(i): next
⇨ 60 for i = 1 to 13: READ card$(i): NEXT
⇨ 70 for i = 1 to 13: for j = 1 to 4: check(i,j) = 0: NEXT:
NEXT :REM make all elements of check 0
⇨ 75 HOME: ? "Pardon me, I'm shuffling!"
⇨ 80 for i = 1 to 52
⇨ 90 a = int(rnd(5)*13) + 1: b = int(rnd(5)*4) + 1
⇨ 100 if check (a,b) = 1 then goto 90
⇨ 110 check(a,b) = 1: deck (i, 1) = a: deck (i,2) = b
⇨ 120 next i
⇨ 130 home
⇨ 140 REM deal out four hands
⇨ 150 for i = 0 to 12: for j = 1 to 4
⇨ 160 ? card$(deck (i*4+j,1)); suit$(deck(i*4+j,2)); " ";
⇨ 170 next j
⇨ 180 ? : next i
⇨ 190 ? :? "Do you want another - y/n?": get q$
⇨ 200 if q$ = "y" then goto 70
⇨ 210 END
    
```

Study the program. Save it before RUNNING it. It would be a shame to lose it and have to type it again.

How does it work? First it loads some definitions of the card and suit names into arrays. Then it sets all of the elements of check array to 0. Then a random number, 1 to 13, representing the denomination of the card is generated and is followed by the generation of a suit number. It then looks at check array to see if the element represented by the denomination row and the suit column is 1. If it is, that means that the card has already been put in the deck array so it returns and gets another set of numbers.

If the card is not yet in the deck array, it changes the check element from zero to one and then stores the numbers in the deck array. After all 52 positions in the deck are filled, it deals out the cards in four hands. The expression of  $i*4+j$  where  $i$  ranges from zero to 12 and  $j$  ranges from 1 to 4 will generate all the numbers from one to 52. Think about it and you will decide it is true.

Have fun casting dice and dealing cards. You now can write a program to play 21 or shoot craps, or about anything else.



continued from P.D. Workshop...

### *Australian SmartBASIC*

A self-booting program that includes permanent SmartKEY functions displayed at the top of the text screen. The catalog, run, list, text, Control-S, and Control-C SmartKeys represent an interesting addition to the programming language for hackers and programmers in basic alike.

In addition, the program contains a doc file on home-made 64K Memory Expanders. No gaurantees as I have not tried it, but it should be of interest to the do-it-yourself ADAMites. (NIAD does not recommend that you do this).

Another interesting program is superbrat for read, list, edit, write and copy. It essentially allows users to recover files accidentally deleted or faulty tapes that refuse to be read using normal load commands. Great for recovering text, LOGO, AdamCALC or SmartFILER files. In addition, this program allows the user to compress "active" files, and to copy from the first block to the last block in order to ensure files to be read aren't overwritten.

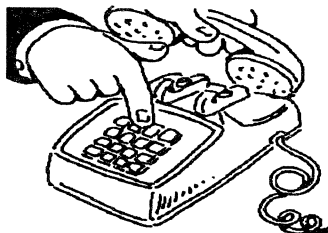
The Patcher program allows the owner of CopyCart+ V1.0 to patch their cartridge ddp or disk so that the larger Coleco cartridges can be copied correctly onto a ddp/disk. This patch also changes the selection process from keyboard to joystick.

In addition, a list of available software through 1987 presents information for the curious as to the state of affair then and the great additions since.

# USED / SWAP CORNER

*NIAD will be selling used items that we have purchased from ADAM owners. Additionally, members may send in lists of items they want to sell or trade with other members.*

We have a few of each item available, we will have to restrict orders on any of the products listed below to phone orders (first call, first serve). If we do take mail orders, it would become a terrible mess. For example, we might receive two orders on the same day for the same product and only have one in stock. So you see that it would not be fair for the person that we don't sell the product to. So please, as they say on the commercial: **PHONE FIRST!** If we do receive any orders through the mail, we will promptly return your order.



## CARTRIDGES

Brain Strainers	\$10
Campaign '84	\$10
Fortune Builder	\$10
Fraction Fever	\$8
Jukebox	\$10
Logic Levels	\$8
Super Action Baseball	\$10

### FLASH! FLASH! FLASH! FLASH!

If you have anything for sale (software, hardware or supplies, etc.), send in a list of what you are selling and the prices you are asking and we will list it in this column for you at no charge. Please do not send items into us without confirming with us first.

## SOFTWARE

32 Basic Programs w/ Book	\$10
Best of Broderbund	\$10
Flashcard Maker	\$8
Flash Facts: Flashbacks	\$6
Flash Facts: Trivia	\$6
Packcopy	\$6
Recipe Filer	\$7
SmartLETTERS & FORMS	\$8
Strategy Strain (DISK)	\$8

## HARDWARE

Panasonic 1091i Dot Matrix	\$139.95
Tan Joysticks	\$3
Keyboard Attachment w/ Tan Joystick	\$6
Keyboard Attachment	\$3
Keyboards	\$10
ADAMnet Cable (Coiled)	\$1
Magnavox 80 Column Monochrome Monitor	\$75
ADAM Daisy Wheel Printer with Tractor Feed	\$105
Address Book w/ AutoDialer	\$20
Roller Controller w/ Slither without Power Adapter	\$30
Atari Disk Drive Dust Cover Fits ADAM Drive	\$3
Exp. Mod. #3 Monitor Kit	\$20
TV/Game A-B Switch-Cable	\$3

## ATARI 2600 CARTS

Asteroids	\$5
Cosmic Ark	\$5
Defender	\$5
Demon Attack	\$5
Empire Strikes Back	\$5
Haunted House	\$5
Riddle of the Sphinx	\$5
Spiderman	\$5
Star Raiders w/Keypad	\$10
Venture	\$5
Yar's Revenge	\$5
Warlords	\$5
Spitfire Attack	\$5
Missile Command	\$5
TacScan	\$5
Kaboom!*	\$5

\*requires Paddle Controllers

## FOR SALE

\* Brand new 320K ADAM Disk Drive (Orphanware). All instructions and

software included in original box. \$275 U.S. (Shipping and insurance to Canada or U.S. included). Contact: Dave McIntosh, 7 Monsarrat Cres., London, ONT, CAN N5Y 4Y7, (519) 679-0578.

\* New ADAM tan colored game controllers \$8, 64K Memory Expander \$48, Optional Power Supply with Cover \$30. I will ship free to you, send money order to: Bob Kologe, 56 Woodruff Ave., Thomaston, CT 06787, (203) 283-9631.

\* Complete ADAM System with Dust Covers, Books and many Coleco Software and Cartridge titles. Contact: Norman L. Schickedanz, 142 Linden, Elmhurst, IL 60126, (312) 834-6250.

\* Complete ADAM Computer System, includes data drive, keyboard, printer, extra daisy wheels and lots of software. Asking \$150.00. Contact: Sandy Mattingly, RR 3 Box 287, Bloomington, IL 61704, (309) 828-5809.

\* 2 160K Disk Drives-\$209 @, Cosmic Avenger, Turbo, Venture-&8 @, many Atari 2600 carts-\$5 @, Expansion Mod. #2 Driving Module-\$35, Expansion Module #3 (R80) with Colecovision and printer, 2 tape drives, modem and software for \$200. Contact: Dan Pease, 8138 Honeysuckle Lake Dr., No Charleston SC 29240.

\* Panasonic 1080i in excellent shape, with original box and instructions. Two extra ribbons, ADAMCalc Patch, ADAMLink Patch, Disk Manager Patch and 3 volumes of PD graphic files. Asking \$150. Contact: John Silva, 69 Sycamore Street, New Bedford, MA 02740-5361, (508) 997-8065.

\* ADAM Computer (R80) w/ covered power supply, Seikosha 180AI dot matrix printer, parallel interface w/ cable, software & manuals for SmartBASIC, LOGO, ADAMCalc, CP/M 2.2, SmartWRITER and Buck Rodgers. \$300.00. Contact: Bob Slopsema, 1815 Camille S.E., Kentwood, MI 49546, (616) 949-9461.



# REVIEWS



***ADAM Memory Expander  
by E&T Software  
Review by James N. Walters***

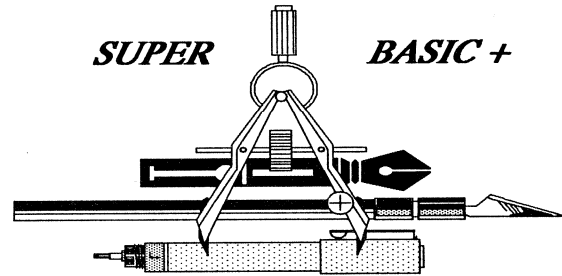
I was really surprised when I received this new ADAM memory expander. It is about the size of the ADAM 64K memory expander, making it very easy to install. The board is very professionally done and uses high quality parts. Unlike Orphanware's, this board uses state of the art (sips). These are little plug in boards that contain 256K of memory. The expander contains four sockets to plug four memory sips into, giving you 1024K of memory. With one sip the expander would contain 256K of memory, add one more and your expander will double to 512K, three makes 768K and four gives you a full blown 1024K or one meg expander. It is also compatible with Orphanware's addressor board and PIA2 and also the new parallel interfaces (an addressor card will be made available for those who don't wish to buy a parallel interface to complete the addressing).

To test this board, I first booted SmartDSK III and SmartBASIC V1.1. Cataloging D7 displayed 1006 blocks free. I then filled up most of the expander by BSAVING 15 files, (BSAVE test1,a0,165000). Using MANAGER, I transferred the SmartDSK utilities to the expander. Then I used the utilities to examine the expander, loading blocks, coping files, purging etc. It passed with flying colors. I then booted a special test program to check every memory location of the expander. This takes several hours, but again it passed. Next I booted RamBOOT with SmartBASIC V1.0 & V2.0, ADAMCALC and SmartWRITER. For about an hour I jumped between the four programs loading files etc. I then decided this expander was a real winner.

The greatest advantage with this expander is the size and the ability to expand to 1024K. The sips are also cheaper than individual chips, this is great news for ADAMites waiting for the price of memory chips to come down. Another plus is the ability to copy complete disks or data packs to the SmartDSK ramdisk and copy them back to another disk or data pack. This saves wear and tear on a drive and is also the fastest copy program to my knowledge. Also, with just two sips, (512K), you can have a much larger workspace with PowerPAINT and a 40,000+ word spelling checker with SpellingAID.

If you are in the market for a larger ADAM memory expander, be sure to check this one out.

\*\*\* A+ \*\*\*



***BY TCR SOFTWARE  
Reviewed by Jim Notini***

Yes, yet another enhanced version of SmartBASIC V1.0, but where all the other enhancements left something to be desired, SUPER BASIC + (SB+) excels. SB+ is 100% compatible with the following ADAM programs: SmartBASIC V1.0, SmartWRITER, ADAM EOS (for machine language programming), SmartLOGO (for using sprites) and all Digital Express programs. Some of the other enhanced versions of SmartBASIC offered some great options, but were incompatible with some of the public domain and commercial utility programs. SB+, as tested by myself with many programs (not all though), is totally compatible with everything on the market today. Another great addition to SB+ is it's compatibility with MICROSOFT BASIC (CP/M version commands). This compatibility sets SB+ apart from all of the other versions of SmartBASIC that are available and just think, the CP/M version of MICROSOFT BASIC doesn't allow for any type of graphic displays while SB+ takes advantage of ADAM's graphic powers.

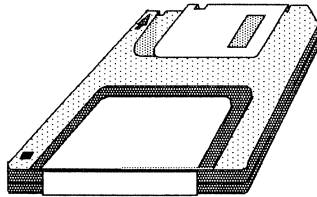
As with most enhanced versions of SmartBASIC V1.0, SB+ includes many patches, but to the machine language file. Other enhanced versions rely on programs that load up after basic and then patch the area of RAM that contains the bug. No longer necessary, as I mentioned above, all the corrections are already patched into the BASICPGM file, just put the disk or ddp into the drive and pull reset. Wait for SB+ to load and your off. Below is a list of some of SB+'s enhancements:

- ☞ 1) The catalog command is changed to use the MICROSOFT BASIC standard "DIR" command. To see a catalog, all that need be done is to type: DIR.
- ☞ 2) There are NO bugs in SB+ as in SmartBASIC V1.0. The DATA/REM spacebump has been fixed, 'H' file recovery is working, BRUN, BSAVE, BLOAD on a different drive is now possible, the line length has been expanded to 239 characters, color tables have been fixed, poke limits are fixed, INIT command now shows the proper size for disks and so on. One thing that hasn't been fixed (it would take a rewrite of the entire file-handling routine) is/are random access files.
- ☞ 3) A special dot matrix printer command has been added! The PR#2 command, when used in the same fashion as

PR#1 command, will direct all output to the dot matrix printer connected to ADAM via a parallel interface. Unlike some programs which only have EPSON printer code built in, SB+ can drive nearly any dot matrix printer because it contains both the EPSON and IBM 5152 printer codes. Hence, IBM compatible printers can now be used on ADAM with SB+. The PR#0 command stops communication with the printer and PR#1 directs output to the ADAM SmartWRITER printer.

→ 4) Enhanced ramdisk command. The RAMPOKE command accesses any size memory expander from 64K upto 1 MEG without a problem. You can therefore save your programs to the ramdisk without any special ramdisk software!

→ 5) WINDOW commands emulates the 16 bit machines such as AMIGA and ATARI ST, by letting ADAM have 100% free-flow movement of text. Therefor, you can divide the text screen into different sections or windows and add a very nice effect to your programs.



→ 6) Incorporation of function keys into control codes. For example, the delete key will now perform the same function as CONTROL-O, CLEAR = CONTROL-L, WILD CARD = CONTROL-S, ESCAPE = CONTROL-C, and so on.

The new commands which make this the best version of SmartBASIC are:

- 1) CTEXT - CTEXT text color #,screen color #
- 2) CBORD - CBORD border color #
- 3) OVER - for overlaying HGR graphic screen colors.
- 4) OUT - for easy access of the sound chip.
- 5) RAMPOKE - for accessing the memory expander if available
- 6) WINDOW - WINDOW horizontal start #,vertical start # TO horizontal end #,vertical end # WINDOW 0,0 to 23,30 is the standard text screen
- 7) SHAPE - SHAPE # AT row #,column # for placing sprites onto the TEXT, GR, HGR and HGR2 screen.
- 8) DEFSHP - defines the sprite data in a certain section of RAM. DEFSHP 1,28000 would set up shape 1 (really sprite) into memory location 28000 in RAM.

The incorporation of these new commands mean two things. Somewhere along the line the amount of free programming space must be decreased. Yes, this is the case, but we are only talking about 1500 bytes, so that is not too much of a problem, especially is you set up your program in a couple of component files to save space. Secondly, some unused commands have been eliminated all together. These commands, such as BREAK, are rarely used and another command, in this case STOP, will perform the same function.

These new commands also will help in reducing the amount of program space used and also the amount of time in figuring out screen colors, etc. For example, to change text screen colors, you would first have to poke color codes into three addresses in RAM and then type TEXT to finally change the colors. With SB+, all you need to do is enter this

command: CTEXT 1,7 and press RETURN. The background will automatically turn to cyan and the letters will turn to black immediately after pressing RETURN. Type CBORD 7 and press RETURN and the border will turn to cyan. The same can be said about using sprites. You no longer have to poke the sprites number, color, horizontal and vertical position into RAM and then CALL an address to make the sprite appear on the screen and then go through the whole procedure again to move it around. Once you have all the sprites defined, all you need to do is choose the color by entering the command HCOLOR=(a number between 1 and 15), and then use the command SHAPE # AT row #,column #.

Also included with this package are some great demo programs which demonstrate SB+'s tremendous capabilities along with running through each of the new commands to show you how they can be used. I would highly recommend running all of these demos before you start using SB+ to get a better idea of what can be done with the new commands. Also, you should list out these demo programs for a better understanding of their use.

One thing that caught my eye is that SB+ is very similar to French SuperBASIC, a public domain program, and the first demo is taken directly from French SB. Many of you have already heard about this, but to say a mouth full, *the public domain version doesn't hold a candle to this commercial program.*

RAMPOKE, for one doesn't exist in French BASIC and most if not all of SmartBASIC's bugs are fixed via a couple of programs which you have to load up seperately. This is not the case with SB+, and as you can see from this review, **SB+ is the best enhancement of SmartBASIC V1.0 to come along, period.**

For the serious programmer and even the novice, this is the one program you will not want to be without. No longer will you have to worry about the many bugs that were in the original basic. Also, the new commands make learning to program in basic amazingly easier. To give you a little insight on SB+'s capabilities, a program I was working on with a version of SmartBASIC V1.0 has reached upwards of 20K. After I converted it to take advantage of the new commands and sprite use that SB+ provides, my program was down to 18K long. Oh yeah, almost forgot, **SUPER BASIC PLUS RETAILS FOR \$9.95 !!! Order from NIAD and you won't be disappointed.**

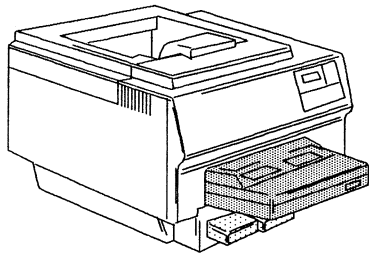
### *PANASONIC 1180i Printer Review by Terry Fowler*

Last month we introduced the Panasonic KX-P1180 Dot Matrix Printer for ADAM. After using the printer extensively, it has been found to be very impressive. This month we'll talk more in detail about its many features.

The FRONT PANEL SWITCHES provide many function changes which we will discuss here in more detail. In addition to the standard LF (Line Feed), FF is another switch (function Switch) and a Selector Chart with lights displaying

your choices. These four switches alone and in combination provide Pica, Courier, Prestige, and Bold PS Fonts, 10 cpi, 12 cpi, 17 cpi, and proportional spacing, in paper lengths of 11", 12", 14", or 8.5 inch. The selections depend upon the lights ON in the three column and "three" rows on the Selection Chart. You turn these lights on and off using the FF and LF switches which double as ROW and COLUMN selectors. Once the correct setting is achieved, the On Line switch doubles as a SET switch. The selections may be made after first pressing the FUNCTION switch, followed by the row or column selection. SET the change and press FUNCTION and you're ready to print. Changes can be made anytime the ON LINE Light is turned OFF first.

MICRO LINE FEED in forward or reverse direction is a nice feature to position the paper exactly where you desire. It is accomplished front the front panel by pressing LF or FF switch while pressing the ON LINE switch. The Platen moves about 1/8th line each time. PERFORATION CUT is also nice



since it rolls the paper out enough for tearing the perforation while not printing, or while the ON LINE light is off, by pressing ON LINE after the FUNCTION SWITCH. Pressing the function switch again rolls the paper back to the start.

MEMO LOAD is the equivalent of "paper parking." Fan Fold paper may be automatically parked below the platen while allowing friction feed of paper or envelopes. This fantastic feature saves the time of unloading and reloading your fanfold paper. The process is simple, but the sequence must be exactly accomplished:

- 1) Press the FUNCTION Switch and pull the PAPER BAIL from the platen. The paper will roll back under the platen.
- 2). Put the paper bail back on the platen, and move the Paper Feed Selector to the Friction position.
- 3). Insert your material directly behind the platen, and pull the paper bail from the platen to autowrap the material into print position. Replace the paper bail and print.
- 4). Remove the material once printed, resetting the paper bail back on the platen.
- 5). Move the selector back to the tractor position and pull the paper bail from the platen to reset the fan fold paper to print position. Most problems with this procedure occur due to incorrect positioning of the paper bail. Make sure it is on the platen before switching the selector between Friction or Tractor positions.

The PANASONIC 1180 is much quieter than the 1080. But, it also provides a QUIET MODE, making it whisper quiet. This is accomplished in the draft mode by making TWO passes very quietly. The SET switch is an alternate action switch which sets and releases the Quiet mode. Another new feature is a LOGIC SEEKING TECHNIQUE which gives the printer a look-ahead capability that allows it to skip blank spaces at the beginning and the end of a line and blank lines

between paragraphs. This really speeds things up in programs like INVOICER. The printer no longer has to travel the length of EACH BLANK LINE, but skips down to the NEXT PRINTED LINE!

The SOFTWARE COMMANDS are available for Standard and IBM modes, but provide many additional commands than previously. Once such command is for DOUBLE HIGH PRINTING, or in combination with DOUBLE WIDTH. Also, 20 cpi Compressed Printing gives you a full range of printing options. There is simple selection of NLQ Fonts, providing Courier, Sans Serif, Prestige, and Bold Proportional Spacing. We have updated FILE PRINTER for the Panasonic 1180 use of these new features too!

The PANASONIC 1180 is the best value dot matrix printer to come along in years. It is versatile enough to work with the best computers, too. DIP Switches provide selection of 7 or 8 Bit Computers. It has an IBM Mode (Proprinter II) and Standard Mode (FX-86e / FX-800). Even a Cut Sheet feeder can be installed. These features make the Panasonic 1180 capable of meeting even future applications, while retaining its value in the event of resale. How can you loose with an investment which will speed up your work processing while insuring reliability and top quality printing for many years to come.. It's the next best step in expanding your ADAM's ability.

## ***EOS FILE INDEXER***

### ***Review by Jim Notini***

File Indexer provides a handy vehicle for reading, sorting and printing directories for standard EOS disks. It is also capable of producing a disk file which you could therefor load up in SmartWRITER, SmartBASIC (since it is an 'A' type file) and even sent to other computer owners via a phone modem. Unless your EOS library is very large, all your disk directories will fit in memory and can be sorted in just a few seconds (not minutes). You can also print out a list of the filenames and volume names for reference, give to your friends for swapping non-copyrighted programs or create a disk/ddp file on which you can add descriptions for the programs with SmartWRITER.

File Indexer, as with File Manager and Disk Doctor also by AJM Software, are 100% machine language programs that use SmartKEY input and operate lightning fast. To get the most out of File Indexer, it is recommended the user has a directory utility which will further aid in setting up the directory volume name and filenames. This is especially so if you have a mix of SmartBASIC, SmartLOGO, SmartWRITER, etc. files. In this case, you would be best off to use different setups for filenames; ie: all capitals for SmartBASIC files, lowercase for SmartLOGO and a combination of both for SmartWRITER. This will aid dramatically when you have a printed list. Upon boot, you are presented with a main menu with the following options:

- I. READ DISK - will read in the directory of the disk or ddp in the current default drive and display the volume name and #

of files. Also displayed is a counter for the # of disks/ddps read, number of files on all the disks read in and the amount of free RAM you have to work with (To start out with you have nearly 40K of free RAM. I read in all NIAD BNDV volumes, 33 in all with 860 files, and still had over 19K of free RAM left).

II. **SORT DATA** - Will sort all the filenames in alphabetical order along with their according volume names. The sort routine is extremely fast!

III. **PRINT DATA** - Will allow for the printing of all the data read in to a dot matrix printer or the ADAM printer. You may also just view the data on screen.

IV. **CLEAR RAM** - Will clear all data that was read in. Be careful, once you press the SmartKEY, the DATA is lost.

V. **CHANGE DEFAULT SETUP** - Allows the user to customize the default screen colors and also the default drive.

VI. **CURRENT DEFAULT DRIVE** - Can be Tape 1, Tape 2 or Disk 1

vII. **INCLUDE/IGNORE BACKUP FILES** - a handy option to have.

**STORE/GET** - Allows for the saving of the data in memory as an 'A' type file.

This is a tremendously handy program to have and will cut down on the time it takes to look for that certain program or file, but there are a few options missing that would make this program even better. First, there is no way to load a file back into File Indexer. You will have to restart everytime you wish to update your list. Second, there should be somekind of safety on the CLEAR RAM option to prevent accidentally clearing all the data in memory. Lastly, once you've read a disk/ddp in, there is no way to go back and delete something out without restarting or editing in SmartWRITER. With these few problems aside, File Indexer is a steal for \$9.95 and is a much needed utility program that every ADAM owner should have.

**HIGHLY RECOMMENDED**

### ***DISK DOCTOR By L. Marschand***

AJM Software has come up with a fine utility program to supplement their excellent FILE MANAGER program.

**DISK DOCTOR has as its sole purpose to repair damaged directories for any non- CP/M 2.2 disk or ddp tape.**

The directory is a section of the disk/ tape that contains the names of all the files/ programs on the media and their location. Hence, if the directory gets damaged, all access to anything on the disk/ tape is lost !!

I have received a number of "panic" calls from people that have a damaged directory, asking how they can retrieve their files and programs - well DISK DOCTOR provides the answer, at least in most cases.

The first question is how do you know if you have a damaged directory that needs fixing? A damaged directory will prevent you from accessing any file/ program on the media. The message that the ADAM operating system usually gives in this case is "CAN NOT ACCESS THIS FILE". If you load the disk/ tape in question via SMARTWRITER, you



will not get the typical card file screen at all. Under SMARTBasic you will get an "I/O ERROR".

Tapes contain 255 "blocks" of data, disks 160. Each block contains 1024 bytes of information. The directory is the "index" which contains the information about which block every file starts in and ends in.

The directory is contained in block number 1 on the disk/ tape (certain utility programs can create directories up to 6 blocks long, which can be handled by DISK DOCTOR) and is automatically updated by the ADAM operating system when ever files are saved on the media.

When a file is desired to be read into memory, the operating system goes to the directory to determine where on the tape/disk the file resides.

***DISK DOCTOR can determine if a directory is fully or partially damaged, blank out a bad directory, read the contents of the tape/ disk and provide the data needed to rebuild the directory.***

This is not a fully automatic process because it requires the user to manually edit the repaired directory block with the information needed for each file on the disk/ tape.

Upon loading DISK DOCTOR, a menu is presented with the first selection being EDIT CATALOG. This would be the initial action if you suspect a bad directory - DISK DOCTOR will tell you if the directory is in fact damaged. If it is damaged you can look at the directory entry by entry to see if their is only partial damage or if all the entries are bad. If, there are only a few bad entries, the reconstruction job is fairly easy, but if the entire directory is bad, you must initialize the directory and recreate it.

AJM has included a nice documentation package that includes an excellent explanation of the ADAM EOS directory structure along with definitions of attribute codes. This explanation is to be used in editing the directory.

ANALYZE MEDIUM is the next function normally used and it reads through the disk/ tape block by block and provides a list of what type of file is contained in each block. DISK DOCTOR can distinguish the following file types:

ASCII  
BINARY  
SHAPE TABLE  
FAST LOAD  
WP FILE

A list of all blocks can be directed to the screen or the ADAM/ dot matrix printer. This list is used to determine the probable



starting and ending block of each of the files on the disk/ tape.

READ BLOCK is the next function that is used to read a specific block from the media and look through it to verify that it is a starting or ending block for a particular file, which is the key information needed to rebuild a damaged directory.

DISK DOCTOR has a great feature that really helps the process - after the entries for the directory block have been built, you would move to block # 2 in the EDIT CATALOG mode. Block #2 is where the first file would start (assuming your directory is only 1 block long). At this point you hit the WILD CARD key which will automatically read block #2 and display it on the screen. You can then advance the cursor to the point that the particular file ends, hit WILD CARD again which will take you back to the EDIT CATALOG function and automatically calculate and build the correct starting and ending blocks for that file. You then would enter a unique file name and any special attributes and you're done with rebuilding the entry for the first file.

This may sound complicated but it really isn't. DISK DOCTOR does most of the work for you, although if you have many files on the tape/disk it will certainly take some time to step through all the blocks to find the starting and ending points for each file which is the basic information needed to rebuild the directory.

DISK DOCTOR'S operation is similar to FILEMANAGER, which means nice menu options using SMARTKeys, "toggle" options for each item and very smooth and fast operation. A well written doc file is provided which gives all the information you need to rebuild a directory. Some valuable hints and suggestions are also included.

Here are some great suggestions that we should all follow to aid in the rebuilding of a directory (they are good ideas to follow in all your work as well):

Note that repeated SAVES of a BASIC program will create 3 files, an 'A' file, an 'a' file, and a deleted 'a' file. You may get even more each time the file size increased by 1k. Some of the following suggestions may help you avoid problems in the future:

1. Put a REM statement at line 0 of your program (both ASCII and FAST LOAD). This one will include program name, version number, and creation date. If you change the version number each time you save the drafts of the program, each file will be unique.
2. Put a REM statement at line 65535 of your program, again with the program name. When you run across this line in READ BLOCK mode, you will know exactly where your program ends. Be sure to use the first occurrence of the REM statement. Note that FAST LOAD programs are stored top down and that your REM statement at the beginning of the program will mark the end of the file.
3. Waste a few bytes in DATA files to write the name of the program that they belong to or the function of the file. Even if it is a Machine Language Code file, add a few ASCII data bytes after the RET instruction at the end. Programs that routinely write to data files should start by writing the name of the file and also write a visible end-of-file marker.
4. Word Processing files present less of a problem, There

especially if they are letters, reports, etc. It should be very obvious when scanning through the file where the end is. Do not look at any ASCII data in sector 0 and 1 of the first block of a WP file. All that area is reserved for headers, margins, tabs, etc. The file starts at byte 3 of sector 2.

5. This may seem to be a lot of work, buy why not protect yourself,. If you go through the trouble of writing a program, it must be because you want to keep prototypes of programs. Once they are debugged, they can be moved to another medium. Using this approach will cut down on your losses if one of you prototypes decides to start writing to disk at random.

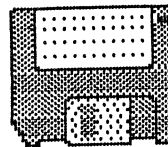
are a number of things that DISK DOCTOR will NOT do -reformat disks/ tapes, repair damaged blocks or sectors. This is a great program - all you have to do is lose the directory on a disk/ tape that contains some important files and it will more then pay for itself !!

RATING - A

***HERE ARE SOME SAMPLE PRINTS  
FROM WALTER'S SOFTWARE NEW  
LABEL MAKER PROGRAM***



Walters Software Co.  
Rd# 4 Box 289-A  
Titusville, PA 16354



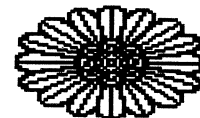
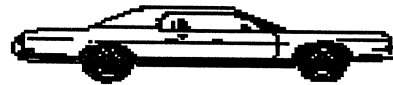
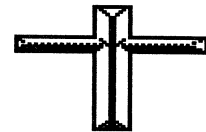
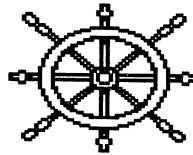
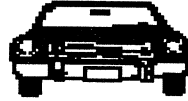
Walters Software Co.  
Rd# 4 Box 289-A  
Titusville, PA 16354  
Phone 814-827-3776

in all directions, giving the impression of revolving, direction-changing objects.

We can't possibly go into all the features of GoBASIC in this article. Suffice it to say that GoBASIC is designed to be easier to use than SmartBASIC (Sol says that anyone who can do any programming at all in BASIC will breeze through GoBASIC) and that it will come FREE with GoDOS. You can even switch back and forth between GoDOS and GoBASIC! In the past, everytime Sol Swift developed a new program, other programmers immediately came out with applications for it... some PD, some commercial. So it will be with GoDOS. Sophisticated programming is now within reach of the average novice programmer, and you can expect to see great strides within weeks of it's release. The possibilities are absolutely staggering.

Again, I HAVE SEEN ALL THIS WITH MY OWN EYES.  
Welcome back, Sol!

**CLIP ART**  
from: PaintMATES05



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Expandable memory board will hold up to 1 megabyte of memory !! Comes with 256k of memory installed. Requires a parallel printer interface or addresser board below.
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256K memory modules used to expand the MEGA RAM MEMORY BOARD. Easy user installation. Add 3 256K SIPS to obtain a full 1 MEG (1024K bytes) of memory !!
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Provides an additional 64K of memory for specified programs. Card that is easily installed in the memory console. If purchased without memory chips, all other components are supplied, inc sockets for 2 4464 memory chips.
- **PARALLEL PRINTER INTERFACE.. \$44.95**  
Interface card that provides ability to print text/ graphics on any standard dot matrix printer. Installs in the memory console - requires parallel printer cable below.
- **PARALLEL PRINTER CABLE ..... \$15.95**  
Attaches to printer interface card and any printer.
- **MEGACOPY TAPE MAKER.....\$59.95**  
Hardware device with software to create ADAM compatible cassette tapes using the ADAM itself.

- **MONITOR CABLE .....\$9.95**  
Allows attaching of a composite monitor to the ADAM memory console, providing both audio and video.  
NOTE: Not available for the ADAM Expansion unit that attaches to the Colecovision game unit.
  - **DISK DRIVE POWER SUPPLY..... \$19.95**
  - **ADAM PRINTER POWER SUPPLY. \$24.95**  
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  - **ADAM POWER SUPPLY W/COVER \$49.95**  
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  - **NEW ADAM KEYBOARD..... \$19.95**
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  - **ADAMNET CABLES ..... \$2.95**  
Flat, 7 foot cables for either keyboard or disk drive.
  - **NIAD PRODUCT REVIEW BOOK .... \$19.95**  
Contains detail reviews of over 100 ADAM products. Save money by knowing products before you buy.
  - **SMARTBASIC PD DESCRIP'S ..... \$5.00**  
Manual contains descriptions of all the programs in over 30 volumes of SMARTBASIC PUBLIC DOMAIN. Use to determine which volumes of PD to buy.
- SERVICES***
- **SUPERGAME CONVERSION TO DISK \$4.00**  
We will convert your supergames to disk version for faster game play. Send in the title card from your supergame ddp case and \$4 for each game.
  - **SMARTFILER FIX..... \$4.00**  
Send in your SMARTFILER ddp/disk and we will upgrade it

# PRINTERS

- **PANASONIC 1180i** ..... **\$229.95**  
 (with ADAM printer interface & cable) ..... **\$269.95**  
 9 by 9 dot matrix printer with 4K buffer and parallel interface.  
 Draft speed 192 CPS; Near Letter Quality speed 38 CPS  
 Two year limited warranty. Bottom/ rear tractor feed inc.
- **PANASONIC 1191i** ..... **\$289.95**  
 (with ADAM printer interface & cable) ..... **\$329.95**  
 Same as 1180i above but draft speed is 240 CPS and NLQ  
 speed is 48 CPS.
- **OKIMATE 20 COLOR PRINTER**..... **\$199.95**  
 24 pin thermal printer capable of black/ white and full color  
 printing. Parallel "Plug 'N Print" module supplied.  
 Includes 8K buffer, special thermal paper required.  
 Draft speed 80 CPS, 40 CPS NLQ mode. Special software  
 required for ADAM to print in color.
- **RIBBONS**
  - > Genuine Panasonic brand for 1080/1091 .....**\$9.95**
  - > Generic brand for Panasonic .....**\$5.95**
  - > Okimate 20 Color ribbon .....**\$5.95**
  - > Okimate 20 Black ribbon .....**\$4.95**
  - > Adam Replacement ribbon .....**\$4.95**

## TRAINING MAUALS / BOOKS

- **Basic Basic Programs for ADAM** ... **\$8.25**
- **The Coleco ADAM Entertainer** ..... **\$12.95**
- **Hacker's Guide to ADAM Vol 1** ..... **\$11.95**
- **Hacker's Guide to ADAM Vol 2**..... **\$11.95**
- \* Disk/ DDP of all the programs in both Volume 1 and 2 of  
 Hacker's Guide .....**\$5.00**
- **Using & Programming ADAM** ..... **\$7.95**
- **ADAM Manuals**..... **\$15.00**  
 (Ones originally supplied with the ADAM computer)

## ADAM DUST COVERS

- > **3 PIECE for COMPLETE ADAM** ..... **\$18.95**
- > **Disk Drive Dust Cover** ..... **\$ 8.95**
- > **3 PIECE for EXPANSION ADAM** ..... **\$23.95**
- > **PRINT WHEELS** ..... **\$ 6.55**  
 SPECIFY FONT STYLE for the ADAM PRINTER  
 GOTHIC 12, SCRIPT 12, ELITE 12, EMPHASIS,  
 COURIER 72, OR PICA
- > **TAPE DRIVE HEAD CLEANING KIT** ..... **\$ .50**
- > **DISK DRIVE HEAD CLEANING KIT** ..... **\$ 7.95**

## PINFEEED PAPER / LABELS

- > **9 1/2 X 11 20 # MICROPERF PAPER** .. **\$9.95 / 500**
- > ..... **\$16.95 / 1000**
- > **9 1/2 X 11 OKI 20 THERMAL PAPER** .. **\$9.95 / 250**
- > **3 1/2 X 15/16 PIN FEED ADDR. LABEL** **\$6.95 / 1000**

# SEGA GAME SYSTEM

- **MASTER GAME SYSTEM** ..... **\$109.95**
  - > 2 HAND CONTROLLERS
  - > LIGHT PHASER GUN
  - > 2 GAMES - HANG ON/ SAFARI HUNT
- **BASE GAME SYSTEM**..... **\$79.95**
  - > 2 HAND CONTROLLERS
  - > 1 GAME - HANG ON
- **3D GLASSES**..... **\$39.95**  
 TRUE 3D PROVIDED VIA HIGH TECHNOLOGY LCD  
 SHUTTER SYSTEM
- **SEGA CARD SOFTWARE** ..... **\$24.95**
  - > MY HERO
  - > TEDDY BOY
  - > SUPER TENNIS
  - > SPY VS SPY
- **SEGA MEGA CARTRIDGES**..... **\$29.95**
  - > FOOTBALL
  - > VOLLEYBALL
  - > FANTASY ZONE
  - > WORLD GRAN PRIX
  - > SOCCER
  - > GHOSTBUSTERS
  - > GOLF
  - > GANSTER TOWN
  - > KUNG FU KID
  - > SHOOTING GALLERY
- **3D GAMES** ..... **\$39.95**
  - > MAZE HUNTER 3D
  - > ZAXXON 3D
  - > BLADE EAGLE 3D
- **NEW GAMES**
  - > MIRACLE WARRIORS \$46.95
  - > SHINOBI \$41.95
  - > PHANTASY STAR \$59.95
  - > RAMBO III \$41.95
  - > FARLOUR GAMES \$29.95
  - > PENQUIN LAND \$41.95
  - > DOUBLE DRAGON \$41.95
  - > WHERE IN THE WORLD IS CARMEN \$39.95
  - > RAMPAGE \$42.95

## DISKS / DIGITAL DATA PACKS

- > **NIAD / LORAN DDP** ..... **\$ 4.25 each**
- > ..... 10 FOR **\$34.95**
- > **NIAD (Non LORAN)** ..... 10 FOR **\$19.00**
- > **BOX OF 11 FUGI DS/DD DISKETTES** **\$ 9.95**
- > **GENERIC DISKETTES 50 DISKETTES** **\$19.95**
- > **RIGHT DIR. DDP for Supergame copy** **\$ 2.50 each**

**PRICES EFFECTIVE: 5/15/89**  
**SUBJECT TO CHANGE WITHOUT NOTICE**

**\*\* SOFTWARE \*\***  
**SPECIFY DATA PACK OR DISK**

VIDEOTUNES		\$26.95
FANTASY GAMER		\$22.95
BASIC BONANZA		\$22.95
SOFTPACK I		\$18.95
LVAC ARCHIVES I		\$ 9.95
REEDY SOFTWARE LIBRARY		\$15.95
BUSINESS PACK		\$18.95
QUICKCOPY V3.0		\$15.95
ELECTRONIC GAME PACK I		\$17.95
ELECTRONIC GAME PACK II		\$17.95
NUMBER BUMPER		\$15.95
REEDY ENTERTAINMENT PACK		\$15.95
JEOPARDY QUESTION PACK		\$14.95
FAMILY FEUD QUESTION PACK		\$14.95
TRIVIA PACK I		\$12.95
KID'S TRIVIA PACK I		\$12.95
PRO FOOTBALL		\$18.95
BACKUP 3.0 (COPY ONLY)	(DISK)	\$16.95
SMARTGAMES PACK		\$ 9.95
ROYAL AMBASSADOR EDUC. PACK		\$ 9.95
ADDRESS BOOK / CALENDAR		\$ 9.95
JEOPARDY QUESTION MAKER		\$24.95
FAMILY FEUD QUESTION MAKER		\$24.95
EASY COME, EASY GO		\$19.95
WIZARD'S PINBALL ARCADE		\$19.95
ADAMTALK V1.1	(EVE SS-CC REQUIRED)	\$19.95
THE SOLAR SYSTEM	(DDP)	\$ 9.95
AMERICA AT WAR	(DDP)	\$ 9.95
WORLD GEOGRAPHY	(DDP)	\$ 9.95
HOME FILES MANAGER	(DDP)	\$ 9.95
PERSONAL CHECKBOOK	(DDP)	\$ 9.95
BASIC SYSTEM MANAGER/FASTRUN		\$18.95
LAB MOUSE		\$12.95
STATES & CAPITALS	(DDP)	\$ 9.95
WORLD CAPITALS	(DDP)	\$ 9.95
GREAT INVENTIONS GAME	(DDP)	\$ 9.95
BASICAIDE		\$ 9.95
SmartTYPE V2.0		\$17.95
PROOFREADER	(DDP)	\$34.95
NIAD GOLD: GAMES I		\$ 9.95
NIAD GOLD: TEXT ADVENTURES I		\$ 9.95
NIAD GOLD: HOME & BUSINESS		\$ 9.95
NIAD GOLD: SCIENCE & EDUCATION		\$ 9.95
STAGE FRIGHT		\$19.95
ADAMCALC Dot Matrix PATCH		\$ 9.95
ADAMLINK Dot Matrix PATCH		\$ 9.95
BEYOND TREK (64K + required)		\$16.95
AUTOWRITER		\$14.95
FILE MANAGER V2.0		\$17.95
CHESS CHAMPION (64K + required)		\$15.95
ADAMLINK III		\$18.95
SPEEDYWRITE V2.0		\$39.95
PRO GOLF CHAMP		\$14.95
MR. T SEARCH		\$12.95
MR. T SEARCH: GAME PAK I		\$ 9.95

SMARTDSK I (for SmartWRITER 64K required)	\$18.95
SMARTDSK II (64K + required)	\$16.95
(for BASIC 1.0/2.0, ADAMCALC, FLASHCARD MAKER)	
SMARTDSK III (64K + required)	\$24.95
(for BASIC 1.0/2.0 with Media Aid Utilities)	
TRIVIA SEARCH (requires Mr. T Search)	\$ 7.95
PHRASE CRAZE	\$19.95
PHRASE PAK I	\$ 9.95
PHRASE PAK II	\$ 9.95
PHRASE PAK CONSTRUCTION SET	\$ 9.95
PrBOOT	\$17.95
SPELLINGAIDE	\$26.95
MISSPELLER	\$18.95
DOUBLE DISK FORMATTER	\$ 8.95
AUTOBACKUP (64K + required)	\$17.95
MIND OVER ADAM	\$11.95
SMARTTERM V1.2	\$15.95
LAS VEGAS CRAPS	\$16.95
COPYCART+ 2.0	(DISK) \$19.95
LINKBUILDER (requires Pro Golf Champ)	\$24.95
AFL FOOTBALL	\$14.95
SUB RAIDERS	(DDP) \$24.95
THE BASEBALL STATISTICIAN	\$12.95
GHOST ZAPPER (64K + required)	\$11.95
TEMPLE OF THE SNOW DRAGON	\$21.95
RAMBOOT (256K required)	\$19.95
SPEEDYWRITE SPELL (64K + required) (NEW)	\$24.95
OPENFILER V3.0	\$19.95
ADAMBOMB (64K + required)	(NEW) \$19.95
FORMATTER II	(NEW) \$12.95
EASY AS A,B,C & 1,2,3	(NEW) \$11.95
SMARTAX V1.1	(NEW) \$17.95
ADDICTUS	(NEW) \$15.95
INVOICER (64K + required)	(NEW) \$14.95
DISK DOCTOR	(NEW) \$ 9.95
EOS FILE INDEXER	(NEW) \$ 9.95
SUPERBASIC PLUS	(NEW) \$ 9.95

**COLECO SOFTWARE (DDP UNLESS NOTED)**

SMARTLOGO	\$29.95
SMARTFILER	(DDP OR DISK) \$15.95
RECIPE FILER	\$10.95
SMARTLETTERS & FORMS	\$15.95
ELECTRONIC FLASHCARD MAKER	\$15.95
FLASH FACTS: TRIVIA	\$11.95
FLASH FACTS: HISTORY	\$11.95
FLASH FACTS: VOCABULATOR	\$11.95
RICHARD SCARRY'S BEST WORKBOOK	\$20.95
DRAGON'S LAIR	(DISK ONLY) \$19.95
SUPER DONKEY KONG	\$19.95
SUPER ZAXXON	\$ 9.95
SUPER ACTION CONTROLLERS/S.A. BASEBALL	\$49.95

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**\*\* SOFTWARE \*\***  
**SPECIFY DATA PACK OR DISK**

**ACTIVISION SOFTWARE:**

ALCAZAR	\$14.95
ROCK'N BOLT	\$19.95
BOULDER DASH	\$19.95
RIVER RAID	\$17.95
KEYSTONE KAPERS	\$17.95
PITFALL II	\$17.95
DECATHLON	\$17.95

**IMAGIC SOFTWARE:**

TOURNAMENT TENNIS	\$19.95
MOONSWEeper	\$15.95

**INTERPHASE SOFTWARE:**

SEWER SAM	\$17.95
AQUATTACK	\$17.95
BLOCKADE RUNNER	\$15.95
SQUISH'EM SAM	\$15.95

**GRAPHIC PRODUCTS - DOT MATRIX PRINTER:**

GRAPHIXPAINTER	\$19.95
GRAPHIXPIX	\$14.95
POWERPAINT (64K + required)	\$34.95
CLIPPER (64K + required)	\$14.95
CLIP ART VOLUME I	\$12.95
CLIP ART VOLUME II	\$12.95
PAINTAIDE	\$18.95
POWERPRINTS VOLUME I	\$12.95
PRINTWORKS	\$27.95
BORDERSPLUS (for PRINTWORKS)	\$15.95

**SPRITE DEVELOPMENT PACKAGES FOR BASIC:**

SPRITEMASTER	\$18.95
SPRITEPOWER (64K + required)	\$16.95

**ADAM PRINTER USED:**

SIGNSHOP	(DDP)	\$22.95
NEWSMAKER	(DDP)	\$26.95
SNAPSHOTS VOLUME I		\$10.95
PAINTMASTER	(DDP)	\$22.95

**CARTRIDGE SOFTWARE - COLECOVISION / ADAM:**

DR. SEUSS' FIX UP THE MIX UP PUZZLER	\$18.95
TELLY TURTLE LOGO / GRAPHICS	\$18.95
BEAMRIDER	\$22.95
H.E.R.O.	\$12.95
CABBAGE PATCH KIDS PICTURE SHOW	\$18.95
THE HEIST	\$18.95
NOVA BLAST	\$18.95
GORF	\$18.95
CENTIPEDE	\$12.95
DEFENDER	\$12.95
TIME PILOT	\$ 9.95

**CP/M 2.2 COMMERCIAL SOFTWARE - INFOCOM:**

\*\*\* REQUIRES ADAM CP/M SOFTWARE - DISK ONLY \*\*\*

ZORK I	\$19.95
ZORK II	\$24.95
ZORK III	\$24.95
STARCROSS	\$19.95
DEADLINE	\$19.95
HITCHIKER'S GUIDE TO THE GALAXY	\$19.95

\*\*\* NIAD PUBLIC DOMAIN SOFTWARE \*\*\*

PLEASE NOTE: Specify VOLUME # and DISK OR DDP

\*\*\* COST PER VOLUME: \$4.00 DISK - \$6.00 DDP \*\*\*

SmartBASIC # 1 - 33 (33 different) # BNDV 1 - 33  
 SmartLOGO # 1 - 4 (4 different) # LNDV 1 - 4  
 ADAMCALC # 1 - 3 (3 different) # ANDV 1 - 3  
 BASIC UTILITIES # 1 - 2 (2 different) # UNDV 1 - 2  
 CP/M 2.2 # 1 - 54 (54 different) # CNDV 1 - 54  
 PD SIGNS # 1 - 2 (2 different) for SignSHOP/NewsMaker  
 PINBALL CONSTR. SET / HARD HAT MACK

New bug free version with 2 demo games

Add \$ 2.00 for 40 page manual

PINBALL GAMES # 1 - 2 (2 different) for PINBALL/HARD  
 SUPER SUB-ROC

TROLL'S TALE

ADAM DIAGNOSTIC - requires 64K Memory Expander

ADAMLINK II TELECOMMUNICATIONS SOFTWARE

SmartBASIC REPLACEMENT DDP/DISK

SmartBASIC V2.0 with DOCUMENTATION file

NIAD BACK ISSUE INDEX - requires SmartFILER

EOS DISK MANAGER - Replacement on DDP or DISK

SP-1 CUSTOM PRINTER SOFTWARE \$7.00

SmartWRITER/SmartFILER (Specify which printer you have)

VIDEOTUNES SONGS # 1 - 2 (2 different)

ONE-MINUTE FORMATTER (DISK ONLY)

UKAS MINI-REVIEWS - requires SmartFILER

A-CHESS (SARGON)

THE ANIMATOR SPRITE DEVELOPMENT PACKAGE

DATA & DISK DRIVE SPEEDCHECK

CABBAGE PATCH KIDS ADV IN THE PARK - 128K ver.

FALL GUY / VIDEO HUSTLER - unreleased cartridges

YOKE'S ON YOU / MATH WIZ - unreleased cartridges.

FRENCH BASIC - great modification to SmartBASIC V1.0

SmartBASIC V2.1 - modification of SmartBASIC V2.0

SmartBASIC V2.0 40 Column Text

ADAM Utilities

AUSTRALIAN SmartBASIC

**MISCELLANEOUS PUBLIC DOMAIN GRAPHICS:**

\*\*\* For use with PowerPAINT, CLIPPER or SmartBASIC \*\*\*

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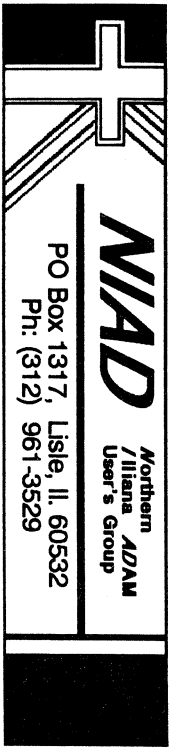
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PAINTMATES VOL. # 1 - 11 (11 different)

PAINTFORMS VOL. # 1 - 3 (3 different)

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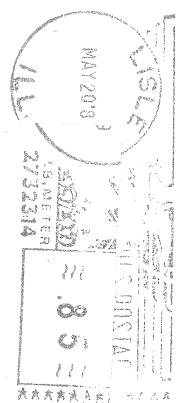
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**MULTI - FUNCTION USER GROUP**  
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" For God so loved the world that he gave his one and only SON, that whoever believes in him shall not perish but have eternal life. For God did not send his SON to condemn the world, but to save the world through him. . . . John 3:16

NIAD NEWSLETTER FOR →

Member # ---->0290sp16912075  
Steve Pitman  
3705 Church St  
Cincinnati, OH  
45244 \*



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