



Saint Louis ADAM



Users Group

OCTOBER 1991 INDEX

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PRESIDENT'S REPORT by Jim Duffy

Well Barry, Al, Don and myself just got back from Adamcon 03 and I must say that Dean Roades and his group did a fantastic job in setting everything up. I finally had the pleasure of meeting in person most of the people I have talked to by voice or modem over the past 6 years. I also talked to many of the people that write articles that have appeared in our newsletters and these people traveled from California-New York and from Florida-Canada to be at Adamcon 03 in South Bend Indiana.

The seminar's where very informative and much could be learned by attending them. The Adam store that was set up the last day of the convention had all kinds of great deals and I even got the chance to (or got hooked into) help sell hardware and software for our own Al Fitzgerald and the Adam Survival Guide for Barry Wilson. Although the pay was not much, what are friends for anyway <grin> !

The only complaint I had was a lousy cold I picked up the first day I was at the convention (must of been the northern weather) which keep me coughing most of the time and probably kept me from talking to different people for a longer period of time than I normally would have without the cold.

Well I can say I had a great time at the convention and meeting all the different Adam users. For more on Adamcon 03 read Zonker's report on page 3.

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St. Louis ADAM Users Group

Meeting:

1. Demonstrations:

- a) Hardware demonstration of Mark Gordon's Adamnet floppy drive (360K [5 $\frac{1}{4}$]). A problem developed in the performance of the drive and it was finally discovered that the wall outlet was emitting the wrong voltage. The Adamnet has proved better than the Adam drives in all ways.
- b) Helpful hints about drives were discussed:
 1. The silver write-protect tabs seem to adhere to the disks with less chance of coming off in your drive, however they are difficult to remove if you chose to do so.
 2. Single-sided drives can be closed when not in use whereas double-sided drives will not close until a disk is placed in drive.
 3. Never ship a disk drive unless a cardboard disk is in drive to prevent damage to drive.

2. Treasurers report: Treasurer absent

3. Old News:

1. Discussion about the up-coming ADAMCON 03.

4. Meeting adjourned by Carl Hill and second by Jim Duffy.

submitted by: Elmyra Tidwell



ADAMCON 03 PARTY

YOU SHOULD BEEN THERE!

How can I tell you about Adamcon 3? What can I possibly tell you that you won't read somewhere else? That it's a barrel of fun? That it's a learning experience? That it's something that is personal to me?

Maybe that last captures it best. After what seemed like an eternity since the end of Adamcon 2 in Toronto, August 1st finally arrived! I won't go into details of lugging two pieces of soft-sided luggage from Seattle to Chicago and then to South Bend. But that is something that I'm glad I don't do every week! I banged and crashed onto a "commuter" flight out of O'Hare airport bound for South Bend. It was a quick 20 minute flight and there I was, standing in the heat and humidity of my old home state of Indiana. As I climbed into the Ramanda Inn shuttle bus, I noticed an older gentleman seated there. Could this be a fellow Adamite? A quick glance at the hand luggage at his feet showed his luggage tag with the name Thomas Keene! By golly, I'd even exchanged letters with the man. So we chatted on into the Ramada.

What I found waiting there is what I consider the essence of ANY Adam convention. The lobby was filled to overflowing with my fellow Adam owners! As I tried to make my way in, a female body lunged from the crowd, nearly sweeping me off my feet. Who else but PJ Herrington, giving me a big welcome? That REALLY made my day! She was quickly followed by Herman Mason, George Koczwarra and Barry Wilson among others. It seems the "gang" was waiting for me to arrive so they could drag me off (kicking and screaming, of course!!) to go get some pizza and beer. We staggered into a Pizza Hut and consumed said goodies. A glance at my watch told me it was time to get back to the Ramanda for the reception.

From this point on, things become a blur. No I didn't have THAT much to drink, although it

certainly had some uh, "small" effect! It's more a case of information overload. When I attended Adamcon 2, I'd decided to take copious notes, figuring I'd need it to keep up. But I found that about three months afterward, those scrupulously kept notes did me no good as I couldn't make head nor tail out of them! So I decided THIS year, to hell with the notebook and just let it flow. This is why this report will mostly consist of impressions rather than item by item coverage.

Not that the convention wasn't structured or at least as much as you can "structure" a meeting of Adamites! Dean Roades as convention chair did a marvelous job of keeping us informed and of keeping us to schedule. Besides our HUGE banquet area (for meals and general announcements), we once again had 3 smaller rooms. In these rooms the various seminars, discussions and product demos took place. The "walls" between the rooms could be folded back to make one BIG area, which is what was done to encompass the Adam store the last day of the convention.

Attendance was very good. I haven't heard any official word on members, but it looked to me to be at least 75 people not counted various and sundry "drop-ins" who were only there one day or so. An I hope that everyone got their money's worth! I know I did!! The convention covered just about everything from novice to experienced. Plenty of product demos and question and answer sessions. And the schedule only covered the morning, leaving the afternoon's free to either socialize or to get into more intense "one on one" sessions on whatever Adam topic.

I had even been called upon to give a demonstration of how to log on to a BBS. When asked, the first thing I thought was "How am I gonna fill up a WHOLE HOUR?". How naive! Once I got going, I couldn't believe it when, what seemed like to me to be about 15 minutes, Dean stuck his head in the door to tell me I had 10 minutes left! But I enjoyed giving the demo, with the able help of Herman Mason, and hope I can do it again sometime!

But far more important to me and what I'll carry around with me forever are candid moments that weren't spent listening to the sessions. For instance-Herman, George, Barry and

I decided to go get some dinner. This was proceeded by about an hour on Barry running around yelling "Well, are we going to eat or what?", me saying "IF I DON'T GET SOMETHING TO EAT SOON, I'M GONNA GET REAL CRANKY!!", George calmly stuffing potato chips in his mouth and saying "I'm not hungry yet." and Herman fiddling with his hard drive and assuring us he would be ready in just a minute!! Anyway, dinner itself was marked when Herman, who really LOVED the bread at the rib joint we went to, was busy eating as much of it as he could. Our waitress, who for some reason was in a hurry to get us in and OUT quick, snatched up at least half of the uneaten bread! The look on Herman's face was priceless. Needless to say, it'll be a LOOOONG time before we let him live that one down!

Another example - George and I decided to go knocking on Guy Cousineau's door to get some of his TDOS programs that he had talked about. Gary Bowser opened the door and ushered us in. Guy was at his Adam and sprawled on the bed were the Wick brothers, Dale and Neil. Dale and Guy were deep into some discussion involving assembly language programming or some such nonsense that was WAY over my head. I mean, it didn't even sound like they were even speaking English anymore! After about 10 minutes of this, I turned to George and said "Wonder how long it'll be before they just start talking to each other in binary?"

Speaking of Guy, I was really happy to meet him. I had been given the impression that Guy (who is instrumental in writing TDOS, along with Tony Morehan) was a soft spoken, shy and retiring person. Nothing could be further from the truth! He is quite gregarious and knowledgeable. He has a quick wit and a ready smile. In fact, he has the look of a fellow that is about to get into mischief at any moment! I came away really impressed with him and the tips he gave me to make learning TDOS just a little bit easier.

And I haven't even mentioned the hotel lounge yet. Despite my promise not to drink as much THIS year as last, I STILL managed to put in some time on the barstool. I'll always remember Sunday night, after the closing banquet and door prizes, when I found myself in the bar with John, PJ, Dean, Alan, Ken, Her-

man, George, etc, etc, etc. The laughter and regrets shared. Alan Neeley saying that he actually made a profit this time out! (and I hope all the dealers made a profit of some sort.) Toasts made and promises given of next year.

Fortunately, there WILL be a next year. Herman Mason and George Koczwara (plus the rest of their user group) accepted the AdamCon banner and will play host to Adamcon04, to be held next year in Cleveland, Ohio. And I say, thank God they did!

I haven't mentioned everything that happened but then how could one person cover it all? They kept talking about how those that put together the Adamcon events learn from each one and build upon it, to make the next one even better. But I found that I've learned, too. I've learned that there has to be time when I just get away from it for a few minutes, to let my mind clear and unclog that information jam. I've also learned to depend upon the good folks who volunteer each year and do it all over again. From what seemed almost like a fluke in Orlando, Florida in 1989 to Cleveland, Ohio in 1992, may they always volunteer. And me? I'll be there for each and every one!

Bart "ZONKER" Lynch

Editors note:

Thanks to Zonker we have one of the first reports on Adamcon 03 to be included in our newsletter. His description of Guy Cousineau was right on target. As Zonker came in the door Thursday night at the reception he was not hard to recognize with a camera around his neck, a loud greeting to all and a t-shirt with Zonk on the back. He gave a very good seminar on BBS's that the average person could understand and it was very helpful to someone that knew very little about a BBS. Also not to leave Herman out, whenever something went wrong with the demonstration on using a BBS Zonker would turn to Herman for the answer which he always seemed to know.

ED-Jim Duffy

FORMAX

(This item was taken from the ANN 9107.)
 [The following article by MOAUG TDOS Librarian James Poulin first appeared in the Metro Orlando ADAM Users' Group newsletter. This file was converted over from WordStar and may need further editing. If anyone would like to have the original articles in WordStar, please contact James Poulin directly.]

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SOFTWARE UPDATE

22DISK

22DISK converts CP/M files and programs to the DOS disk format and back in to any of the other recognized CP/M disk formats, therefore allowing ADAM users to import programs written for other CP/M machines. Files can also be transferred between ADAM and DOS machines for use in Wordstar, P C-File, and others, allowing data to be freely interchanged.

SYDEX has added four new ADAM disk formats (for a total of five) to the over 300 CP/M disk formats (in the registered version) that the program can read. The five ADAM disk formats are: 160K SSDD, 254K DSDD, 320K DSDD, 360K DS DD, and 3-1/2" 720K (Orphanware Format).

Sydex is a company that produces Shareware programs that run on IBM compatible DOS machines. SYDEX maintains a BBS for the purpose of upgrading programs. Unregistered versions can also be downloaded. Registered copies of the program can be ordered for \$25.00 from:

Miriam St.Clair
 c/o SYDEX
 P.O. BOX 5700
 EUGENE, OR 97405
 Voice: (503) 683-6033
 FAX: (503) 683-1622
 DATA: (503) 683-1385

HEXACE SOFTWARE BRUCE WALTERS
 RD # 2 BOX 51 Franklin PA. 16323

Bruce Walters' Hexace Software has started turning out programs for Adam. They appear to be very reasonably priced at \$10.00 each for his first few releases.

I have had the pleasure of use his FORMAX disk formatting program.

The purpose of this program is to allow the user to control up to eight disk drives when formatting disks. 720, 320, and 160 K drives are allowed for in this program. Other size drives may be used by making small changes to this program. Bruce Walters is very friendly and helpful and would be glad to give you the information necessary to make these changes.

The program will allow you to initialize the disks also, giving you a choice of directory/catalog size by merely following the easy (Hey I even could do it) to follow on screen instructions.

You have the option of giving the disk/directory any name you wish. So if I had a disk of software reviews, I could name the directory/disk, REVIEWS or SWREVIEW, etc. A very helpful feature.

This program also gives you the option of putting a boot on your disk.

The main Work Screen is easy to use. You just use the up and down arrow keys to select the drive. To start formatting, put a disk in the selected drive and press the return key.

You may then move to the next drive, place a disk in that drive and press the return key to start that drive and so on.

HERE IS THE BEST PART OF THE PROGRAM, YOU CAN FORMAT ON UPTO EIGHT DRIVES AT THE SAME TIME. IT sure takes the work out of formating .

You say you don't have eight drives, have no idea how you would hook up eight drives any way. Well as I said Bruce Walters is very helpful and very user friendly. By making a change to the drive eprom it will recognize the other drives. This is simple as installing a new eprom. Bruce indicated he can obtain the eprom for you, tell you how to install it or if you send him the hardware, he can install it for you, all for a reasonable charge. Now I do not have all the fine points and details on this but if you are interested, write Bruce Walters for further information.

(Guess who he must have had in mind)
 -----> (Me ????)

If during this program, an error occurs, you will see a number appear. See the table below for the meaning of these numbers.

- 1 DCB NOT FOUND
- 4 NO DATE
- 5 NO FILE
- 22 DEVICE DEPD ERR
- 24 NO DIR ERR

(Hey I dont know what all that means but I bet I can get all those errors :) :))

FORMAX: A great new program with many options from HEXACE: (Bruce Walters' hobby) a great new Adam programmer making his contribution towards keeping Adam and Adamites going and get the most from their ADAM.

He deserves your support.

OTHER PROGRAMS FROM HEXACE INCLUDE:

COPX. A multi-featured copy program which allows among other things the copying of files in any order you want; recognition of ram drive, tape drives and 4 disk drives; when copying from RAM disk, the ability to make two copies (to 2 drives). I have ordered this and will give you more information when recieved.

(SmartWriter) HELPER: Allows you to switch between Adam printer and dot matrix printer by pressing keys, no rebooting, no losing what is on the screen or in memory.

You can also access a ram drive or a second disk drive again by pressing keys, without rebooting, without losing what is on the screen or in memory. It gives you the use of two disk drives in SmartWriter.

Now I could go on for several months on the advantage, historical importance, the joys of SmartWriter as opposed to this Johnny-Come-latelys. But I wont. I will just say this is going to make my SmartWriter even more effective, easy to use, and multi-featured.

{Come closer, quiet now, I am going to tell you a secret and I don't want Bruce Walters to know I am telling you this, so keep it quiet. But for a little extra, if you send in your dot matrix printer book, your imbeded command program, or something similar ----Check with Bruce to see exactly what you need--- he will customize your (SmartWriter) HELPER so you can

use imbedded commands in SmartWriter to give you things such as emphasized, compressed, expanded type, italics, underscore, super & sub-script, etc. Bruce did it for my Panasonic. I haven't received the software or customizing bill yet but I will write about that after I get it.

More to follow.

Best from Barry Wilson

[The following article by Rich Lefko discusses basic clean-up and adds a short r eference to the new Mel Ostler books. This article originally appeared in the February, 1991 MOAUG "That's Rich!" column (subtitled "Hey ADA-Mites, Let's Keep It Clean!" -

--PJH]

With the new year upon us it might be a good time to take a look at our ADAM system, and do a clean up!!

OK, OK, so I hate to clean as much as you do, but I REALLY HATE sending any of my ADAM equipment out for repairs MORE than I hate cleaning, so, buckle down, put on an old shirt, and read on.

Just about the easiest things to clean are the drives! If you have disk drives all you need do is buy one of those (good quality!) disk head cleaning kits. Then all you have to do is periodically follow the easy directions on the box, which usually consists of wetting a cleaning disk with a supplied cleaning solution and inserting it in the drive and running that drive for about 30 seconds. I usually engage the drive by pulling the reset switch or trying to write to the drive. Either way works!

The Digital Data Drives (DDD) are a little more difficult to clean . Years ago Coleco sold their "Accessory Kit" which had a small bottle of DDD cleaning solution and some swabs to do the job. Reading the bottle revealed that it simply contained Isopropyl Alcohol. So I went out and bought a bottle and I use a Q-Tip to swab it on the DDD head. All you need do is moisten the tip and rub the head, gently, with it. If it comes out soiled, dip

another Q-Tip in the alcohol and rub the head again. Repeat this process till the Q-Tip comes out clean! Always wait a few minutes to allow the head to dry before placing a DDP in the drive. The ADAM manual suggests cleaning the head after 40 hours of use, or if you are experiencing difficulty in reading information from DDPs.

No matter what kind of printer you have, you will need to clean it as well. I own an ADAM SmartWriter as well as a Panasonic Dot Matrix printer. I use the same print head cleaning kit on both. It consists of a special paper that you saturate with a supplied cleaning solution, usually alcohol, that will not damage your roller (platen.) Once you've saturated the paper, you place the paper in the printer, remove the ribbon, and activate the printer. I usually send some long-winded Barry Wilson article to the printer and just let the paper do its work. The paper is reusable. There are other Daisy wheel kits that come with brushes so you can scrub the wheel of any build-up.

After that, I clean the screen on my monitor with a static-free cleaner and a soft cloth. Always spray the cleaner on the cloth, NOT the screen itself. I also wipe down my keyboard with the cloth.

Now comes the clever part!! You know those little vacuums they sell so you can vacuum out small spaces? Well I don't have one of those and didn't feel like spending the \$20 they want for one so I did this. I have a Dirt Devil, (I guess a Dustbuster would do as well), and I take the "crevice tool" (That's the long thin attachment) and I stick a drinking straw in the end and tape around the entire opening so air can only be sucked through the straw! I use this to vacuum out both my printers, the keyboard, and I also take the top off the memory console and vacuum out any dust that has fallen through the cooling slots! Be careful in the memory console. If you have memory expnders or other plug-in boards, you should probably stay away from these.

Lastly, I take a cloth and spray it with silicon and I wipe the rods that my print heads ride on in both printers! Be careful to NOT touch the attached cables!

I (try to) go through this ritual once every 1 1/2 months and have NOT had any mechanical problems since I started! (They will probably start right now, since I said that!) Your ADAM is now "squeaky" clean. Happy computing!!!!

On another subject: Mel Ostler's brand new book, "Learning to Draw with ADAM" has just been released and at first glance seems to be as comprehensive as Mel's other fine publications! For more information contact Mel Ostler, Roadrunner Publication, 3217 Mesilla Hills Drive, Las Cruces, NM 88005(PHONE:1-505-525-3802.) I hope to write about this book and others Mel has written in future articles! Please don't wait for ME, though; these books are fantastic!!!

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The following article by John Harris first appeared in the February, 1991 issue of MOAUG under his column header "The Harris File". (File is 79 columns)

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Recently I bought a used IBM XT computer... not to replace my trusty, beloved, easy-to-use ADAM, but to work alongside it for heavier business applications.

I remembered reading that I could use the floppy disk drive on the IBM (or clone) to format ADAM disks, thus saving wear and tear on my ADAM disks. Yes, you do get wear and tear on the IBM drives, but they cost a lot less and are far more readily available than ADAM disk drives.

As I had gone through newsletters years earlier, I had copied out this ADAM-IBM information and filed it--just in case. (Everyone does this, don't they?) In the unlikely event that someone failed to do this, and now needs the information, let's go through my file and see what we have. Ah, here it is. And SO simple! Here it is, from a newsletter whose name and date I failed to note: "The DOS "diskcopy" command will read an ADAM formatted disk and write it to a blank disk." Exactly what I needed. So I put an ADAM-formatted blank disk in the IBM and told it to "diskcopy." It purred merrily and told me: "Formatting while copying." That's even better I thought. I can also use this simple process anytime I need to backup an ADAM disk.

But as with so many things in our imperfect world, I found it was all too good to be true.

The next message I got on the screen was: "Drive types or diskette types not compatible. Copy process ended." I tried again, and again, and with different disks... all to no avail. That method was just too good to be true. It wouldn't work. At least not with my XT and its MS DOS 3.3.

So I searched my file again, and found some resourceful soul had come up with another method: "You will need the program MEDIA MASTER," it said. "This is a DOS program that allows the IBM or clone to read and write to different disk formats. "Boot MEDIA MASTER and select the TRS-80 IV (SSDD--single-sided, double density) format".

Place the unformatted disk in drive B and hit return. It will format and verify the disk in 28 seconds." This too sounded great--except that I don't have the MEDIA MASTER program, nor does the article tell me where I can obtain it. Nor does my IBM have a drive B. I suppose I could overcome the later shortcoming by switching disks in drive A, but the article doesn't tell me that.

So I concluded that I'd have to continue formatting my ADAM disks on my ADAM drives. But there in my file was also a review of David White's ADAM CONNECTION program by Preston Harris (NIAD Newsletter, June 89, Page 12.)

Now I knew ADAM CONNECTION could convert my ADAM files to IBM, or IBM files to ADAM, and I had planned to order one for this purpose. But I didn't know that the program would allow me to format or copy ADAM disks on the IBM. It will do both, the review tells me. And it will format any single or double-sided disk for ADAM use in 1/4 of the time it takes an ADAM. And likewise for copying disks. The IBM drive is faster.

So as soon as my ADAM CONNECTION program arrives, I plan to put the IBM to doing the heavy formatting and copying. And my ADAM drives can float along on easy street, and last many years longer.

--John S. Harris, 105 Burning Tree Lane, Boca Raton, FL 33431.

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The following article by Ron Collins appeared in the February 1991 MOAUG newsletter. I am unaware of any prior printing but am not sure. The article was converted from WordStar by James Poulin. If anyone would like to have the original articles in WordStar, please contact James Poulin directly.

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ADAM CP/M 2.2

Part Two

By Ron Collins

This month we will discuss the built-in or Resident commands. These are commands that Digital Research included in the operating system and are available just by typing in the command or pressing a preprogrammed SmartKey. These commands are easily recognizable and most are self explanatory .

DIR is the first resident command and is programmed on SmartKey I. The DIR key was set up to print the command DIR when pressed so that you can get the equivalent of SmartBASIC's CATALOG. DIR is the command CP/M looks for to print the directory. A space is also printed so that you can enter the drive you want a directory of.

With CP/M, we are given 5 drives; A, B, C, D and M. The thing I had trouble getting used to at first was that CP/M was adaptable to where it was booted from. Unlike SmartBASIC which HAD to be loaded from tape drive 1 to know where the HELLO file was, CP/M could be loaded from ANYWHERE. If you loaded from tape drive 1, that became drive A>. If you booted from tape drive 2, then THAT became drive A>. Everything else just moves down one place and you have access to all of your files. The only drive that stays the same no matter where you boot CP/M from is drive M>, the memory expander if you have one.

The correct syntax for directory is as follows:

A> DIR<cr> Prints the directory of the current (logged) drive.
A> DIR B:<cr> Prints the directory of drive B.
A> DIR b:*.COM Prints the directory of files with only the .COM extension.

A> DIR TEST.* Prints a directory of all files starting with TEST on the logged drive (drive A for this example).
 Note: Wildcards (*) are permitted with the DIRectory command.

The next resident command is the ERA command, it is assigned to SmartKey II. This key label is just a shortened form of the word ERASE. The obvious use of this CP/M command is to erase a file. You can ERASE a file from any drive that you have online and logged in. I'll go into logging in a drive and why you would want to do so a bit later. For now, keep in mind that all you have to do to ERASE a file is to hit the ERA SmartKEY (or type in E R A) and follow it with the filename that you want erase. To erase a file by the name of JUNK.COM you would type ERA JUNK.COM and press the RETURN key. It's that easy! Press the DIR SmartKEY and hit the RETURN again to verify if you want. Either way, JUNK.COM is GONE! Be very careful because it's all too easy to ERASE EVERYTHING on the disk or data pack!

The third resident command is REN and is assigned to SmartKey III. This one turns out to be a short form of SmartBASIC's RENAME command. Renaming a file is easy once you learn how. In CP/M, you have many different types of files. Files that run without anything else being loaded are all command files. These files are listed in the directory with the file's name (called the FILENAME). This is followed by a period and then the file's type (called the FILETYPE). A program such as COPY (CP/M's program to copy files from one drive to another) would be listed in your directory as: COPY.COM. To change the name of COPY.COM to...say MOVE.COM, you would use CP/M's built-in REN command. Now, there are two ways you can RENAME a file. You can either press SmartKEY III or you can type in the simple three letters R E N. Either way, on your screen you will see A>REN _. The underline is just your cursor. This is where the next letter you type will appear. Okay, that means that RENaming COPY.COM to MOVE .COM would look onscreen as: A>REN MOVE.COM=COPY.COM (then press the RETURN key to do the rename).

The next built-in command is the USER command and is assigned to SmartKey IV. This is a useful type of command if you know what it

means and how to use it. To begin the explanation, let me first look at something we are all very familiar with: SmartBASIC. Under SmartBASIC, if you type CATALOG and press the return, you will be presented with a list of all of the files stored on the current disk or data pack. There are no surprises with your directory if you know how it is set up. BASIC shows 4 types of files A, a, H and h. A catalog will show all of these types because there is no way to keep them separate.

Now, suppose you wanted to place all of your "A" type files on a catalog by it's self. How would you do it? Go even further. Suppose you wanted to put your "A" files one place, your "H" files someplace else, your "a" files yet another place and finally your "h" files in yet another catalog area? The only answer is that YOU CAN'T! The EOS system is not designed to keep files segregated in any way. You have only one directory area to work with and no more.

CP/M uses the USER function to allow program organization. If you want to keep all of your different .COM files together, USER will let you do that. CP/M is designed in such a way that it is able to support 16 different places you can store files. At boot-up, you are placed into user area "0". This is your first user area. The 16th area is "15" (remember "0" is your first). I like to keep all of my utility programs on user area 0:, my modem programs in user area 1:, my new files on 2: and so on.

The biggest advantage to program segregation by user areas is that you can keep "like" programs in one place. You can even have 15 files of the same name (such as README.TXT) that are all different files that just happen to have the same name. The way to keep them on the same drive and still be able to use them is to put each one on a different user area. You effectively are in possession of 16 different directory areas!

Logging into a different user area is simple. All you have to do is to press the USER SmartKey (or just type U S E R) and a number from 0 to 15. To move from USER 0 to USER 15, the command line would appear as: A>USER 15 <cr>. Moving between user areas is simple. Moving a file from one user area to another is another

matter. I'll talk about moving files from one user area to another at another time.

Next month we'll finish up the built-in commands and discuss the transient commands that Digital Research provided with CP/M.

The fifth resident command is SAVE and is assigned to SmartKEY V. This command does just what the name would imply. It saves a file stored in memory to a disk or data pack. You won't get much use from the SAVE command until you get into editing programs. DDT.COM, the debugger program on your master CP/M disk or data pack has the ability to load any of the .COM files on your disk, etc. into memory. Once there, you can alter program code any way you like. The changes are only in memory, though, so your main program is safe from any damage.

To create a revised version of a .COM file you have altered, you would use the SAVE command along with a new filename to save the file on your disk or data pack. You would also need to know how many records you want CP/M to save for you. We won't go into too much detail now on record counts. We'll just see how to use a record count with our SAVE command. Suppose we have just used DDT.COM to edit a program on our disk named TIME.COM. In this case, TIME.COM has 13 records in it. We change some little thing and want to save our version of the program under the name TIME2.COM after we get out of DDT. The command line for this would be:

```
A>SAVE 13 TIME2.COM <cr>.
```

The sixth resident command is TYPE and is assigned to SmartKEY VI. The use of it is just what the name implies... it will type a text file to your screen. Remember that file called HELP? If you are interested in what it is, just press the sixth SmartKey, type HELP and then press the return. The command line will look like this:

```
A>TYPE help
```

What you will see on your tv screen or monitor is this:

```
CP/M 2.2 COMMAND SYNTAX
```

```
DIR [dr:] [file]
TYPE [dr:] <file to type>
REN <new> = <old>
ERA [dr:] <file to erase>
USER <new user 0 to 15>
STAT [command line]
PIP [command line]
DDT [command line]
SAVE <pages> [dr:] <file>
DUMP [dr:] <file to dump>
ED [dr:] [file to edit]
LOAD [dr:] <hex file>
ASM <assembler file> [.param]
COPY [dr:] <existing file> [dr:] <new file>
A:[file]
b:[file]
FORMAT <CR>
BACKUP <CR>
CONFIG <CR>
SYSGEN <CR>
ADAM <CR>
CPMADAM <CR>
```

As you can see, Digital Research and Coleco wanted you to have a quick reference in case you ever forgot how to use one of the commands or programs they have supplied. It is always a good idea to print this list onto your SmartWriter printer. Keep it in a good location where you can refer to it when needed.

To facilitate easy hard copy of what you are seeing on your TV screen, CP/M has a useful capability built into it. Just as in SmartBASIC, there is a command to turn on the printer and one to turn it off. Rather than trying to remember PR#1 or PR#0 as with the SmartBASIC, you will need to only remember one simple command. CP/M constantly monitors your keyboard as part of it's control over the ADAM. Whenever you type something, CP/M is right there... watching and waiting to work for you!

Just typing something (anything) will get some sort of response when you press the return. If you type a program name, CP/M will load it for you. Also watched are references to any of the built-in commands imbedded into the operating system. All keyboard access is constantly being monitored so that your every command can be acted upon. In the case of printing to the ADAM SmartWriter printer, simply press the CONTROL and the letter P at the same time.

Anything that is typed from this point on will be automatically echoed to your printer and typed out on paper. To cancel this printing, just use that same CONTROL P combination again. Everything that you type and everything that CP/M tries to tell you will be printed until this option is cancelled.

To get a hard copy of this HELP file, simply type CONTROL P (which would show up as ^P on your screen) followed by your command of TYPE HELP <return>. It is easy to see that this is a very efficient operating system.

MORE THAN MEETS THE EYE:

As I began to study that CP/M 2.2 user's guide, I began to learn some new concepts. These were ideas always missed in things like SmartBASIC but not so clearly that you could put your finger on it until you saw how it "could have been". A perfect example of this is the CATALOG function of SmartBASIC. Have you ever wanted to boot a program ... let's call it HELLO, and failed to spell it correctly? Perhaps you typed run hello <return>. As we all know, SmartBASIC doesn't care if you type "run" or if you type "RUN"... it all means the same to it. Why then doesn't it know that "hello" is the same as "HELLO"?

The reason is obvious to even a casual Smart-BASIC user. You are able to store a wide variety of DIFFERENT programs of the same name if you spell it different. You could name it "hEllo" or "heLlo" or any other combination. All of the various spellings of the word hello in your catalog. How do you go about this in BASIC? You don't!

ADAM CP/M 2.2
Part Four
By Ron Collins

CP/M looks at every command no matter what case they are in when you type them as upper case. If you type in lower case, CP/M will translate it to upper case every time. The result is that a file name can only exist in one form, upper case, at one time. A program called HELLO could only be present once. If you tried to save a new program to the same disk and user area called hEllo, a function of CP/M would delete the original and place your new file in the same location!

You could have multiple files called HELLO only by changing the second part of a CP/M filename. The filename always has two parts to it. The first part is the one we called HELLO ...this is the filename. The second part is known as the filetype. There is always a period present to separate the two parts for you. A few of the conventions of the name are that the filename can have any number of letters or numbers from 1 to 8. The filetype can have up to only 3 characters in it.

To use multiple files by the name HELLO then, you could alter the filetype of the various differing files. You could use HELLO.BAS, HELLO.TXT and even a HELLO.SB1. CP/M will also look at the filetype and consider the three files different. Now, say we wanted to try that search of the DIR (CP/M's CATALOG) to look for all the various HELLO program files we have on the disk. Let CP/M do the work for you!

One of the more useful features of CP/M is it's ability to recognize what we call wildcard characters. The manual refers to a command such as DIR CAT.COM (which will list the presence of a file called CAT.COM on the current drive/user if it is present) as an UNAMBIGUOUS command. What that means is that you have been very clear in telling CP/M exactly what you want it to look for.

Wildcard characters can also be used. These characters are either the "?" or the "*" characters. If you use the "?", it is only going to represent one letter or number in the filename or filetype. For each character in the name, you must use a separate "?" character. The "*" is used to represent a group of characters. Because these are used in a more general way, they are considered to be AMBIGUOUS commands.

To use these wildcard characters in an example, let's look for that program we mentioned earlier. We could always type the command DIR CAT.COM. We could also type DIR C??.COM which would also show up files like CAR.COM, CRT.COM, CLS.COM, etc. I tend to not use the "?" key, however. I don't like to type any more letters than I absolutely have to. The "*" is the one character I use to save my fingers. If I type DIR C*.*, I will be given all the files listed all the files listed

above plus things like CATERWAUL.DOC, etc. In short, it will list ALL files and ALL filetypes which have the one thing in common... a letter "C" as the first character.

I could also mix them up. DIR C??.* would only list the "C" files with three letters in their name and any filetype. I could even do things like DIR *.COM or DIR *.BAS or even DIR *.C?M. If you take a few minutes to think about this, I'm sure you'll find a few ideas of how this could be a useful tool.

CP/M as an operating system is very sophisticated, yet it's also very simple. It will only do for you what you ask it to do specifically. It's built-in commands and many thousands of useful utility programs make up quite a "tool box" or the serious or casual users. I'll cover some of those useful utilities in the next part of the article so that you can begin to get some use out of that program you still have sitting on the shelf. In the meantime, please look at the manual. Please experiment a bit with some of these simple tricks until you get a feel for them.

I know it will take time to get comfortable with CP/M but it was that way for me with every program ever purchased for my ADAM from the very beginning. CP/M actually has less to remember as it does much of the memory work for you.

Until next time, keep plugging away!

Ron Collins

Editor's note:

Thanks to Ron we have another great article on CP/M and he has done so much for the Adam community that I could not begin to tell everything in this newsletter and still have room for anything else.

ED-Jim Duffy.

[The following article came to us through ANN 9106 and provides some real good advice on using tape drives. Let me state that even those of us with two disk drives occasionally use tape.]

DEMONS OF THE DDD

by Rich Clee

When Coleco was frantically rushing the ADAM to completion, the Digital Data Drive (DDD) seemed like an absolutely brilliant idea.

The many MTAG members, among all the other ADAM owners, who have since sat cursing the infernal machine may beg to differ. But there was a rationale behind it.

You have to remember that when the ADAM was conceived, around late 1980, owners of competitive machines would have given their eye teeth for such a machine. TI99/4A, Apple II, Commodore Vic-20 and C64 and other owners were using plain ordinary tape recorders to feed data in and out. Speed? Reliability? You had to date back to when you entered a program by cross-connecting circuit board plugs to think that was much of an improvement.

Disc drives? These machines were supposed to be affordable. ADAM would offer one - a single-sided, 160K unit of highly respectable speed, at about \$800 the pair, which was quite in line with the prices charged by the competition and compared well with them in performance. But for the ordinary, tight-budget user, that was a fancy frill for the real hackers. Coleco made the DDD part of the basic package. It ran ten times faster than a tape recorder. It stored more than half again as much as a disc, and discs at that point were neither cheap nor noted for reliability. Some ADAMites claimed the DDD was faster than the C64's original disc drive. It was a good deal - then.

Of course now it's easy to bring the ADAM into the '90s. A number of vendors will be delighted to sell you all the disc drives you want, hard or floppy, of great speed, marvelous reliability, and ridiculously low price. Even so, many who underuse their ADAMs choose to soldier on with the original Digital Data Drive.

At this point my 'phone starts ringing. "Where can I get an ADAM fixed". "My tape drive won't work". "Where can I get new tapes?". "I keep getting error messages". What to do?

In the latest issue of AIM, Terry Fowler (who fixes ADAMs) has put in a special plea to all club executives and newsletter editors. Please, Terry asks us, tell our members to phone first before sending an ADAM in for repairs. Many times he can give advice that will let the owner fix the ADAM himself. Terry's point is well taken, especially in regard to tape drives.

Not everything that goes wrong with a tape drive can be cured by a home fix. But if it's 2 a.m., you need to store the essay that's due tomorrow afternoon, and suddenly all of your tapes produce a message saying "cannot write to this file", there are a couple of techniques worth trying.

The first thing to do is take your little foam swab, dip it in a bottle of tape head cleaner, and very gently but thoroughly clean the tape reading head. Never, never, never, under pain of causing the irretrievable demise of your DDD, use a demagnetizer or abrasive tape cleaner. Just swab the cleaner on, blot up the excess with all the tape granules that have stuck to the head, and let it dry. This will often do the job. In fact, you should be doing it as a matter of course every few months any way.

As implied earlier, you should try a couple of tapes. If you have them, it might be worth trying a Megacopied tape and a 320K tape. This gets into the reason why the tape someone copied for you, and that you saw working on his machine, doesn't work on yours. The DDD is very sensitive to speed variations and can drift far from factory settings over time. If your DDD has drifted, even tapes used or recorded on it at the old, original speed may refuse to work. The reason a Megacopied or 320K tape may work is that they have different formats and hence run at effectively different speeds.

According to one of the ADAM repair specialists, 90% of the dead tape drives he sees have the same faulty part - number Q4 (or Q6 on later revision boards), a Panasonic chip #2N3906. This is a chip governing the speed circuit. It emphasizes how critical speed control is to the working of the Digital Data Drive.

So if cleaning doesn't work, and assuming you're using mostly Loran clear-label tapes, get out your copy of the MTAG Speedcheck program. If you don't have it yet, you can get it from the club public domain library. Run it and see where your drive is at. If it's beyond the bounds of tolerance, take your precision screwdriver to the adjustment screw and adjust the speed back to the appropriate level.

There is a tricky point here. The original from which your Speedcheck was copied must be a clear-label Loran, and it must be copied on to a clear-label Loran. Loran were the actual manufacturers of all the tapes sold under the Coleco brand name, as well as their own. At one point, Coleco changed the format on their house-brand tapes, and distinguished them with an opaque grey label. They require a different original; if Speedcheck is copied from a clear-label tape onto the grey label type, it will give false readings well beyond the drive's speed tolerance. The same is true of Megacopied or 320K tapes.

Meanwhile, if you do the Speedcheck and find adjustment is necessary, how you do it will depend on the version of the tape drive you have. On some you can see the tiny adjustment screw through the vents in the top towards the right as you face the machine. Smart people always disconnect any electrical appliance, such as a computer, before sticking (and risking dropping) a conductive metal screwdriver blade inside. For the dumb ones, the more commonly found tape drive has the speed adjustment screw buried in the bottom vents near the centre; you may even have to move the connecting cables aside to find it.

Try adjusting in half-turn increments; as you get close you'll find very small adjustments can produce big swings. To get at this you must, of course, turn off the machine, open the top of the console, unscrew the two hold-down and rear ground screws, and lift out the offending drive, at least as far as the connectors will let you. This screwing out, adjusting, screwing in, checking, screwing out again, adjusting further, etc. etc. gets very tedious and inspires people to take dumb shortcuts. That's likely why Coleco moved the screw to the bottom and made you take off the ground connection to get at it; it makes you do the job the safe way - for you and your

ADAM.

Since MTAG has many new members, some may not know that one of our veteran members, Syd Carter, has long been fascinated by the formatting process. Some years ago he devised a machine that, when installed in your ADAM, allowed you to copy the electronic ADAM tape format from a Coleco original to an ordinary commercial audio tape. He called it Megacopy. If you used a Smartbasic or blank data tape as your original, you got the regular centre directory format. If you used a Buck Rogers original, you got a right directory tape. He also had provision to produce, in effect, two separate 128K tapes on one cassette, each of the two tracks having its own directory.

As they must be reversed to use a program on the inner track, these are called "flippies". One drawback of these tapes is that you must drill the guide pin holes yourself, as audio tapes do not have them. But Megacopy has many useful tricks, including making shorter or longer tapes, and where format problems have occurred will make a blank tape usable again after a crash. Data recovery, however, is not possible.

Syd later found out how to generate the ADAM format from scratch, without copying, but the machine to do it was very elaborate and expensive. There was not enough of a market in Canada to support such a machine, but Ed Jenkins of E&T Software bought one and used it to produce 320K tapes. These are the same length as the regular ADAM tapes, but the blocks are crowded more closely together. That means that, given a tape drive running at factory speed, the blocks go by 6% faster, which is beyond the DDD speed tolerance. Thus read or write errors can occur. Of course, if your DDD has slowed down drastically, a 320K tape may work where a regular Coleco/Loran won't. If you want one for experimental purposes, MTAG carries them in stock.

Megacopy is available from Trisyd Video, Syd's company, but not right at the moment. His regular circuit board supplier has left the business, and finding another able to meet the quality standards necessary has been difficult. So Syd is in the process of totally re-doing Megacopy to simultaneously add even more capabilities and exploit the fact that he

has to redesign his circuit board anyway. Megacopy Mark IV should be available fairly soon.

What makes the Loran tapes so much more expensive than regular audio tapes? They're structurally quite different. The tape itself is on a base formulated to take the strains imposed by the fast speeds and sharp reversals of the DDD. The coating is made for digital, not analogue recording, with extra dropout resistance. The hardware and rollers are upgraded. The case is made of Lexan, the bulletproof plastic used in police station windows and motorcycle helmet face shields. This is chosen to resist heat, a major source of problems in all computers including the ADAM.

When the tape is formatted it is divided into 256 blocks of 1,024 bytes (1K) each in two tracks. Block zero is centre of the front track. (Computers start counting with zero, not one). Blocks 1 - 63 run down to the right end, then 64-127 towards the left. 128 to 255 are on the rear track. This is done to allow ADAM to move from the centre to the start of a program with maximum speed. It also produces interesting results when a program runs over the divider, e.g. uses blocks 62 - 74 inclusive.

Block zero is the "boot" block; it is where the information lives that tells ADAM what to do with the tape when the reset is pulled. Block one is the directory; if it is disrupted in any way nothing on the tape can be accessed by ordinary means. A third block called the "hole" moves down the tape as it is filled, and keeps score of how many blocks are in use. That is why a "blank" 256K tape reports 253K free when the catalog command is used in Basic.

You can see all of these things, and modify them, using programs such as Utility Dump or JKL Utilities, available in the MTAG public domain collection. This can lead to some very interesting discoveries. For example, reading the directory with either utility will disclose system files (e.g. BASICPGM) which are not shown when the catalog command is used. You'll also find that when you delete a file it doesn't really go away; its directory entry is simply changed so it no longer

responds to catalog. With the utilities you can undelete it.

With a block reader (Utility dump or JKL) you would find the directory has space for 39 entries, three of which are used for the boot, directory and hole programs. This leaves 36 usable spaces. Because a delete does not remove an entry from the directory, but merely conceals it, it means that once that space has been used it is "gone forever". That is why you can have a tape that has 36 files of 1K each on it report "no more room" though a catalog command in Basic shows "217 blocks free". It's also why a tape with 36 deleted files would show a blank directory when "get" is used in Smartwriter, but respond to "store" with "no more room". It's not the tape that's full, it's the directory.

How do you regain use of a tape that's filled with dead and useless files? If you want to trash the lot, load Basic and remove that tape. Put the useless tape in and type the command "init" plus anything you'd like to call the tape, e.g. "init useless". If you have two drives you can load Basic in #1, put the dead tape in 2, and command "init useless, d2". The "init" command, short for initialize, wipes out the old directory and writes a new blank one in its place. So you start filling it from new.

But suppose you have 31 obsolete files and five good ones on your tape? You have two choices. One is to load the active files one by one into ADAM, then resave them to a new tape and initialize the old. The other is to use the public domain utility called catclear, which wipes out the original directory while storing the active entries in computer memory, then rewrites the directory with only the active files in it. What happens if you interrupt catclear halfway through, with the old directory gone and the new one not written? Bye-bye active files. Once it starts, don't suffer a power failure.

So you bought ADAM because it's the world's best typewriter, you save all important letters, they're only 1K each on average, and you hate seeing the resulting 217K of tape space wasted and inaccessible? Again, call out your JKL or similar utility package and add as many more 39-entry pages as you think you're likely

to need. A four-page directory would then let you store 157 such letters before running out of room. And other than the fact that the (original ADAM) disc drive formats each disc to only 160K, all of the comments about space management on tape also apply to the disc drives, and of course the directories work the same way. So, the utilities work just as well on discs too.

Some of the demons that infest the DDD will never go away. Tapes, like discs, are essentially magnetic storage media. When you buy an audio tape, after a while as you listen you may hear the odd pop, hiss or slightly sour note. On video you may see a miniscule wrong-colour spot, a tiny flicker, or little sparkle on the screen. This means that the tape was exposed to a condition that generated a miniscule magnetic field, and as a result one little grain of metal on the tape had its magnetic charge changed. This is very common; it is why the new digital audio tapes "oversample"; what they are really doing is recording the same datum many times so that on replay the reading mechanism gets several opinions as to what the correct answer is (yes or no; on or off) and reacts to the majority. This is really an acknowledgement that magnetic data storage media are very unstable and easily corrupted. It's also why computer people say always make a backup.

What can corrupt the data on a tape or disc? Touching it when you are carrying a static charge, as we usually build up from the friction of our clothing in the winter. A nearby lightning strike. Putting it anywhere near a magnet. The trick here is that any electric motor also generates a magnetic field, including those in ADAM's tape drives, disc drives, and printer. The disc slot and tape compartment may be shielded, but don't put your medium on top of or beside the machines. If you want to know where to get a real load of static electricity, brush your finger over the front of your TV. It generates a beast of a magnetic field too; don't let your discs or tapes anywhere near it. The same applies to audio speakers, any motor-driven electrical appliance or radiation source, even a magnetized tool. And some deterioration will take place from untraceable causes from radio transmission to power surges to cosmic rays. Even the tape or disc reading heads in the

ADAM drives can generate a small field from eddy currents when turned on or off; that's why you are told never to turn ADAM on or off with a storage medium in a drive.

You'll never escape the ills that infect all computers. But with the procedures and tools mentioned above you can exorcise most of the demons that infest your DDD. Treekies tell you to "live long and prosper". ADAM says keep it clean, keep it cool, save often and back up.

Editor's note:

See Rich we don't always forget to give you credit for your article's. And here is credit when we forgot to give it. Article by Rich Clee, Rich Clee, Rich Clee <grin> ED-Jim Duffy

DIRECTORY SORT

GUY COUSINEAU STRIKES AGAIN.

STILL USE SMARTWRITER LIKE I DO? STILL USE SMARTBASIC?

EVER USE MORE THAN A ONE BLOCK DIRECTORY ?

HAVE MANY SHORT FILES ON YOUR DISK?

TIRED OF SEARCHING THRU THE DIRECTORY FOR THE FILE YOU WANT?

TIRED OF YOUR SMARTBASIC CATALOG RUNNING OFF THE SCREEN, SO YOU DONT KNOW WHAT THE FIRST SEVERAL FILES ARE?

WELL THANKS TO GUY COUSINEAU >>>>>>> TODAY IS YOUR LUCKY DAY.....

HAVE YOU TRIED DIRECTORY SORTING PROGRAMS ONLY TO FIND THAT SOMETIMES THEY WORK AND SOMETIMES ALL YOUR FILES ARE SCRAMBLED? I have tried those directory sort files on the market with mixed results. Sometimes they worked but when they didn't it as a major task to replace all the ruined files.

WELL GUY COUSINEAU CREATOR OF DISK DOCTOR (A fine program I use), FILE INDEXER (Another fine program which I use even more) and other fine programs, The Second Half of The team of

Tony Morehan and Guy Cousineau (Only Tony apparently has a better public relations firm and is more well known), has solved OUR PROBLEMS.

I HAVE HAD THE PLEASURE OF TESTING DIRECTORY SORTER V 0.9. THE POLISHED PRODUCT, DIRECTORY SORTER V 1.0 WILL BE READY BY AND FOR SALE AT ADAMCON 03 At what I consider a bargain price of only \$10.00 .

I use SmartWriter for my legal work. I have many short files, some are form letters and others are payment records from collections I am handling for creditors. I cannot afford to have these messed up with a Directory Sort program that does not work.

As I said with the previous programs on the market, I have ended up with badly mixed up files. On some disks I have as many as 100 1-2 K files. Going through that size directory looking for the file I want is a real pain. Often since I try to hurry thru the directory, I will quickly skip over the file I want and then have to go back thru that huge directory to find it.

WELL NOW ALL MY FILES ARE IN ALPHABETICAL ORDER. I can quickly skim thru them, skipping over entire 1K blocks of directory files and only slowing down when I come upon the letter I want, etc.

If you use over a 1 block directory, have more SmartBasic files than will fit on the screen when you do a catalog and you can probably think of other good uses for such a program DIRECTORY SORTER by GUY COUSINEAU IS FOR YOU.

NOT ONLY DO YOU GET A PROGRAM THAT WILL DO THE ABOVE BUT YOU GET A GUY COUSINEAU PROGRAM. This means professional in appearance and function.

The actual program screen resembles FILE MANAGER and has many of the same functions.

You have the option to Show the Directory on your disk. This option allows you to also look at each file to see its attributes, size, place in directory, etc.

Under the Back Up functions you can both format and initialize disks and tapes. The

format function will allow for formatting two disks drives at once. You can use verification or no verification to check your formatting.

The initialize function allows you to change the volume name of the disk or tape. You can also select a directory size of between 1-8 K.

These extra functions allow you to start with an UN-formatted disk and NOT have to leave the program to continue. You just format and initialize from within the program. Very helpful, if you are like me and sometimes start copying before you check to see if you have blank formatted disks.

All of these features could be sold alone for the same price as this complete Directory Sorter disk is sold for, \$ 10.00. I personally consider the \$10.00 price to be a real bargain. (Just consider what the cost of the disk, mailer, postage, etc. amount to and you see that Guy Cousineau is not trying to make a large profit but rather to make his software available to as many adamites as possible.)

But you also get the Directory Sort feature. You have the option to sort and copy all files on the disk; to exclude the deleted files; to exclude the deleted and backup files. You can also clear the target directory or not as you wish.

The program will sort by the full file name and not just the first few digits. As in the aschi scheme of things, small letters come after capital letters. This allows you to put one type file in capitals and others (such as backup or documents) in small letters and make it even easier to find your file.

Once you add a new file or resave an old file, that one file may be out of order depending on space available on your disk. NOT a major problem and in fact a good feature, as eventually on a much used disk, you will need to re-alphabetize and save.

So this forces you to make the backup copy you always should have made but didn't for one reason or another.

I work with two copies, the current one and a backup. When the current one becomes unalphabetized due to repeated saving of files, I

Directory Sort it over to the backup and then use the newly alphabetized backup as my working copy, etc.

Once you have made your sorted backup, your UNSORTED original can become your backup and the more useful SORTED copy can be put to daily use. After you have saved a few new files, you will find that your directory is no longer in complete alphabetical order. This will alert you to the fact that another backup is likely required, unless you like losing programs and files.

AND IT IS SO SIMPLE EVEN BARRY WILSON WAS ABLE TO USE IT. I TRIED TO CRASH IT BUT NOT EVEN I COULD CRASH IT.

IT IS A FOOL PROOF PROGRAM.

I consider it a very valuable addition to my every day use software.

I am also glad to see that we EOSers, we SmartWriter users have not been forgotten.

NOW THERE IS A DRAWBACK WHICH I MUST POINT OUT. IT WILL ONLY HANDLE 255 files per disk. So if you routinely put over 255 separate files on your disk, this program is not for you. However, if you keep your directory at 6K or less, you will have "no" problems. For the rest of us, it is a great program by a great programmer.

The program was made to work for both people like myself, who believe in read the documents as a last resort only (the on screen menus are easy to follow) and for those more intelligent adamites who will first do the sensible thing and read the documents. (The documents are very thorough and well written).

BUY IT. I WAS SO IMPRESSED I INSISTED ON BUYING A COPY RATHER THAN JUST KEEPING THE DEMO. So if you know how cheap I am, you know this must be one hell of a great program.

Barry Wilson, Editor ANN, Co-Editor ASG.

Editor's note:

I know that Guy is not getting rich by selling programs at \$10.00 a piece so show him some support and buy his programs and DON'T PIRATE!
ED-Jim Duffy

[From the 6-91 463 ADAM newsletter]

SMARTWRITER 'HELPER'

Review by Dean Roades - 463 ADAM

'HELPER', by HEXACE Software is the simplest software I have ever seen. It is also has a feature I have dreamed about for years. Let's look at how the program works.

'HELPER' is an auto-boot program, just put it in any drive and pull the reset. The screen will go black and after about 10 seconds, the Electronic Typewriter screen re-appears. It looks like it didn't load, but don't worry (be happy). Press the ESCAPE key and you are ready to start.

The three major functions of 'HELPER' are to make use of: dot matrix printer, ram disk, and (BEST OF ALL!!) disk drive #2. Some of these functions are available in other programs, but with 'HELPER' you have the ability to switch back and forth without re-booting SmartWriter.

In a nut shell:

#1. Ctl A activates the dot matrix printer, Ctl B returns you to the ADAM printer. This allows you to printout draft copies on the dot matrix printer, then switch for the final printout in true letter quality on the ADAM printer. (It's slow, but there is no better print quality around.)

#2. Ctl C directs any action designated for Tape drive #2 to the ram disk. Ctl D returns to Tape drive #2.

#3. Ctl E directs any action designated for Tape drive #1 to Disk drive #2. Ctl F returns to Tape drive #1.

#2 and #3 allows you to use 5 drives in Smart-writer! You can switch back and forth as often as needed. Load a file on Tape drive #2, "Ctl C", save the file to the ram drive. Or use two disk drives and a ram disk on an ADAM with no tape drives. That's right, unlike some programs which require a tape in the drive designated for the ram, 'HELPER' does not.

A benefit not listed in the Docs. You can use HEXACE's program 'COPX' to transfer files to

the ram, run 'HELPER' without turning ADAM off and the files are accessable through the ram drive in SmartWriter. This is a big help to editors who have to look at a lot of files. Just copy the entire disk into ram, load 'HELPER' and call up those files without a lot of wear and tear on your disk drives. It's faster, also.

A hidden trick built into 'HELPER' is one most people will never see or realize it's happening. When deleting the last file on a disk, 'HELPER' removes the pointer which shows the end of that file. Ordinarily if you delete a file, the space reserved on the disk for that file remains. If you save a file later that is smaller, it uses the same space and wastes the part it does not need. If you save a file larger, it will be stored after the deleted file. It's a bit hard to explain, but it all means less wasted space on your disk.

HEXACE is planning to upgrade 'HELPER' to allow the use of printer codes for the dot matrix printer. This will make your ADAM even more versatile.

The cost for all these goodies is an astounding \$10.00. That's right, no typo here, \$10.00. This includes shipping and handling! If you use SmartWriter, you can't pass this up.

Order your 'HELPER' from:
Bruce Walters
HEXACE Software
RD#2 Box 51
Franklin, PA 16323-9204

Bruce has also implemented a unique promotion. If 10 people order 'HELPER' and send in your serial number, Bruce will refund your full purchase price. Buy your copy today and spread the word to your friends. Bruce will keep tabs on the serial numbers and when you get 10, he will send you \$10.00.

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This article first appeared under the title "ADAM Inn Action" in the February, 1991 MOAUG newsletter. Thanks to Rob Friedman of Compu-serve for putting me in touch with Mr. Jones.
PJH
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As dedicated "Adamites" we can all agree that this is a great little machine. It does word processing, plays games, and is wonderful for just "hacking." But what can it REALLY do?

In the hotel I manage in Smithfield, RI, I have an ADAM hooked up to our master TV amplifier and run cable-TV style bulletin board messages to all 117 guest rooms. These messages provide information about guest services, local restaurants and more. The system is programmed in SmartLogo and runs continuously on Channel 3.

The operating system is simple. In SmartLogo, single letters or words can be "defined" to execute a long series of commands such as screen color, sprite shapes, print statements, and much more. For example, the "super" command that runs my system is called simply: TV. This definition is:

TO TV

MOVIES PIZZA COFFEE EATS1 EATS2 CLUB TV

END

Each of those terms is a defined command that creates a new screen of text. "TV" calls each routine in turn, executes it, and moves on to the next. Note that the last command is TV, calling the whole list over again (an endless loop.) Some of the routines call sub-routines that scroll multi-page listings, activate sprites (in Logo these are called "turtles"), and other such "frills".

Just as SmartBasic looks for and automatically runs a user-defined "HELLO" file upon booting, SmartLogo auto-runs a "STARTUP" file. I have written a STARTUP file that sets up the "turtle" shapes: a stylized shield for our company symbol, a "happy face" for our coffee shop, and so on. STARTUP then "recycles" the system and loads and runs the TV file.

This is handy in case the system crashes due to power failure or other reasons. All my desk clerk has to do is insert the SmartLogo tape in the drive and hit the RESET switch. ADAM does the rest. The entire operating system and TV file loads and begins running in three minutes. The datapack can then be removed and put safely away.

After SmartLogo boots up, there is enough RAM left in ADAM for 8-12 screens of text, depending on how much use is made of graphics. The more turtles that are programmed in, the less memory space left for text. If anyone can think of a way to have access to a memory expander in SmartLogo, please let me know. I would like to run many more messages.

SmartLogo is so easy to program in due to the built-in ("resident") commands such as: CS for Clear Screen. These commands are pre-defined by the operating system and are explained in detail in the operating system manual supplied with SmartLogo.

I put the system on line last March, and naturally have made several improvements and additions. That's the really nice part about SmartLogo. The more I use it, the better I get at achieving the same results with tighter commands, leaving more RAM available for actual text. For example, the definition:

TO SS

PR []

END

causes the text to scroll up one line. Pretty easy programming, huh? SmartLogo allows 28 text characters per line with 23 lines from top to bottom of the screen. To avoid a cluttered look, I type "SS" after each line of text. This command prints a blank line between each two lines of text, reducing the available text to 11 or 12 lines per screen.

It is now only one step further to the definition:

TO S

TO S :N

REPEAT :N [SS]

END

where N equals the number of blank lines you wish SmartLogo to insert after a print statement. If I type "S 23", Logo will insert 23 blank lines, in effect scrolling the current text off the screen. Otherwise, I

would have to type "[]" 23 times in a row. That sort of thing quickly fills the system, leaving less room for actual text.

The hardware hook-up wasn't too difficult because TV channel 3 is blank on our system. I did have to install a low-cost VHF-RF (radio frequency) amplifier to carry ADAM's Channel 3 output from the front desk to the utility room through a 50-foot co-axial cable.

Also, I found I needed a Channel 3 bandpass filter to avoid causing interference on adjacent channels 2 and 4, which are NOT blank. This whole procedure took less than a day, including tuning the bandpass filter. This setup has worked very nicely for over nine months.

Possibilities for your own use include putting a TV in a store window with ADAM hooked up, and advertising your "hot specials" or other attention getters. Since that would be a single-set hookup, no RF amplifier or band-pass filter is needed.

If anyone is interested in installing a similar system, feel free to call me for assistance. This technique is ONLY easily applied to ADAM or other small computer with an RF output designed to display on a standard TV... IBM & Mac users need not apply!

I can be contacted in care of:

Susse Chalet Hotel
 P.O. Box 17309
 Esmond, RI 02917
 Phone (401) 232-2400
 FAX: Ext. 141
 (CompuServe ID # 71341,3372)

[The following article was taken from ANN 9107 and is an excellent review of one of JKL Utilities features. Some of you may have an occasion to use this feature.
 FACILITIES FOR THE ADAM. JKL UTILITIES.]

BY THOMAS J. KEENE.

The following article was originally published in the April, 1989 issue of the IEAUG newsletter, and was provided to us by the author, Tom

Keene. The original article was formatted in CP/M, probably in VDE266, a PD word processing program that is one of Tom's favorites, and was converted to SpeedyWRITE 2 by your editor. We thank Tom for his continued support of our efforts.

For those of you who have been using JKL Utilities, you will agree that it is probably the greatest utility program ever written. There is one final chapter to be written on the use of JKL, and that deals with the powerful JUXTAPOSE command. It was originally named COMPARE but it was never implemented in the original JKL Utilities. For this splendid program, the ADAM community is indebted to George Havach.

The JUXTAPOSE program enables you to compare any block of an ADAM disc or DDP with any other block on another (or the same) disc or DDP. The output of the program displays every byte that is different in the compared blocks. It displays the byte in both blocks and the meaning of the byte in ASCII (if possible). In case the blocks are identical it will display a comment that there are 0000 Bytes different. JUXTAPOSE is very easy to use (as are all JKL programs). An example will show just how easy it is.

After loading JKL into ADAM's memory you type the letter "J" at the prompt. You will see a series of menu prompts that virtually preclude an error. Suppose that we are going to compare block number two of a disc on the A:Drive with block number one of a disc on B:Drive. This is the way the prompts will look:

```
Select Drive for Base Block_
DDP1:DDP2:DSK1:DSK2: :
```

Here you should select SMARTKEY III for disc drive 1.

The next prompt will be:

```
Enter Block Number: _
```

In this example, enter 2 and a carriage return.

The next menu prompt is:

```
Select Drive for Compare: _
```

Here we would press SMARTKEY IV in this example.

The next prompt is:

Enter Opt Block Number: _

In this example enter 1 and a carriage return

The next menu prompt is:

Hit Y to Start Compare_

As soon as you hit Y you will get this prompt:

Insert Source
Type S When Ready_

Then you will get this prompt:

Insert Source
Type S When Ready_

When you have done this, JKL takes off and makes the comparison. It will display five columns of data. The columns compare, on a line by line basis, all bytes which differ. Here is a typical screen presentation of ten lines of comparison:

Byte	Block1	Block2
0000	31 1	4A J
0001	FE	4B K
0002	CB	4C L
0003	78 x	20
0004	32 2	55 U
0005	33 3	74 t
0006	C8	69 i
0007	06	6C l
0008	01	73 s
0009	21 !	03

The program will continue through the entire block and if differences occur, they are displayed in the manner shown above. Where there are no differences, no bytes are displayed. You may note that on some of the bytes in the list above, I show two entries under Block 1 and Block 2 and in some cases there is only one entry. The first number is the HEX value of the byte. The second column is the ASCII meaning of the byte. Where nothing is

shown as in the case of FE, that is because, there is no ASCII equivalent for that code. On the screen however, you will see a character (like a sailboat or an up arrow or a smiley face) that is associated with the code, but the printer can't show you that.

If you have compared two blocks that are identical, there will be no output like the columns above, but you will get this response:

0000 Bytes Different

Where there are differences, you will see a somewhat similar summation, like this:

02FA Bytes Different

And if EVERY byte was different, then this would appear:

0400 Bytes Different

It doesn't matter if you compare two EOS blocks, or two CP/M blocks. The JUXTAPOSE program will make the block comparison. If someone has modified some established program, (like MEX114.COM), to change the baud rate, and you are curious about how it was done, then this JUXTAPOSE program is made to order for that. You just make a block by block comparison of the original file with the amended file. The differences, (and ONLY the differences), will show up. I have found this to an incredible tool for evaluating program amendments.

I mentioned previously in an earlier JKL article, that I once compared a so-called public domain program (PMASTER) with a copyrighted program (PRINTMASTER) and found that they were identical. The PRINTMASTER program was a CP/M program written for the Kaypro 4 computer. PMASTER was a file that originated in England and uploaded to GENIE so I have no idea what its origins might have been. But neither was created with the ADAM in mind.

You can compare any block on any disc that the ADAM can read. If it is a LOGO program, or a machine language word processor program or any disc or DDP file, you can compare it to see what differences or similarities it has to another file. This is POWER! And the astonishing thing about it, is that it is so

easy to use and understand. The blocks being compared don't necessarily have to be in the same block positions.

If you want to compare the original CP/M system tracks that came with your DIGITAL RESEARCH CP/M 2.2 with a modified system track such as Orphanware's version for the 80 column CP/M, then this JUXTAPOSE program is for you. If you want to see what changes Tony Morehen made, in TDOS, to create TDOS40, then this is your tool.

I have found programs that appeared to have been profoundly altered, to actually have had only a few bytes changed.

This about wraps up this on-going discussion about JKL Utilities. I have used a lot of utility programs over the years, but I have found nothing that compares with it. There are some programs that have some of JKL features, but none of them, (that I am familiar with), are nearly as easy to use as JKL. NOT EVEN CLOSE! And to think that Joel Lagerquist first released this power house back in 1984. True, it has been vastly improved since my first version. If it was twice the price of ANY other utility program that I know of, it would still be a bargain!

Editor's note:

Thanks for another fine article Tom and I enjoyed meeting you at Adamcon 03. Your seminar's where very interesting and I seemed to learn alot of new information for them.

ED-Jim Duffy

[The following article by James Poulin first appeared in the April, 1991 MOAUG newsletter. It describes the MBI hardware demonstrated by Bob Blair at a MOAUG meeting. This article was submitted by ANN 9107]

SHOW AND TELL by James Poulin

Bob Blair shows Micro Innovations hardware to MOAUG & tells us how it works

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Bob Blair demonstrated Micro Innovations

hardware at the February MOAUG meeting in Orlando. The hardware demonstrated included what Bob calls "the CADILLAC" of all hard drive systems. The system included a 20 MEG hard drive, a 5 1/4" DS/DD (320K) and a 3 1/2" DS/DD (720K) disk drive. The hardware was all housed inside a standard IBM clone cabinet. It is intended that the ADAM computer be placed on top of the M.I. cabinet for normal operations.

The hard drive system is connected to the ADAM through the center expansion slot via a highly populated interface card. The card includes a parallel interface, two serial interfaces, memory card indexer, and the hard drive port. It is important to note that this card does not include the hard drive interface; that is located in the cabinet with the hard drive itself.

As you might expect, a parallel printer can be connected to your ADAM system via this interface card, along with two serial devices. Those serial devices most commonly utilized are an external modem and a dumb terminal (for 80 column display). Also, a large memory expansion card (larger than 64K) can be connected to the memory indexer.

The hard drive system comes complete with software to run in both EOS and CP/M (TDOS). Included with the system is the EOS program FILEMANAGER and the TDOS operating system, both written by Tony Morehen. I like some of the changes in the TDOS system which allow you to select the size of drive A. The Orphanware version sets drive A to 1 MEG and cannot be changed.

Bob put the system through its paces, including the installation of TDOS for several different system configurations. It should be noted that the floppy drives are not tied into the ADAM via ADAMNET and therefore cannot be used as boot drives. The hard drive system must be booted from either a digital data pack or a normal ADAMNET drive. I boot my Orphanware hard drive system from a cartridge provided by Walters Software; this would also be possible for the M.I. system. Walters Software also has a complete utility package available for use on the M.I. system.

Bob also demonstrated a dumb terminal connect-

ed to the system via one of the serial ports. This terminal allowed full width 80 column display in TDOS. All that is required to hook the terminal to the interface card is the appropriate ribbon cable.

The last piece of hardware demonstrated was a 3 1/2" disk drive connected to the ADAM thru ADAMNET. M.I. has designed this product to replace the scarce Coleco disk drives. The drives come in DS/DD 5 1/4 as well as the 3 1/2" model. These two drives are fully compatible with the ADAM system and can be equipped with either the E&T or Orphanware EPROM, and they require no additional software. The drives are made up of standard IBM compatible double-sided drives, a Micro Innovations-designed controller card, a very attractive cabinet that matches the ADAM color scheme, and the external cube power supply and communication cable. These drives are bootable (just like Coleco drives) and are a fine addition to the system. The cabinet that houses the drives is slightly smaller than the Coleco cabinet and therefore takes up less room on your already crowded computer desk.

[I snapped up the dumb terminal, as well as the MIB2 interface (which includes two serial ports and one parallel port.) Others have expressed an interest in buying a dumb terminal, which can often be found as a salvage item in a computer surplus outlet. Bob did not have any more of them, but he suggested that interested parties might try contacting the president of AWAUG, James Howard (703 960-5315.) If James doesn't have them, he may be able to direct you to a likely source. ---PJ Herrington]

WHAT IS ECHO? LET BARRY TELL YOU.

THIS IS A SYSTEM DEVELOPED BY STEVE MAJORS WHICH ALLOWS THE ANET BBSs TO EXCHANGE MESSAGE BASES ON A REGULAR BASIS SO YOU CAN LEAVE MESSAGES, QUESTIONS, ETC. ON ONE BBS AND HAVE IT READ ON MANY OTHERS.

IT IS A GREAT WAY TO EXCHANGE INFORMATION, THROW OUT QUESTIONS, ETC.

I USUALLY TAKE THOSE I THINK TO BE OF MORE WIDE-SPREAD INTEREST OR THAT ARE TOO TECHNICAL FOR ME TO UNDERSTAND AND DISTRIBUTE THEM ON

ANN.

THIS ANET ECHO SYSTEM IS A GREAT STEP FORWARD FOR ADAM BBSs.

TRY IT , YOU'LL LIKE IT.

Barry Wilson

#-TIME:234-Mon Apr 08 1991 03:12 PM SUBJ.
:COOLING OFF YOUR ADAM TO :ALL "INSPIRED"
FOLKS FROM :STEVE MAJOR (CONNECTION)
ORIGIN:THE CONNECTION [CHAMPLAIN NY] PHONE
:(518)/298-4294

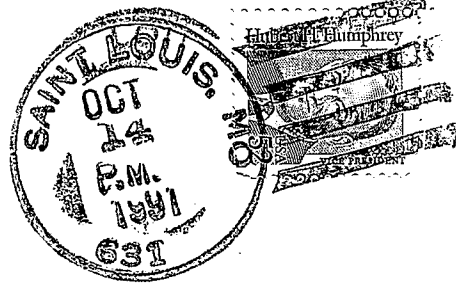
READ MESSAGE? (YY/N/Q):Yes!

If your ADAM is like mine (on 24 hours a day), you may want to add a little project to it like I have that will keep your ADAM cool. In MY CPU, I have a MI HD inteface card (two serials/one parallel), and a megaram 768K of RAM, plus two data drives.

The two expansion cards are probably the "hottest" running items available, and it used to be my ADAM was almost TOO hot to touch! Goto a Radio Shack and get yourself a 3" cooling fan, a hardware store for a piece of sheet metal about 3" X 12" long, eight nice brass cabinet bolts (that fit into the cooling fan), and some wire mesh. Using a vice, bend your sheet metal to fit like a U around the back of your ADAM, mak sure it fits!!! Then cut out a hole in what will be the top piece where the cooling fan will fit (so the air can get thru). Drill your holes into this same end and spray paint it black. Next cut and fold the edges of the wire mesh to fit on top of the cooling fan (so the blades won't hit anything). Spray paint it black when done . Finally assemble the whole thing, mesh on top, and screw the fan to the sheet metal U you just made. Set it up so the fan is right on top of the "back" cooling vents, and plug your fan in. Viola! You've got NICE cool air swirling thru your memory console. Remember how I said my console was HOT to the touch? Not anymore, since I did this it's like touching ice. Just thought I'd give a little insight on how a few simple supplies can drastically improve the life of your ADAM. Total cost for me was only about 25 bux (mostly for the cooling fan). You could also get a much smaller cooling fan and install one right INSIDE your ADAM too!



12967 Weatherfield
St. Louis Mo. 63146

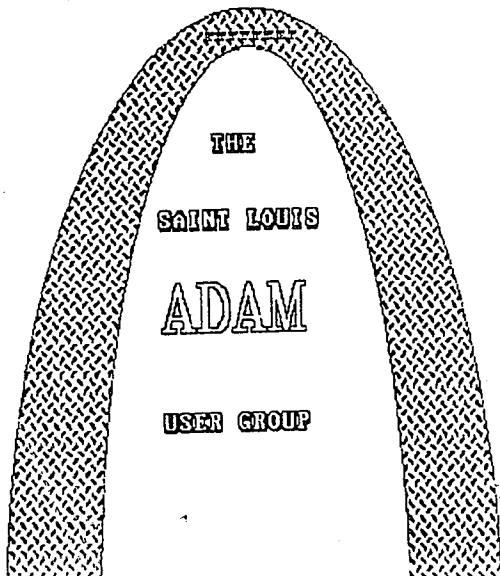


TO:

RICK
1402
Fort

FIRST CLASS MAIL

THE SAINT LOUIS
ADAM™
USER GROUP
12967 Weatherfield Dr.
St. Louis, Mo. 63146



The St. Louis ADAM User Group Newsletter is produced to keep our members up to date on new software and hardware for the ADAM computer. It is also our desire to pass along ideas, hints, and tips for programming, word processing, telecommunicating, and gaming. Each of our members can help us in this task by sharing your ideas with us.

We meet on the second Saturday of each month at the Thornhill Branch of the County Library. This is located on Fee Fee Road across from Parkway North High School. We meet from 12:30 to 4:00 pm. All of our members are urged to attend. We welcome visitors to come and see if we can help each other.

This newsletter will be distributed at each of our meetings. For those members who have paid their dues we will mail your newsletter to you if you are unable to attend the meeting. You can help keep our costs down by being at the meeting to pick up your copy. The postal rates have made mailing costs a serious matter.

SEE YOU AT THE MEETING!!