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# THE AWAUG NEWSLETTER

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ADAM WASHINGTON AREA USER'S GROUP

Vol. 5, No. 6 December 1989

# BOB BLAIR

## AWAUG Member of the Year

AWAUG takes great pride in announcing the selection of our club President, Bob Blair, as the AWAUG Member of the Year. As most of you know, Bob has been identifying several long term members as Members of the Month to recognize their substantial contributions to AWAUG over the years. All of these have been richly deserved but, although the success of our club depends on many, the glue that holds it all together is Bob Blair. His efforts over the past few years include the AWAUG BBS, inexpensive 80 column terminals, inexpensive modems, the use of his home for equipment repairs and hard drive installations, as well as the normal (and substantial) duties as Club President (and Treasurer, and Meeting Coordinator, and Tape Driller, etc, etc, etc). Bob has contributed countless hours in pursuit of improvements for our beloved Adam. Although he insists it's a lot of fun, his "fun" has helped all of us get more use and more enjoyment from our Adams. Bob, this one's for you, with the gratitude and appreciation of all our club members as well as the entire Adam community.

**WELL DONE!!!**

**AWAUG Member of the Year**
A commentary by
Peter Hartzler

When Jack suggested to me that Bob Blair should be cited as AWAUG member of the year, I thought this to be a wonderful idea. I wasn't too suprised when Jack then asked me to write an article about it... Actually, I can't complain, since one thing I can say with certainty is that I have personally gotten FAR more out of AWAUG than I ever expected, and consider the time I have spent involved with AWAUG to be time very well spent.

It is not easy to say what it is about AWAUG that is so special. I am sure that it must be a combination of many factors, including timing, the interesting and versatile object of our common interest (ADAM), but certainly most importantly, people. Among this group, Bob certainly stands out as a man of many talents. Not only is he an effective manager, able to coordinate the actions essential to the successful operation of the club (not an easy job), as well as a class A Bulletin Board System Operator, but he is also an accomplished fisherman. I have had the honor of going out on his Bass Tracker boat, where he taught me everything I know about catching catfish.

While Potomac river catfish may be good eating, that is not the main point. The main point is that Bob is a good friend that I might never have met had it not been for AWAUG. I know that there are many people besides myself involved with AWAUG who consider Bob to be a good friend, who they are thankful to have met.

The ADAM community, by it's very nature, is a community of slightly eccentric computerists. I do not mean this negatively; just that for many people the ADAM world represents 'the road less travelled'. There is plenty of room for individuals here. This fact presents some special challenges to the running of a user's group. Not dealing with 'clones' means that there are going to be opinions, sometimes strongly stated. Time and time again I have been amazed by Bob's ability to bring people together and get them working toward a common goal.

AWAUG turns 5 this year, having published it's first newsletter in the Winter of 1985. At that time AWAUG consisted of a handful of members who realized that they had something. Most of those original members have moved on to other pursuits. Bob has been with AWAUG from very near the beginning, and has been an active supporter of the group for as long as he as been associated with it. This perseverence is not to be underrated.

Bob's tenure has seen AWAUG go from a small, loosely organized user's group to one of the largest non-profit ADAM user's groups in the country, with a charter promoting the personal growth of it's members. Bob has shown everyone that AWAUG does not recognize limitations. The AWAUG BBS, the club's organized distribution of hardware and software, and it's excellent technical support,

and it's overall success are all in large part the result of Bob's efforts. This is the first year that AWAUG has honored anyone with a Member of the Year, But I am sure that if this had been done in years past, Bob would have rated for the honor well before now.

I doubt that Bob would want me to finish this article without pointing out that the success of AWAUG is not any one person's doing, but rather the result of everybody working together. Some design hardware, some create software, some work out how to duplicate digital data packs, and some write for the newsletter, and others perform myraid other tasks, while Bob holds it all together and keeps it moving gracefully. He even manages to make it look easy, which it isn't.

The box said it was a complete system, just plug'n'go. My wife didn't quite know what to make of all the apparatus that I lugged home from Zayre almost five years ago, and I am sure that I didn't know either. She insisted that I not set it up on the dining table. She certainly did know an opportunity when she saw one, and so when I appropriated our black and white TV to hook up to it, she made it clear that there was no choice but to go out and buy a brand new color TV for the living room... Hopefully she'll be watching in color when Julia Child explains how to cook a catfish.

Hats off to Bob Blair! PH.

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**AWAUG MEMBERSHIP INFORMATION**

AWAUG is an organization dedicated to the support of the ADAM computer system and the furthering of computer literacy. Membership in AWAUG costs $15 per year. Members receive a bi-monthly newsletter and are entitled to purchase items offered by the club such as public domain software, WordStar 3.0, formatted tapes, and some hardware. Members receive free technical support through the AWAUG hotline support system. Our volunteers can help to answer your questions.

Hardware Hotline:
Volunteer(s) needed

Software Hotline:
Volunteer(s) needed

Meetings are held on the third Saturday of each month at the Tyson's Pimmit Regional Library. The address is 7584 Leesburg Pike, Falls Church, VA (1/2 mile inside the beltway on Route 7).

Meeting are free. For more information about the meetings or the club, contact Bob Blair at (703) 971-6465 or check in on the AWAUG BBS at (703) 922-5497 (2400/1200/300 8-N-1).

Your club officers are:

| | |
|---|---|
| Robert Blair | President<br>BBS SYSOP |
| Peter Hartzler | Vice President |
| Manfred Patterson | Membership |
| Jack MacKenn | Tape Librarian & Editor |
| Steve Sandoe | Disk Librarian |
| Cliff Sinopoli | Procurements |

**ADAMLINK III+**
A review by
Bart Lynch

About a year after I first got my Adam (was that REALLY 5 years ago???), I got interested in telecommunications, or in plain English, Bulletin Board Systems. This seemed the perfect way to communicate for me as I usually get nervous in face to face conversations. And this allowed me to "talk" to folks all over the country. There were drawbacks of course. The first telecom program for Adam was the infamous Adamlink. This allowed you to call up a BBS, read files, post messages and that was all. No upload or (more important!) download features. It wasn't long before Coleco corrected that with Adamlink II. But as my appetite for telecommunication grew, I soon found that 300 baud was far too slow; I needed 1200 baud.

About the only way to go about it was to go with an 80 column unit. Most public domain programs for 1200 baud are in CP/M and were configured for an 80 column screen. There WERE some "screen chop" programs to cut it down to a TV screen, but they didn't work so well. So I decided to bite the bullet and buy an 80 column unit. At the time, it was the only way to go.

Today, that's no longer true, I'm happy to report. If you've wanted to go 1200 baud BUT didn't want to buy an 80 column unit OR go through CP/M, the answer is here. The program is called Adamlink3+ and it is amazing! (the "3+" indicator is because 3 was released with some minor bugs which have been eliminated in this version) For ease of use and convenience, there's nothing like it.

First it's the same Smartkey driven menu you grew up with. This was one of Colecos smartest ideas and is still effective today. The keys are the same but their functions are quite different. You may set your terminal (or TV) so that you use the 80 column unit or not. Your text is configrured perfectly for TV use with 1200. You may even have output for BOTH 80 and regular text, if you happen to have both terminals hooked up (I can't imagine a use for this, but if you want it, it's there!). The video output can also be set for such things as baud rate and port. The modem may be set for baud rates up to 2400. You may also set the modem type of interface (serial or parallel) and the type of dialing (tone or pulse). There is also the ability to change between the Adam printer and a parallel printer.

As you can see, the options are many. And as I stated above, the Smartkeys make it a breeze to operate. And once you have made your selections,they can be stored permenantly on the disk. All in all,I would say this is a most remarkable piece of software. The author, Tom Clary, deserves high marks for this product. I'd recommend this program to anyone who is serious about telecommunications!

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**EXPANDER**
by
Gene Manning

If you're like me then you don't have a disk drive as yet. You must rely on your tape drives and, let me tell you, that can be a real pain in the backside. When you try and DL something from our BBS, you

discover the limitation so far as the computer and its' RAM is concerned. I guess that you've found out that a tape drive is very slow, but did you know that at your fingertips is a drive that I would guess about three to four times faster than your tape drive? (Actually, it's much faster than that! Ed) What I'm speaking of is refered to as "M" drive or your RAM drive which is the Expander. The expander can come in many sizes, from the basic 64K all the way up to 1024K. At the present time I have a 256K expander in my Adam. It plugs into expansion slot #3 and along with the 256K expander comes (you buy separately) a parallel interface which also acts as an addresser for the 256. It tells the 256K where to store in its' memory all of the Data coming in. As I sit back and watch a file being DL'd into my RAM drive without stopping, it makes me wonder what I did before I got my expander. I guess that I did without, and let me tell you the downloading time is a lot faster with a expander. For me a 256K is enought space to store things that I copy from a BBS. You might want a bigger expander, but it all depends on what you do with the space that you have in your RAM drive. If you are the type that does a lot of file work or programming then a 256K may not be large enough. The next size of expander from the 256K is a 512K, the next one up from that is 768K and finally the big one at 1024K. To install an Expander is very simple; all that you have to do is remove the expander card and the addresser card (parallel interface) from the special electrostatic bag and place ne expander card in slot 3 and the addresser card in slot 2 of your Adam CPU. WARNING!! THESE CARDS ARE VERY SENSITIVE TO ELECTOSTATIC CHARGES, ENSURE YOU'VE GROUNDED YOURSELF PRIOR TO REMOVING THE CARDS FROM THE BAG. You're all set with 256K of additional memory storage area (assuming that you have purchased a 256K expander). All that you have to do to call it up is type the line "M:<CR>" (after booting up your CP/M) and wait for the drive prompt "M>" that is what it looks like. Now everything that you copy will go into your RAM drive so that after you have finished DLing, all that is left is to load it onto your tape (or disk). Some of the other nice features of having an expander is that you can DL a large file from the BBS, say a "LBR" or an "ARC". If you aren't lucky enough to have a disk drive to DELIB the LBR file then stand by for a long wait because Adam will DELIB a file at about 64 or 128 bytes at a time. If you are working with a file that is, say, about 130K, that's about a little over 1000 records, and DELIBing a file like that is going to take quite a long time especially if you have nothing but a DDP (tape) to work with. The RAM drive is much, much faster.

I negelected to add that the RAM drive is a temporary area for all that you copy. If you should have a power loss or a malfunction with your Adam then everything that you have DL'd is gone. You are going to have to begin the transfer procedures all over again so it behooves you to copy the files from your RAM drive onto one of your blank tapes (or disks) as soon as you have finished DLing the file(s). This way, you

will not lose your DL'd file. Then if you're working with a LBR file, go ahead and DELIB it in your RAM drive as it is much faster (and therefore less frustrating). Well, if I have helped you decide on whether to buy an expander or not, I'm glad (and if he hasn't helped, tough bananas....Ed). If you do get an expander you'll be better off in the end and your phone will more than likely be a little lower (my own personal experience is that my phone bill became MUCH lower after DLing to an expander...Ed). GM

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## USE SAVE AND DDT TO CUSTOMIZE DEFAULT SETTINGS IN YOUR APPLICATION PROGRAMS

by

JOSEPH MENDEZ

The standard CP/M transient command DDT.COM can be used in conjunction with the built in SAVE command to configure certain application programs. If you regularly use a program that does not allow you to default to optional settings you can use DDT and SAVE to permanently change the default settings.

I use my AWAUG serial port and IMP.COM to perform high speed (9600 baud) null modem transfers between my Coleco ADAM and Heath 89. My problem with IMP centered around the error checking protocol. IMP defaults to Cyclical Redundancy Checking (CRC) but my Heath communications program, MAPLE.COM, only offers the older Checksum protocol. IMP will automatically step down to Checksum after an unsuccessful attempt at CRC, or I could manually step down with the TCC command. I wanted IMP to default to Checksum immediately upon loading but could find no way to do this within IMP.

SAVE will store to disk an exact image of whatever is in the Transient Program Area (TPA), the area in RAM occupied by the active program. The answer was to load IMP; manually change the error checking protocol with TCC; and SAVE the newly changed IMP in TPA to disk.

One small problem is that SAVE requires you to know the number of "pages" in memory that is occupied by the target program. DDT will give you this information in hexadecimal form. Perversely, SAVE requires you to enter this information in decimal. Thankfully, almost every CP/M guidebook I have seen offers a hex conversion chart, usually buried in an appendix in the back. Even better, get the public domain enhancement DDTZ.COM; use it in place of DDT and it will give you the number of pages in a straightforward manner; no conversions necessary!

The procedure I used is as follows:

1. Enter DDT IMP.COM

   result onscreen:

```
NEXT      PC
4A00      0100
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The number we are interested in is the 4A, which is in Hex (H). A conversion chart shows 4A(H) equals 74 decimal (D). Subtract 1(D) from 74(D) to get 73(D). 73(D) is the number of "pages" to be SAVED. If you use DDTZ, it will do the conversion for you and put it on the screen automatically.

Enter Control C (^C) to exit DDT.

2. Load IMP and enter TCC to change the error checking protocol.

3. Enter "BYE" to exit the program. The program continues to reside in the TPA.

4. Enter SAVE 73 IMPNEW.COM

An image of the revised IMP.COM that still resides in TPA is saved to disk. The changes have been preserved and become the new default setting.

5.Load IMPNEW.COM and confirm the changes have been installed as the new default settings.

In the course of experimenting with SAVE, I discovered an application for USER areas. PIP.COM can import files from other USER areas to the current USER area using the [G] option. The problem is that PIP can't export files to other USER areas. So how can you get PIP.COM in USER areas 1 through 15? The easy answer is to use NSWEEP.COM, another public domain utility. If you don't have NSWEEP handy, you can use DDT to discover that it takes 31 pages. Load PIP; enter a return to exit PIP; change USER area; and SAVE 31 PIP.COM. As a built in command, SAVE takes no disk space and offers enhanced power to CP/Mers who know how to use it.

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Merry Christmas to all and to all a Good Night! .... S. Claus

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**ADVERTISE**
**IN THE AWAUG**
**NEWSLETTER!**

The AWAUG newsletter accepts advertising for publication. We believe that advertisements help ADAM owners to know what is available and, therefore, that they are a good service. In keeping with this notion, our rates are very competitive. Because it is to everyone's advantage to encourage enrollment in our club, we offer a discount to members who wish to advertise.

At present, our membership stands at just under 100 ADAM owners, so your advertising will reach a significant number of very interested people. Rates are as follows:

| SIZE | Member | Non-member |
|---|---|---|
| Full page | $9.50 | $6.35 |
| Half page | $6.00 | $4.00 |
| Quarter page | $3.00 | $2.00 |
| Column inch | $1.00 | $ .65 |

A column inch is 38 characters wide and 5 lines high. For each consecutive column inch, add one line.

Advertising may be for any legal goods or services. Material may be submitted in any intelligible form, from camera ready artwork to telephone orders voice, or by data transmission via the club's BBS, telephone (703) 922-5497.

To make inquiries or place an ad, call or write:

Jack MacKenn (703) 371-7548
415 Camden Drive
Falmouth, VA 22405

## THE PRESIDENT'S CORNER
By Bob Blair

December is usually a good time for editorial article authors to look back over the past year and look forward to the next. This year, as an ADAM owner, you too have ample reason to take stock of what has happened and assess the possibilities for your future use of the ADAM computer.

Who would have believed that 1989 would be such a fantastic year for our orphaned computer? Spawned by the continued support from ADAM user Group members like you, the "third party" hardware and software innovators confidently churned out new products at an unheard-of rate. New vendors and suppliers appeared, we lost a few too. The first ADAM convention was held and other successful measures were taken to increase communication and support between and among the ADAM owners, User Groups and ADAM Bulletin Board Services.

To focus on just a few of the many developments, consider the emergence of: the (economical) hard disk drive; the sound digitizer (record/store voice or any sound and play back on standard ADAM); the use of standard IBM double-sided disk drives (accompanies one of the Hard Drive systems); modular memory expansion devices (can go over 1 megabyte in size); the 80 column color "board"; the ADAM BBS Network and the ADAM News Network (news sharing between individuals and Users Groups, respectively); new operating systems (TDOS and GODOS); new business/home applications (tax, bookkeeping, spreadsheet); new educational software (eg. School Daze); new games (like Lord Simon's Castle and the Vase of Tur); and so many other wonderful things for our ADAM too numerous to mention here. But, in my opinion, the most important thing that happened this year was the confirmation that our decision to stick with the ADAM was the correct choice. The ADAM is perhaps the most versatile home computer available today and is constantly improving. "The best of the 8 bit'ers" is how one Canadian newsletter author describes the ADAM.

What does/can the above events mean for your use of the ADAM in the future? Well, you can now expand your ADAM to higher capabilities without spending a fortune, and without being greatly concerned for ADAM support being abandoned in the near future. Too, the events of 1989 point clearly to the continuation of ADAM advancements.

Specifically, what does 1990 have in store for our ADAM? Heck, I don't know, but it would be fun to guess! My guesses are: 1) increased and improved software which operate under the new ADAM operating systems; 2) new hardware that matches what is now available for current IBM and Mac type computers (scanners, light pens, plotters ??); 3) stronger associations between vendors, designers and User Groups, with faster and more extensive communications between BBS systems; 4) Standards of compatibility and greater protection from software pirating for ADAM programmers; 5) higher volumes of sales for the really good software, but a continuation of the downward

trend in prices for ADAM hardware and software; 6) an increase in the number of ADAM Bulletin Board Systems and new innovations (voice mail??); 7) the emergence of new ADAM heroes who, like the many who emerged in 1989, will continue the fun and excitement of KEEPING ADAM ALIVE AND GROWING. See ya next year!!

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**POWERMATE**
an update by
Mark Gordon

Micro Innovations of Reston, Virginia is pleased to announce the immediate availability of their new expansion products for the Coleco ADAM computer. The Powermate 2 and Powermate 4 are add-on stand-alone subsystems that give the ADAM two RS-232 serial ports, an ADAM-compatible parallel printer port, an ADAM-compatible memory expansion board port, one or two 10, 20, or 30 MB hard disk drives, and one or two 360K or 720K floppy disk drives.

The Powermate 2 consists of an attractive and compact external cabinet (which houses up to two disk drives), an interface board (which mounts in the center expansion card slot inside the Adam), and all necessary cables and software. The Powermate 4 offers a four drive external cabinet in place of the standard two drive cabinet. Both models have sufficient power supply capacity for their full complement of disk drives, as well as an internal fan for effective cooling. Installation of the Powermate requires no modifications to the Adam.

All Powermate units come standard with two RS-232 serial ports - one set up for direct connection of a CRT terminal or serial interface printer, and the other set up for direct connection of an external modem. Also standard are an ADAM-compatible Centronics parallel port for direct connection of a parallel interface printer and a memory extender board port for connection of an Orphanware or E & T memory expansion board. The serial ports are addressed so that they do not interfere with existing Adam expansion products. All ports are fully supported by the included TDOS software.

The standard Powermate 2 unit offers a single 10, 20, or 30 MB hard disk drive. A second hard disk drive or a single 360K or 720K floppy disk drive can be added as an option. The Powermate 4 also comes standard with a single hard disk drive. However, a second hard disk drive as well as one or two floppy disk drives can be added as options. The supplied software fully supports up to two Powermate physical hard disk drives (many logical hard disk drives) and two Powermate floppy disk drives, along with the four ADAM floppy disk and tape drives.

Micro Innovations supplies two operating systems with each Powermate unit - TDOS release 4.0 and EOSHD release 3.3, both from AJM software of Ottawa, Canada. TDOS is a significantly improved replacement for the Digital Research CP/M operating system and EOSHD is the standard Coleco EOS operating with

Powermate hard and floppy disk capability added. Full support is provided for all Powermate capabilities - both serial ports, the parallel printer port, the memory expander port, and up to two hard and two floppy disk drives.

Utility programs are provided to perform disk and tape formatting, set hardware parameters (to change the floppy disk formats, the serial port defaults, and the IOBYTE assignments), backup and restore hard disk data, and to park the hard disk heads. In addition, Micro Innovations provides many public domain programs, including Z80 assembler, debugger, text editor, archiving, de-archiving, and communications packages. Also included are patches to allow the more common EOS applications programs to execute from the Powermate hard disk(s) and a custom version of AJM Software's popular File Manager to perform the patching.

To install Powermate, the user simply plugs the interface board in to expansion slot #2 (the center slot), connects the external disk drive enclosure to the interface board, inserts the boot disk or tape, and pulls the reset switch. Both TDOS and EOS are pre-installed on the hard disk. As delivered, TDOS is the default operating system. To go to EOS, type "EOS" and hit the return key. To go back to TDOS, hit the "Wildcard" key. Instructions are included for the user to make an EOS boot tape or disk, if desired. Also, software is provided for the user to change the size or number of EOS or TDOS partitions.

Micro Innovations is currently shipping 10 and 20 MB versions of the Powermate 2. Introductory pricing for orders received before January 1, 1990 is set at $399.00 for the 10 MB unit and $499.00 for the 20 MB unit. The 30 MB Powermate 2 configuration and the Powermate 4 units are expected to be available in January, 1990. Floppy disk drives (either 360K or 720K) can be added to either product for an additional $100.00 when ordered with Powermate. All units come with a 90 day warantee and are completely assembled, tested, and ready to run. The component parts of the Powermate products are not available separately. A hard disk BOOT ROM, either in cartridge or ADAM CPU plug-in form, will be available in first quarter 1990.

To place an order or for additional information, contact Mark Gordon on the AWAUG BBS or write or call Micro Innovations at 12503 King's Lake Drive, Reston, VA 22091, (703) 620-1372. Normal office hours are 6 to 10 pm, Monday through Friday. A telephone answering machine takes messages at all other times.

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**.....and God Bless Us, every one.**

T. Tim

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## Recovering Deleted Files

by

Les Wilsey

Wednesday night, I decided it was about time that I backed up the files on my hard disk as that 20 meg was being filled up pretty fast. In order to save space on the 720k disk I was backing up to, I felt that I should crunch the files first I had read on the BBS that a lzhufenc.com Utility would do the best job of compressing so I thought I would give it a try. I found the .lbr file on our BBS so after download and de-librarying it, I started in to compress the .COM files on the Hard Disk and then copying them one by one to the 720k disk.

I had went through the As, Bs, and Cs.COM files on one of the HD file section when I figured that this might give me more storage space, but would take forever to compress. The LZHUFENC.COM will only allow one file at a time to be compressed and the infile and the outfile had to be specific identified. Command is lzhufenc dir.com dir.czm also it could only be uncrunched using the file utility lzhudec.com file, uncrunch.com would not work on files compressed by this utility program.

As this was too slow, I decided to use the old standby crunch.com utility. I moved all of the .CZM files off of my backup disk to an empty area on the HD and deleted them from the 720k backup disk.

I located the crunch.com utility and copied it to the HD (B2: section) and before proceding I checked the 720k backup disk to be sure I had cleaned all of the files off. There were still two .com files left on the disk. I issued the command DEL *.COM -- and it did - It deleted all of the 57 .com files that were on the B2 section of the HD - a total of 704K. Was I sick?

I started looking for an unerase utility file. I could not find one on my HD so I signed on to the AWAUG BBS did a locate and found a UNERA16.LBR on the Board, downloaded, de-lbr it but no unera.com file in there. There was an .ASM file but I have never assembled a file so I could not use it. I decided to pull the big switch and hit the sack as it was now one oclock in the A.M.

The next morning, I brought all of my floppies and started listing directories. After a couple of hours, I finally found UNERA30.COM and tried it out - it worked? I restored two files that I thought were on the disk. By the way, did I mention that I did not know what files were on the disk? Well I decided to go for broke and issued the command: UNERA30 *.* for the B2 Disk drive. Lo and behold, all 57 next step was to backup all of the files on my HD.

I got the CRUNCH.COM file ,placed it on the B2 HD and crunched a couple of files using a wild card in place of the file name. I then decided to go all HOG and crunch all of the .com files with one command and also copy the files as they were crunched to the 720k dd for the backup copy at the same time -- all with one command: A0:>CRUNCH *.COM E0: and it would CRUNCH til all of the 720k DO was filled up and then

ask for another 720k DD to continue.

Now I realize that none of you out there would make a dumb mistake like I did, but if you did, I'm sure you would always have a backup copy of your files but just in case there might come along another person that doesn't know enough to quit when he gets tired and sleepy, it might be nice to know that it is possible to recover those files that sometimes get deleted, erased, or just dissapear for no reason at all.

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**The Sewing Machine**
reported by
Bob Seat

The following series of classified ads ran about 20 years ago in an Arizona newspaper:

Monday edition: For sale- R.D.Jones has one sewing machine for sale. Phone 958-0707 after 7 P.M. and ask for Mrs. Kelly who lives with him cheap.

Tuesday: "Correction" NOTICE. We regret having erred in R.D. Jones' ad yesterday. It should have read: One sewing machine for sale. Cheap. Phone 958-0707 and ask for Mrs. Kelly who lives with him after 7 P.M.

Wednesday: Another try: R.D. Jones has informed us that he has received several annoying phone calls because of the error we made in his classified of yesterday. His ad stands correct as follows: FOR SALE. R.D. Jones has one sewing machine for sale cheap. Phone 958-0707 after 7 P.M. and ask for Mrs. Kelly who loves with him.

Thursday: The last word: I, R.D. Jones, have no sewing machine for sale. I smashed it. Don't call 958-0707, as the telephone has been taken out. I have not been carrying on with Mrs. Kelly. Until yesterday she was my housekeeper, but she quit!

Ed. note: The above was copied from the "Just Fun" section of the AWAUG BBS. There's lots of good stuff there so get a modem and come aboard!

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Want even more fun from the ADAM BBS system??? How about a

**-- Scavanger Hunt --**

This post appears on ALL of the 10 BBS Systems, that will be taking part in the "HUNT". The 10 BBS's are as follows:

Trading Post 24hrs
(216)/791-4022

Up -N- Adam 24hrs
(206)/859-2018
Adamlink (Ut) 6p-7a
(801)/484-5114

L'le Orp Adam 24hrs
(402)/457-8308

Phoenix Admlk 24hrs
(602)/936-3892

Connection 24hrs
(219)/422-6091

SLAUG Th-Su. 9p-7a
(314)/773-1551

AWAUG 24hrs
(703)/922-5497

AKRON BBS 24hrs
(216)/882-4720

SOCA BBS
24hrs (714)/775-1603

Now, what you must do is find TWO (2) HIDDEN CLUES, off each of the 10 systems, and leave IN a FEEDBACK message to the SYSOP, the location on HIS BBS, as to WHERE (what area) you saw HIS two (2) clues. Each clue will contain DOUBLE QUOTES and a \ mark, like this ""SAMPLE\CLUE"". The winner must have POSTED OR REPLIED on EACH SYSTEM atleast once during game period, in the OPEN BBS, area, of EACH SYSTEM. Winner is the FIRST USER to find ALL 20 clues, on the 10 systems. ANY USER that HAS SYSOP ACCESS on ANY ONE of the 10 SYSTEMS, CAN NOT BE A PARTICIPANT or a WINNER. Here are the 20 clues:

""SERIAL\LOGIC""
""BUFFER\RAM""
""CONTROLER\BBS""
""CABLE\PARITY""
""CARRIER\COPY""
""PORT\SUPPLY""
""POWERMATE\EOS""
""CLOCK\ADDRESSER
""MONITOR\80COL""
""KEYBOARD\DISK""
""ADAMCOM\EVENT""
""INTERFACE\CPU""
""MODEM\BAUD""
""SYSOP\DATAPACK""
""EPROM\RIBBON""
""PRINTER\PAPER""
""FORMAT\DELETE""
""ASCII\TRANSFER""
""STARLINK\PCP""
""EXPANDER\PIA2""

All clues should be posted by SYSOP in a area accessed by all, and the clue MUST SHOW SYSOPS ID header. Game ENDS MIDNIGHT Dec 24, 1989. If no winner, then user with the MOST CLUES at that time is the winner...

[SYSOP NOTE - THE APPEARANCE OF THE CLUES IN THE ABOVE MESSAGE DOES NOT COUNT AS THE HIDDEN CLUES - YOU MUST FIND TWO OF THE ABOVE CLUES ELSEWHERE IN THIS BBS.]

The prize(s?) will be announced later.

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**AWAUG MEMBER OF THE MONTH**
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**Clifford Sinopoli** is AWAUG MEMBER OF THE MONTH of December. Clifford has been a member of AWAUG, and a regular meeting attendee, for three years. In August of 1987, Cliff volunteered to assist AWAUG members and officers by making procurements to assure the extensive club library and for the supply of blank formatted tapes. Since that time he has purchased thousands of tapes from a variety of local retailers, negotiating the best prices AWAUG has ever experienced. Frequently, Cliff makes special (long distance) trips to drop off procurements.

Few of the AWAUG members have been aware that this quiet and generous man has been our benefactor. AWUAG's club treasury is dependent upon, and has thrived, on his procurements. He has worked long and hard for us without reward or recognition.

It is with great pleasure that we announce that **Cliff Sinopoli** is AWAUG MEMBER OF THE MONTH.

**SPECIAL ANNOUNCEMENT**

The AWAUG hardware repair service has been discontinued. From time-to-time it has been necessary for AWAUG to adopt a service where none currently exists. for a while, there were few, or no, ADAM repair services. Accordingly, Minh Ta stepped in and agreed to handle repairs for AWAUG members. We were swamped with requests. However (thank God), a report from the recent ADAM convention includes news that a full ADAM hardware repair service is now available. KOSOWSKY's ADAM REPAIR (315) 699-6456. In the meantime, all hardware items currently in hand for repair will be repaired (if we can) by AWAUG volunteers.

If you have an emergency, leave me a message on the BBS.

Bob Blair

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**The Editor's Corner**

Well, the year is practically over. It doesn't seem like I've been your editor for an entire year. Guess time flies when you're having fun!!

This has been a very robust year for AWAUG and for the entire Adam community. We've seen the production of a hard drive interface for our machines which has substantially increased the utility of our little "orphan." The talent and dedication of Big John Lingrel and Tony Morehan is absolutely amazing and all Adamites owe them a very large debt of gratitude. Mark Gordon's Powermate is ready for production and provides another choice for increasing the capabilities of the Adam. Tony Morehan has made a large contribution to this project also. AWAUG, under the leadership of Bob Blair, has made several low cost improvements available to club members such as 80 column terminals, 1200 bps modems, and a parallel interface that can be used for connecting a dot matrix printer. It just seems to get better and better!

Minh Ta has created several add ons that provide additional utility. In addition, Minh has been there for us when we had hardware problems or needed his technical expertise to install our hard drives.

One of the problems with mentioning the contributions of a few folks is that some deserving people get left out. Certainly many of our members have made substantial contributions for the betterment of all of us and there is no intent to slight them. AWAUG, like all Adam clubs, depends on the efforts of a lot people to be successful. I'm proud to be a member of such a fine organization.

There are a lot of changes coming next year and I'm confident that if everyone pitches in we'll do just fine.

I hope you all have a very Merry Christmas and a Happy New Year. JM

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"....let it snow, let it snow, let it snow."

Author wishes to remain anonymous given the current weather conditions

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FACILITIES FOR THE ADAM

JKL UTILITIES

There are two utilities in JKL that are very powerful and useful. With these you can dissect and revise the machine language of any program on any ADAM storage medium such as the digital datapack or disc. There are a large number of special programs which will also permit patching programs and some are even easier to use than JKL. But JKL was the first EOS program that provided this facility and it was in use long before Coleco made CP/M 2.2 available for the ADAM. By far, most of these disassemblers are available in CP/M and only a few are EOS systems. Not that it matters. Either way you can find out exactly what is written in a program (even if you can't understand it) and you can change it in any way you please. In CP/M there is a unique program that permits you to do these same things, only it does them in the resident memory of the computer. That is, it does not make changes on the disc. The program I refer to is DDT.COM. After you have made changes with DDT.COM and have exited back to CP/M, you can (if you're swift) make these changes a permanent part of the disc (or DDP) by a SAVE maneuver. This SAVE maneuver takes a bit of cogitation to get it right.

Before delving into the patching (changing) of a file, I will cover the simple READING of a file. There is a JKL command, "R", which will read blocks on the disc. On the whole, it is relatively easy to use. And one nice thing is that you can't damage the program on the disc by using the READ command. So it is safe to experiment with it.

The READ command will dump one block of data at a time. A block of data is one kilobyte or 1024 bytes of data. You can read any block on the disc. The screen output is in both HEX and ASCII (text) although, for binary files, the ASCII output may look like hieroglyphics.

Once JKL has been loaded into memory, you may remove the disc and then place your subject disc on any of the drives available. To execute the read function you just type in R (no carriage return needed). The next screen you will see will look like this:

```
Select Drive for Read Block_

DDP1:DDP2:DSK1:DSK2:
```

As in previous JKL programs, the bottom line refers to the SMARTKEYS. If the disc to be read is on the B:Drive, then we hit SMARTKEY IV. As soon as the SMARTKEY has been pressed, the bottom line will be changed to this:

Enter Block Number :_

At this point enter the block number in HEX of the block that we want to read. It doesn't matter if the disc being read is in CP/M or EOS. We should know what block we are interested in. For example, suppose that we are going to read the first block of a CP/M directory. That is located at the 13th block or in HEX that would be Block D. So at the prompt above, we enter D and a carriage return. Then another line is added to the menu:

Enter Buffer Address: _

Normally I enter 0 (zero) but I have never observed that it made any difference what you put in here. As soon as you enter 0 and a carriage return, you will get this prompt":

Hit Y to Read Block_

There will be a brief pause as JKL reads the designated block. It then returns to the standard JKL prompt (U> ) almost as if nothing has happened. In order to see the readout you must type M at the prompt. Now you will get a big dump of the contents of block D. It might typically look like this:

```
0000:C903DA8100C3FDBC I.Z..C}<
0008:FF00534420202020 ..SD
0010:2020434F4D000000   COM...
0018:0A02030000000000 ........
0020:0000000000000000 ........
0028:00004144414D2020 ..ADAM
0030:2020434F4D000000   COM...
0038:1E04050607000000 ........
0040:0000000000000000 ........
0048:0000534F4C564F44 ..SOLVOD
0050:4453412020000000 DSA  ...
0058:0F08090000000000 ........
0060:0000000000000000 ........
0068:000041444D544C33 ..ADMTL3
0070:2020524E4F000000   RNO...
0078:120A0B0C00000000 ........
0080:0000000000000000 ........
0088:00E553554254574F .eSUBTWO
0090:202042414B000000   BAK...
```

```
0098:010B000000000000 ........
00A0:0000000000000000 ........

UP  :DOWN:ADDR:CALL:LIST: END
```

This, by the way, is the directory of the disc that I am using right now to write this article. The filename that this is filed under is found on line 0068. This is a completely typical CP/M directory, and JKL is providing both digital and ASCII information. This same information could be seen with another disassembler such as DU-V87. The only significant difference is the format of the output. DU-V87 presents 16 bytes of output line whereas JKL, as you can see, puts out 8 bytes of data per line. Also DU-V87 dumps one sector (128 bytes) in each dump, whereas JKL dumps 168 bytes in each segment. In order to view more of this one block dump, your attention is directed to the SMARTKEY menu that appears at the bottom of your screen.

SMARTKEY I will move the data up on the screen and line 0000 will scroll off at the top and line 00A8 will appear as the bottom line of data. In a similar fashion, SMARTKEY II will scroll the data down. This is very convenient for viewing the data line by line. However if you want to move to a completely different location in the block, the SMARTKEY III is for this purpose. If you wish to have line 0280, then press SMARTKEY III (ADDR stands for address). This will bring a new menu entry between the SMARTKEY menu and the bottom of the data dump:

```
Enter Memory Address:_
```

Here you would enter 280. At once the line at the top of the screen is the line starting with byte 280. In this respect, JKL is a little different from other disassemblers. With JKL you can start the read out with any byte you choose. It can be 283 or 315 or whatever. Most others dump only at even byte numbers, usually at numbers like 0010, 0020, 0050 etc.. You can always tell when you have reached the end of the one kilobyte block dump. This will occur at byte 0400. Anything that appears above 03FF is not part of the block you requested. Usually the ASCII part of the dump is obviously not a part of the block you have been reading. Byte 03FF (HEX) is byte number 1023 or the 1024th byte (zero is byte number one) and hence the last byte of the block.

For those of you who have some experience with CP/M's DDT.COM, this presentation should look quite familiar. DDT will not display this particular information, but you can have DDT present any of the files in the directory, such as SD.COM Notice that in the directory entry of SD.COM above, on line 0018 there is an 0A (which in CP/M indicates that there are 10 sectors in the SD.COM file). This is followed by an 02 and an 03. This tells you where the file SD.COM is

located. It is located in CP/M group 02 and part of 03. Since the directory that we are looking at is group zero (or Block D in HEX) the SD.COM will be found two blocks further down or at block 0F. If we read block 0F, just as we are reading block D right now, we could see the actual file SD.COM. What we would see would be identical to a DDT.COM look at the file SD.COM. However, DDT.COM actually calls up SD.COM and lodges it in the first part of the Transient Program Area (TPA) starting at block 0100. If we looked at 0100 of the DDT.COM dump, we could see the identical data that JKL would present by reading block 0F. I mention this because of the next reference I make to the SMARTKEY menu.

SMARTKEY V has a menu named LIST. If you hit that key, the screen presents a list of the memory dump which is a program listing by byte number and 8080 mnemonic code of statements in the program. It lists the mnemonic and the operation that is performed by that mnemonic. Mostly these OP codes are the same as the CP/M OP codes. The operations are the same, and since we are looking at a CP/M program, they are equivalent. DDT has a LIST command and if we listed these same lines with DDT, we would see almost the same presentation. This LIST is particularly useful in reading non-CP/M files (EOS). If you have selected the LIST option, you can return to the normal screen by just hitting the SMARTKEY V again. There is a menu for CALL on SMARTKEY IV which appears to be a regular CALL command to enter and operate the file starting at the address you enter after the CALL command. But I have never had any success getting this to work. Finally there is SMARTKEY VI which is an END command. If you press this key you will exit the READ operation and be returned to JKL for the next operation.

You may make changes in the program you are reading in the memory dump and then make this a permanent change with the WRITE command. There is another JKL utility which has been expressly designed to do this in one command and that is the PATCH command which is executed with the letter P. You can make changes with a combination of the READ and WRITE commands or with the PATCH command. The end result is the same. I really don't see where one procedure has any particular advantage over the other. I will go through both procedures and you can make your own choice.

A real easy change to make would be in the example I used above where I READ the directory of a CP/M disc. On line 0008 the ASCII dump indicates that this is the directory entry for the file SD.COM. The first byte in that entry is the byte 00 (this is located at position 0009). This 00 indicates that it is an active file in USER area zero. We can change this to E5 which will change the status of SD.COM to an erased file. So using the READ command and reading Block D, we will see the dump above. Put the cursor at the first zero and type the character E; at the next zero, type 5. That's it! Now hit the SMARTKEY V, which is the END command and you are out of the READ operation and back at the JKL prompt. If you go no further and simply exit

JKL or look at another disc, no permanent changes will be made in the directory. You can punch holes all day long with the READ command and no harm will come. But to make the change to E5 a permanent change, then as soon as you get the JKL prompt after exiting the READ command, you type W. This executes the WRITE command. You will get a menu that asks for the block number and the buffer number. Here you enter the same numbers that you used in the READ command. Maybe I should go through those menu prompts just as they appear:

```
U>W


Select Drive for Write Block_
DDP1:DDP2:DSK1:DSK2:  (you choose SMARTKEY IV)


This line now changes to this:

Enter Block Number:_     (you enter D <CR>)
Enter Buffer Address:_   (you enter 0 <CR>)


Hit Y to Write Block_  (you hit Y)


U>
```

You are now returned to the JKL prompt. These changes have been made permanent. This is obviously extremely easy. If you wish, you can hit the memory dump M and you will see the final form you left this block in. You may verify this by doing another READ of this block. This time you will see that the change is there. You may now change this block back to 00 and restore the file to an active file in USER area zero. Use the same procedure.

In the future if you read some article or instructions that tells you to patch certain changes in a program to make it work on the ADAM, you can pull out JKL and with the READ and WRITE commands you can make the changes with a minimum of bother.

The PATCH command is slightly more complicated to use than the READ command but still quite easy. To execute the PATCH command you type P at the JKL prompt, Thus:

```
U>P
```

The screen displays the usual SMARTKEY menu with a couple additional keys added:

```
DDP1:DDP2:DSK1:DSK2:EDIT: END
```

You first select the drive to be patched (like SMARTKEY IV)

Next press SMARTKEY V (EDIT)

The menu now changes to look like this:

```
UP:DOWN:    :DRV :READ:WRITE
```

We must first read the block, so hit SMARTKEY V (READ)

The response is a prompt for block number:

Enter Block Number:_ (you enter D)

At this point you will get a large screen dump of the block D just as above when you were reading a block. Now you may change the same byte from 00 to E5. When you have made the change then hit SMARTKEY VI (WRITE). You will receive a screen prompt like this:

Enter Opt Block Number:_

Normally you won't be changing the Block Number
so just hit a carriage return.

The next prompt is:

Hit Y to Patch Block_

When you hit Y, you have made the patch. Now to get back to JKL. So hit SMARTKEY IV (DRV) That stands for DRIVE. Next hit SMARTKEY VI (END) and you will be returned to JKL.

Both of these procedures to patch a file are very easy, even on the first attempt. I have personally used them both many times both for CP/M and for EOS files. Everyone in IEAUG should become intimately familiar with their powerful JKL Utilities and these programs discussed today are some of the most useful tools you will ever have.

Thomas J. Keene
IEAUG

1340 Lombardy Blvd.
Bayshore, N.Y. 11706
July 23, 1989

Robert Blair &
ADAM Washington Area Users Group
7814 Worthing Court
Alexandria, VA 22310

Dear Bob and the Members of the ADAM Users Group:

I wish to thank you personally and thank the club for auctioning off my husband's Adam computer equipment. Since he died in December 1987, I have been trying to locate a place to sell his computer since no one else in the family had a need for it. My Brother-In-Law, Marshall, read the notice of your club meetings in the Computer Digest, called Bob, who invited him to bring the equipment to your meeting. Marshall felt the D.C. area would have more Adam people then on Long Island. From your great response, I was right in sending the equipment to you.

David really enjoyed using the equipment and I am very pleased (he would also be pleased) that others will be able to benefit and enjoy the equipment as he did.

Again, thank you for your kindness in selling the equipment.

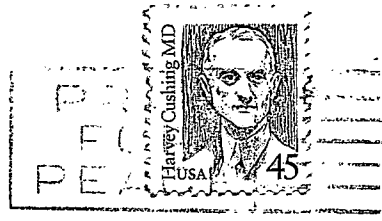
Sincerely yours,

Doris Wellisch

Doris Wellisch

The Fine Print







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