

SURPRISE ! ... SURPRISE !

Dateline January 1, 1985, Coleco discontinues production of the ADAM computer.

Dateline March 1, 1986. Adam Users' Group continues to grow, increasing memberships by more than 50%.

When the announcement of ADAM'S demise reached us, we all thought that AUG would continue its support for only a short time.

But that didn't stop us from reaching as many ADAM users as possible. We sent mailings to as many names as we could get our hands on. We continued our advertising in Family Computing magazine.

We received thousands of inquiries and were able to turn more than 75% into loyal AUGies. Now that's when things started to look LONG TERM!

The most important step was taken by YOU. Not only did you support the group by your membership, but you let us know what was happening with ADAM in all parts of the continent (and world). Third party vendors developed and continue to develop hardware modifications, software programs and utilities for ADAM.

You also contributed many fine articles, tips and programs to AUGment. You contributed and continue to contribute some super-fine programs to the AUG Library for other members' enjoyment.

All in all, mutual friendships have grown and will continue to grow through the use of the ADAM computer and AUG.

With all these good things happening, it's no wonder that AUG and AUGment continue to thrive.

The thoughts of short term publication have turned to thoughts of editorial content for 1987.

But for the present, we will continue to bring you the latest up-to-date news and reviews of the still to come hardware and software for the ADAM.

All we ask is that you continue to send us suggestions that will help us help other members through AUGment.

The headline reads "SURPRISE ... SURPRISE," but the real surprise is the number of new members we are getting every day.

The ADAM is a good computer and probably the greatest computer value on the market today. It's no wonder that although it has been more than a year since ADAM was discontinued, more ADAMs were sold during 1985 than most other "well known" computers.

The only missing link was the support needed for new users. Since Coleco is no longer offering support, it is very important that AUG, with your help, continue to offer the help tips and articles necessary to make ADAM complete.

Keep up the good work. We'll try to do the same.

I guess, when you think of it, there wasn't so much of a surprise after all!

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Binder/Index

Keep your copies of AUGment, and the index for Vol. 1, in a three-ring binder. Order from AUG Binder, Box P, Lynbrook, NY 11563. Include your ID#.

Binder with index.....\$10.00
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 All six Vol. 1 issues, w/binder and index.25.00

W/P Bulletin Board

The new electronic bulletin board of the Word/Processing Users' Group is now on line. Containing information for writers and other word processors, SCROLL-BB may be reached by calling 516/294-9724 at 300 or 1200 baud. For more details contact W/PUG, Box 144, Malverne, NY 11565.

Notice

We have received a Software Support Alert Notice from Practical Programs, P.O. Box 244, Kalamazoo, MI 49005, regarding Basic Manager v1.0 and affecting orders #140 and below. If you get error #90 when you try to go to the "LK" screen with no files currently locked, write to Practical Programs for instructions.

Dear AUG,

In the last Issue of AUGment, several people have apparently been decoding the basic interpreter and have discovered some undocumented commands. It would seem that some ADAM owners are not aware that SmartBASIC is actually Applesoft Basic. They will find these commands and perhaps some others fully documented in any good Applesoft manual, which their local library should have. I would recommend Apple II User's Guide by Pools, McNiff, and Cook. Most source code in Applesoft will also run on the ADAM UNLESS THERE ARE PEEKS/POKES. SOUND OR GRAPHICS. In these cases, some modification will be necessary since different CPU, sound, and video chips are used.

Kenneth E. Griggs
 22041 Central Park Ave.
 Park Forest, IL 60466

* * *

Dear AUG,

You folks are just great. I have every copy of AUGment and I'm always rereading them. In reference to CP/M STUFF in the Nov.-Dec. 85 issue, I want you to know that I am grateful you took the time to recognize the fact that there are lots of people who became frustrated with CP/M. This is because of the way it was presented to us. AUGment has a way of making the most complex things easy to understand, and I'm sure that I speak for a great many people when I say thank you for helping us. I look forward to many more issues of AUGment, and with each issue I can get a little closer to CP/M.

Please feel free to forward my name to other ADAM users. I have not been very successful in contacting other ADAM users in my area, but through your publication you might be able to unlock that door for me.

Paul F. Morel
 320 Powerline Rd.
 New Smyrna Beach, FL 32069

DearAUG,

In Vol. 2, No. 2, a letter introduced a new command, NOBREAK. A better way to get the same effect is to put the following lines in your program. The first command should come at the beginning and the second should come at a part of the program that will never be used so that the program does not run over it.

```
0 ONERR GOTO 60000
60000 RESUME
```

This little trick is very useful if you don't want anyone listing your program. To cancel the command, type CLRERR.

My letter in the same issue contained a program with an error. In line 20, A\$ should have 30 characters in it. Just toss in some spaces and it'll work fine.

Two sample programs:

```
10 HOME
20 INPUT "Enter saying: "; a$
23 HOME
25 GOSUB 1000
30 VTAB 12: HTAB 1: PRINT LEFT$(A$,
  29);
40 a$ = MID$(A$, 2)+LEFT$(a$, 1)
50 FOR delayloop = 1 TO 100: NEXT
60 GOTO 30
1000 IF LEN(a$) < 30 THEN 1010
1005 RETURN
1010 a$ = a$+" ": GOTO 1000
```

[To make it look better, try POKEing 16953,32 at the beginning.]

```
10 HOME: ONERR GOTO 100: POKE
  16953, 32
20 VTAB 10: PRINT "Try to stop it:"
30 FOR t = 500 to 0 STEP -1: HTAB 1:
  VTAB 12: PRINT t: NEXT
40 VTAB 20: PRINT "I knew you couldn't
  do it!!! ": PRINT " "
50 PRINT: PRINT "Press any key to
  go";: GET a$
60 HOME: CLRERR
70 VTAB 10: PRINT "Now try:"
80 FOR t = 500 TO 0 STEP -1: HTAB 1:
  VTAB 12: PRINT t: NEXT
90 END
100RESUME
```

[POKE 16953,95 after running the second one to get the cursor back.]

Erik Walkowicz
2639 Douglas Drive
Bloomfield Hills, MI 48013

DearAUG,

In the Jan.-Feb. AUGment, Rob Friedman asked about running the HELLO program from disk.

The solution is simple: All you have to do is change the default setting from tape "8" to disk number "4" on your SmartBASIC disk. Look at the second byte in block #18, which originally has a value of 8. Change this value to 4. These are decimal values, not ASCII. This assumes you have version #79 of SmartBASIC. [Print peek(260) to find your version.]

If you do have a version other than 79 you will have to look for the correct byte. It should be in the general area. The key is to look for a 62 followed by 8.

Uncle Ernie's Toolkit and Hacker's Guide to ADAM both have programs for changing and saving individual bytes to disk.

Jim Guenzel
12221 Spring Shadow Ct.
Maryland Hts., NY 11518

DearAUG,

In response to John Walden's letter, I can provide (to anybody who has an Expansion Module #3 ADAM) schematics for a composite (Video/Audio) or a non-composite (Chroma/Luma/Audio) setup. I also have some pokes for anyone out there to use.

The first one is for you sequential file users: 9|0|03,|0-255 (Character). Now you don't have to have those question marks.

The second one is for the beep sound that BASIC makes. The pitch can be changed using 17954,10-255. The voice can be changed using 17958,144-159 or 178-191 or 2|08-223 or 24|0-25|0. One problem is you cannot shut off any voice except for the first. To shut off a voice other than the first, type poke 17958,255: poke 17958,144.

Damon Michaels
21 Stone Brook Road
Sudbury, MA 01776

Dear AUG,

The answer: Block 18 Page 1 Byte 01 Change 08 to 04.

The question: "How do you run a HELLO program from disk...?" from Rob Friedman.

It took a lot of trial and error after I used the Hacker's Guide and encountered the same problem.

Procedure: Copy SmartBASIC using the Hacker's Guide backup program. Then use the Disk Editor to change Block 18. You could also change the word HELLO as it appears on Block 18 and have your "HELLO" be any five letter word. It's less messy to just use five letters. Remember to rename your HELLO program if you do this.

I have a disk drive, CP/M, LOGO, ADAMCalc, and have modified all to work from the disk drive. LOGO was the easiest. After copying to disk, just add "SETDEVICE 4" in the "QUESTION" Procedure and <SAVE> it.

Lesson learned: I got Hacker's Guide on disk and didn't notice that it did not have a WRITE-PROTECT tab on it. I was all excited and within 20 minutes I decided to INITIALIZE a tape so that I could try some of the programs. I put the tape in the drive, typed "INIT HACKtry," and watched as the disk drive wiped out my brand new disk. It was the default drive. I had to type in the Disk.Edit program and reconstruct Block 1 by copying Block 0. Luckily INIT only moved the directory to Block 0 and I modified the Disk.Edit program to move only selected blocks.

It took a lot of trial and error and was a real learning experience in editing, etc., but there have got to be better ways to learn. I know; I'm a teacher.

Moral: Use write-protect tabs for those disks that you do not want destroyed. Check all drives before trying potentially destructive procedures.

Henry M. Seamon
RD 1, Box 191
Hickory Grove
Fulton, NY 13069

Dear AUG,

Attention, ADAM Ranger!

Here's a method for using the moving window mode of SmartWRITER to gain the full-screen editing advantages and fast-moving cursor, without watching your text disappear off the edge of the screen. Just set the margins to within the screen display. (I use 10 and 45.) Then set margins back again when you print. It took me seven months to figure this out!

I especially like the above arrangement with Coleco's Roller Controller, (\$20 at Kay Bee Toys and \$30 at Toys R Us). I use the trackball to move the cursor all over the screen when editing my manuscripts.

You may also be interested in some ADAM items carried in the latest JAMECO Electronics catalog (1355 Shoreway Road, Belmont, CA 94002, 415/592-8097). They carry the Coleco computer board for \$6.95 and the Coleco game board for \$4.95. Mine came with connecting cables but without socketed chips, and labeled as defective, so judge for yourself. They also carry the Coleco power supply for \$14.95. Mine was brand new—came with cords, switch, and info sheet for PS72559.

And now, Ranger, my question for you. I'm looking for a second digital data drive. There should be tons of them on the surplus market by now. Do you know any place that's selling them for under \$20.00? I know that NIAD is offering reconditioned DDD's for \$19.95, but that word "reconditioned" puts me off. Hope you can help.

One other thing. My SmartWRITER files are limited to about 20 double-spaced pages. Will the 64K expander let me write much larger files? Hope someone has the answer.

Conan LaMotte
7971 Dorado Court
LaJolla, CA 92037

[Editor's note: New, not reconditioned, digital data drives are available for \$9.95 from H & R Corporation, 401 E. Erie Avenue, Philadelphia, PA 19134.]



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Basic Practice

HOW TO DRAW A CIRCLE IN HGR: The following simple program demonstrates the somewhat esoteric technique of drawing circles. Transposing the COS and SIN functions in line 60 and the parity signs in line 70 vary the direction and starting point of drawing. The ".95" in line 60 compensates for an inherent screen distortion.

```
ra = radius of circle
hi = horizontal center of circle
v1 = vertical center of circle

10 INPUT " enter radius (5-89): ";ra
20 h1=128
30 v1=80
40 HGR:HCOLOR = 14
50 FOR point=0 TO 6.28318531 STEP
   .0174532925
60 v2=ra*COS(point): h2 = .95*ra*
   SIN(point)
70 HPLOT h1+h2, v1-v2
80 NEXT point
```

HOW TO RANDOMLY ASSIGN DATA: This routine demonstrates another programming trick. Randomly assigning values to DATA variables can be critical to games and quizzes. As the program reads the randomly selected word into the rand-variable, it converts the dummy-variable to a null set. This way, the next time a random number is picked it can check to see if that number has already been used (line 70).

```
10 DIM origv$(9),rand$(9),
   dummy$(9):TEXT 20 FOR x=1 TO
   9: READ origv$(x):dummy$(x)=
   origv$(x):NEXT
30 DATA ace,bat,cat,doe,eat,fit,
   got,hai,ink,jar
40 INPUT " enter random number: ";
   r1:r2=RND(-(ABS(r1)))
50 FOR x=1 TO 9
60 r3=INT(RND(1)*9)+1
70 IF dummy$(r3)="" GOTO 60
80 rand$(x)=dummy$(r3):dummy$(r3)=
   "":NEXT
90 HOME:VTAB 2:HTAB 8:PRINT "orig";
   SPC(2); "rand":VTAB 4
100 FOR x=1 TO 9:HTAB 5:PRINT x; " |";
   origv$(x); " |"; rand$(x):NEXT
```

WHAT ARE HIGH AND LOW BYTES? Since the maximum value that a single memory location (address) can contain is 255, a technique is used that splits numbers less than 65535 into two separate values.

This is particularly important to know if you are getting started in machine language programming. Note that the low byte always precedes the high byte in an mi-routine.

To convert from decimal to high/low bytes use this formula:

```
hi byte = int(value/256)
lo byte = value - hi byte * 256
```

Let's convert 17115 to high/low bytes:
hibyte=int(17115/256)=int(66.85)=66
lo byte=17115-66*256=17115-16896=219

To convert from high/low bytes to decimal use this formula:

```
value=lo byte+hi byte*256
```

Let's convert 87(lo byte) and 39(hi byte) to a decimal value:
value=87+39*256=87+9984=10071

[This is the first in a series of articles contributed by P.R. Dick of DATA DOCTOR. To have your programming questions answered in future BASIC PRACTICE articles, send them to: DATA DOCTOR, Dept ABP, P.O. Box 776, Oak Hill, WV 25901.]

NOTICE

It's time for some AUGIES to renew their membership. If your AUGment label has **RENEW** printed on it, your membership will expire after the next issue.

The renewal rate is **\$15.00** U.S.A. ... **\$20.00** CANADA (U.S. Funds) and should be mailed to **AUG RENEWAL**, P.O. Box P, Lynbrook, NY 11563.

IMPORTANT

Please write your ID# on the face of the check. The number on the AUGment label is your ID number.

Back Issues

We have had many requests for back Issues of AUGment. If you would like copies of any of the previous Issues, please send **\$3.00** (for each) to **AUG Back Issues**, P.O. Box P, Lynbrook, NY 11563.

Avoiding I/O Errors

You have a program like CHECKBOOK which opens, reads, and writes to a data file; you run the program, add a few records, and write to the file....I/O ERROR. If this has happened to you, read on...

This kind of problem is similar to the NO MORE ROOM problem in that it is caused by the serial DIRECTORY SYSTEM. Once a file is opened, its length is recorded and you cannot exceed this maximum block length.

In order to avoid this problem, use the following technique in your WRITE subroutine of the program. (Data file is called DATA.)

```
100 ONERR goto 200
110 d$=chr$(4)
120 PRINT:PRINT d$+"OPEN temp"
130 PRINT d$+"WRITE temp"
140 FOR x=1 to length
150 PRINT data$d
160 PRINT:PRINT d$+"CLOSE temp"
170 PRINT d$+"DELETE DATA"
180 PRINT d$+"RENAME temp,DATA"
190 RETURN
200 CLRERR
210 PRINT "Unable to write to temp
```

```
file."
220 PRINT "Insert another tape or
disk and press any key."
230 GET q$
240 PRINT d$+"OPEN DATA"
250 PRINT d$+"WRITE DATA"
260 PRINT
270 PRINT d$+"CLOSE DATA"
280 GOTO 100
```

This subroutine should get you by locations:

```
16956 left margin
16957 right margin
16958 top cursor margin
16959 bottom cursor margin
16993 bottom line where SCROLLING
starts
16994 column where SCROLL stops
16995 number of frozen lines at the
top for SCROLL
```

Note that these values also apply in GR and HGR modes. See article by P.R. Dick in Vol. 2, No. 2.

Guy Cousineau
1059 Hindley Street
Ottawa, Canada K2B 5L9

HOT NEW PRODUCT!! EVE EXP-MOD #3 KIT

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* * *

VENDORS is not advertising. We list as many vendors as space allows. Listings in no way represent our endorsement.

Stellar 5

by Loretta Picone

Stellar 5 is a unique astronomy program that was specifically designed for the ADAM computer.

In addition to locating all the planets, Stellar 5 allows you to calculate the position of 15 comets (including Halley's) and the eight planets at any date, past, present or future.

The planet and comet finders are important programs in this package. Planet finder includes a graphics program that allows you to see where a planet can be found on ten different days during a 60 day period. A grid displays six of the 12 major constellations. The planet finder will tell you in which constellation each planet can be found and its magnitude, phase and distance from the earth.

Stellar 5 also includes a calculator that measures the distance between two objects in space, a program giving information on galaxies and stars, and star charts which give data on the most important stars.

You first load SmartBASIC, then insert the STELLAR 5 disk or data pack, and then RUN STELLAR 5. A MENU will automatically appear on the ADAM screen with the following ten choices: 1) Constellation charts; 2) Constellation data; 3) Star finder and data; 4) Convert to Julian date; 5) Planet locator; 6) Convert to calendar date; 7) Moon phases; 8) Halley's Comet; 9) Find your zodiac; 10) Distance calculator.

Then ADAM will ask you which subject you want, and you will enter the number of your choice.

Worth having in your personal library, Stellar 5 will provide you with quite a learning experience and fun at the same time.

Available from Hanania Enterprises, Ltd., P.O. Box 356, Tinley Park, IL 60477 for \$39 on data pack or disk (including shipping and handling), Stellar 5 is guaranteed to work. It will be replaced unconditionally during the first 30 days and for a fee of \$10 any time after that.

Helpful Hints

To start off my first article, I thought it would be appropriate to begin with a small graphics program.

This is for those of you who have continuous graphic pictures all in one program and want them to look a little more advanced. Here is a small graphic subroutine to make the transaction between pictures a little more interesting.

c = a color different from the background of the first picture

nc = background color of second picture

```

10 GR
20 COLOR = c
30 Y=0:Z=39
40 FOR A=0 TO 19
50 HLIN 0,39 AT Y
60 HLIN 0,39 AT Z
70 Y=Y+1:Z=Z-1
80 NEXT A
90 COLOR = nc
100 FOR B=0 TO 19
110 HLIN 0,39 AT Y
120 HLIN 0,39 AT Z
130 Y=Y-1:Z=Z+1
140 NEXT B
    
```

Here's something I found while roaming around in SmartLOGO. If any of you AUGies who have SmartLOGO are looking for a way to leave a SmartLOGO procedure and return to word processing, try this:

```
.CALL 64743
```

If anyone knows how to copy the Buck Rogers Super Game, please let me know. I own PACKCOPY by Sage Enterprises, and after attempting to back up my Buck Rogers data pack, I tried to use it and it hung up my system.

In the next newsletter, we'll make your favorite SmartBASIC programs seem to be self-loading.

John S. Griffin
745 Beach Ave.
Beachwood, NJ 08722

* * *

Time to Renew?

ADAM

| | |
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| DATA PACK (Adam) | 1/\$ 3.95 - 10/\$37.50 |
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| Paper T/F-F/F 1/2" Greenbar, 18 lb. | 1000/\$18.99 |
| Labels T/F-F/F (Address) | 1000/\$5.00 |
| Labels T/F-F/F (Data Pack) | 100/\$5.00 |
| Index Cards - T/F-F/F - 3" x 5" | 500/\$7.95 |
| Rolodex Cards - T/F-F/F 2 1/6" x 4" | 500/\$8.95 |

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| 64K MEMORY EXPANDER | \$69.95 |
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| DIGITAL DATA DRIVE | SPECIAL PRICE | \$29.95 |
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| TRACTOR FEED for Adam printer | \$79.95 |
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| PRINTER STAND - Front ON/OFF switch | \$19.95 |
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| POWER PACK - To separate printer/use CPU alone | \$69.95 |
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| ADAM AIR CONDITIONER - Stop heat buildup with this super quiet computer fan. Will help eliminate the problem with the computer crashing (freeze) | \$19.95 |
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| SERIAL/PARALLEL INTERFACE UNIT - This opens a whole new world for the Adam owner. Now you can connect a dot-matrix hi/speed printer/use standard modem (300-1200 baud). Comes w/software used with SmartBASIC or CP/M, etc. Available on disk or DDP.(D/DP) - Serial and Parallel | \$149.95 |
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| SPEECH SYNTHESIZER UNIT/CLOCK CALENDAR - Now add VOICE capabilities to Adam. Software is included | \$109.95 |
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| Disk Holder - Holds up to 50 disks - anti-static | \$15.95 |
| Monitor/TV Stand - 360 rotation, up to 12.5 angle | \$22.95 |
| Adam Monitor Cable | \$10.95 |
| Panasonic 1091 Printer | \$279.95 |
| Panasonic Ribbon | \$9.95 |

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| PACKCOPY - Backup SmartBASIC etc. | \$29.95 |
| DIABLO - Mind challenge - Graphic | \$19.95 |
| BLACK GOLD - Look for oil. Survey-profits-fun | \$19.95 |
| THE STOCK MARKET GAME - Fun & Educational | \$19.95 |
| BOUNTY HUNTER - Text adventure | \$20.95 |

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| ADAM ENTERTAINER - Book (sound, graphic, etc.) | \$12.95 |
| ADAM'S COMPANION - Book (updated) | \$9.95 |
| LEARNING TOGETHER with ADAM - Book w/LOGO | \$9.95 |

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| DataCALC - Spreadsheet | \$24.95 |
| RIB - Basic tutor for Adam (D or DP) | \$24.95 |
| EBU - SmartBASIC - Data Pack or Disk | \$21.95 |
| HACKER'S GUIDE TO ADAM - Disk or DP | \$17.95 |

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| TurboLOAD - Revolutionary new product. Speeds up loading program, a must for Adam owners, also included the program the FILE ORGANIZER | \$28.95 |
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| PaintMASTER - Hi-Res graphic design system primarily written in Z80 machine language. Load/save your creation to either D or DP | \$23.95 |
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| MultiWRITE (DP) - The only 64 COLUMN professional word processing system for the ADAM that does not require any additional hardware. MultiWRITE displays 64 characters of text at one time without the need for an expensive 80 column board | \$39.00 |
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| CHARTS & GRAPH ASSEMBLER - "Auto-proportions inputs" Create pie charts, bar graphics, and line graphs. Up to 10 inputs. Print bar graph on daisy-wheel printer. Add a graph to a letter or report (DP/D) | \$24.95 |
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| VIDEO TUNES - Compose, play, save music | \$34.95 |
|---|---------|

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|--|---------|
| AUTOAID — Enhances the abilities of SmartBASIC. Generates new line numbers as you type. Defines function keys to be any command or character string, and much more | \$29.95 |
|--|---------|

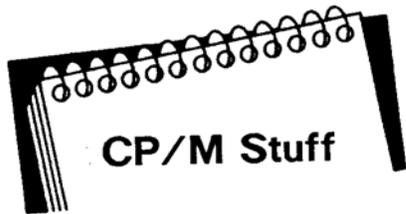
| | |
|---------------------------------------|----------|
| MULTI-CART BACKUP - Backup cartridges | \$ 19.95 |
|---------------------------------------|----------|

S&H - \$2.50 US
S&H-\$4.50CN
US \$'s only

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Cherry Hills, NJ 08002
(609) 667-2526

FREE CATALOG - We stock what we sell for FAST DELIVERY



As promised In our last issue, we will discuss the use of CP/M's powerful transient program called PIP.

PIP stands for "Peripheral Interchange Program." O.K. What's a peripheral?

That's anything like...your printer...disk/data drives...modems...the ADAM screen...and much more. Therefore PIP can interchange information between peripherals.

Now that the explanation is over, let's do some work with CP/M.

When you first get your disk/data pack you are asked to copy it to a formatted disk/dp. Well, this time we will copy one disk/dp to another using PIP.

Place your CP/M disk/dp in drive A and a formatted disk/dp in drive B. At the A> prompt type PIP <RETURN>. After a short time a new prompt, a star, will appear (*). At the * prompt type B:=A:*. The drive light will alternate and your screen will tell you that the programs on drive A are being copied as they are being listed on your screen. The difference between COPYing and PIPing is that now your PIPed disk/dp on drive B will have to be sysgened. PIPing places your files in a neat order on the disk/dp for faster access. This as an excellent way to back up your data and programs at the end of each session.

So...you don't need all the other stuff on the disk/dp. Then let's PIP only one program. Re-format the disk/dp in drive B and get back to the PIP prompt (*) as discussed above. At the * type B:=A:EXAMPLE.COM. When the * reappears hit <return> to get back to the A>. Now, type DIR B:. Notice that the once-blank disk/dp now lists EXAMPLE.COM.

PIP works both ways...you can PIP from drive B to drive A by just typing A:=B:(filename.ext). Always type the drive you want to PIP to, FIRST.

At the * prompt type

```
CRT:=A:EXAMPLE.COM
```

Your CRT screen now displays the file EXAMPLE.COM. Look familiar? Right! It gives the same result as if you had used the "TYPE" program we discussed earlier. This time we used the "interchange" program to move the file EXAMPLE.COM from the disk to the ADAM screen.

Here's something for you to try. At the * prompt type

```
LPT:=CRT: <return>
```

The screen will show nothing. Since LPT represents your parallel Centronics printer, turn on your printer and get some paper ready. Now start typing. At the end of the line hit <return>. If you want to print another line, hit Ctrl-J (which gives you a line feed) and continue typing.

Isn't that something...you can type an envelope without using a word processor. One drawback... (didn't you know it?)...if you make an error you cannot backspace or delete because the error will appear. Now try

```
LPT:=EXAMPLE.COM <return>
```

GREAT STUFF, CP/M! When you are finished, hold the <control> key and type Z. The * prompt re-appears. Hit <return> and you will be back to the A> prompt.

Some of our members have asked us to recommend a publication on CP/M. One of the best is The CP/M User Guide by Thorn Hogan, published by McGraw-Hill. The cost is about \$13 and is well worth it.

Also, there is a great booklet called CP/M Programmer's Reference Guide by Sol Libes, the editor of Micro/Systems, and it is offered FREE. Write to Mr. Libes at Micro/Systems, P.O. Box 1192, Mountainside, NJ 07092-9990.

In our next issue we will discuss other "resident" and "transient" CP/M programs and the use of the famous "wild card" method of working with them.

In Response ...



...To find out your ADAM version: Put the word processor into electric typewriter mode and press Control-R. This will give the version (R-80 or above is good). For your BASIC version number, load Basic, type in ?(peek(260)), and then press RETURN (79 or better is good).

...New data drives with spring clips that hold tapes in place may have too much DOWNWARD PRESSURE. Bend clips upward to take pressure off the DDP.

...The new tape drives are faster, which may cause slack in the tape and give you an I/O message. Take the tape out and wind it tight. They also have a different sensor switch, which may hold the tape away from the sensor and give you an I/O message. Adjust the spring clip or push the tape all the way in.

...Be careful when installing a second drive unit. If you miss a pin you can damage the drive. Keep the black wire to the right hand side as you are installing the second drive. KEEP THE POWER OFF!

...Many surplus houses are now selling the drives for as low as \$9.95 plus postage. These are the original drives that came with the original ADAM, and although the wire connections have not been dressed as well as the new ones, they work OK.

...Many third party outfits are selling ADAM monitor cables for \$8.95 to \$10.50. For about \$1.89 for a 5 pin din connector and 75 cents worth of cable with an RCA plug on the end, you can make your own. The Coleco manual shows you how.

...Small fans selling for as low as \$6.95 to \$7.95 will keep your computer nice and cool. These generally surplus fans no larger than 4x4x1 1/2 do a great job.

[Thanks to Walt Wright and the Long Island ADAM Users' Group for these tips.]

* * *

C-INTERFACE

ADD A PRINTER TO ADAM

- COLOR GRAPHICS PRINTING •
- Print HGR or HGR2 screens • Produce pictures with commercial software or your own programs • Artwork, graphs, signs, bar charts, anything you can create!

- FAST PRINTING •
- Smartbasic or Smartwriter files • Most dot matrix printers are much faster than ADAM's roughly 10 characters per second

- QUIET PRINTING •
- Dot matrix printers generally quieter than ADAM printer
- Thermal printers generally much quieter

- WALK-AWAY PRINTING •
- Pin in hole paper feeds built in to most printers will reliably advance folded computer paper • No more babysitting the printer!

- BLACK AND WHITE GRAPHICS PRINTING •
- Similar to color printing, but works with Commodore-64 compatible printers

The C-interface is a single circuit board that fits entirely within ADAM in expansion slot one. It adds a Commodore 64 serial bus to ADAM! Any printer that plugs into the Commodore serial bus will work. Most printers that work with the Commodore-64 use this bus. When our Centronics Port is added, any printer with a standard Centronics Interface will also work.

COMPLETE PACKAGES FOR ADAM

- C-INTERFACE AND OKIMATE 10 PRINTER •
- Thermal transfer at 60 characters per second • Color or B&W graphics • Includes Commodore Plug N Print Module • Pin in hole paper feed • \$259.95

- C-INTERFACE AND OKIDATA 120 PRINTER •
- Dot matrix 120 characters per second • Pin in hole paper feed • B&W graphics • \$319.95

- C-INTERFACE AND COMREX CR220 PRINTER •
- Dot matrix at 50 characters per second • Pin in hole paper feed • B&W graphics • \$174.95

COMPLETE PACKAGES LESS PRINTER

- C-INTERFACE AND CENTRONICS PORT •
- Adds standard Centronics port to C-interface • Includes both cables • Inside small box between two cables • \$119.95

- C-INTERFACE ONLY — \$69.95 •
- Shipping and Handling:
Continental US - \$8 w/prtr, \$4 w/Centr., \$3.50 w/C-Int.
Canada, APO, FPO - \$14 w/prtr, \$6 w/Centr., \$5.50 w/C-Int.

MO residents add 5.725% sales tax. VISA/MC add 3% to total or send check/money order to:

CAPITAL SOFTWARE
P.O. BOX 370
ST. LOUIS, MO 63032

New Library Programs

534 MORSE CODE + (Utilities)

MORSE, a program to help in learning C.W. code, has 3 options. Sound Out lets you input a character or "word." The computer sounds it out, prints the graphics, and sounds it out again. Learn lets you select from a group of characters and punctuation. Your score will be rated on a percentage of correct answers. Practice presents 40 "words" at the selected speed. You can choose either random 5-letter words or pick 40 words from morse, a data file. CATALOG interprets every catalog entry, showing file attributes, size, start block, end block. DATAMAKER will take the memory locations you specify and turn them into "DATA" statements for use in another program. LOWERSDATA, the son of Datamaker, is an example of how to use the techniques of Datamaker to save LOW resolution screen pictures BY TURNING THEM INTO A PROGRAM which can be used alone as a graphic picture or made the beginning of another program. The program created can immediately be run as a self-drawing picture. SHAPEETDATA, another son of Datamaker, will seek out the shapetable in a program and turn it into "DATA" statements. RUNMEFIRST makes letter files. There is a DEMO program that will help you make your own file. EDITOR uses screen editing features for writing data directly into a "Spreadsheet" of up to 100 columns by 31 rows.

535 DIET PARTNER

DIET PARTNER, a powerful tool to help you stay on your diet, is a series of companion programs—tools to help you achieve your goals. The program uses a food-calories-carbohydrates table that is easy to customize. DIET PARTNER includes: Weight Calculator, Calorie Calculator, Recipe Calculator, Calories Burned, On-line Documentation and Calendar to Print.

536 U.S. PRESIDENTS + (Educational)

U.S. PRESIDENTS is an exercise in naming the Presidents of the United States. The program will keep score for you. MAJORCITIES is an exercise that will ask you to name the states of cities given.

The program will indicate if you are right or wrong and keep score. ADDITION, SUBTRACTION, MULTIPLICATION, and DIVISION deal with flashcard math. As the problem appears on the screen, enter your answer. CONVERT will convert linear measure to milli, centi, kilo, inches, feet, yards, etc. MATHMASTER, a basic mathematics review for children in elementary grades, covers the four basic computation skills. The user chooses the process and the skill level.

537 U.S.A. RACING & GAMES

In USARACE, a one player racing game, the goal is to drive cross country as fast as you can, avoiding some nasty problems, the worst being crash. As you race across 10 states, you must often buy gas, resulting in loss of time, but you can buy spare gas at the beginning of the race. In DIRK you are Dirk Jones, a not-so famous explorer who was abandoned as an infant. Your quest is to recover the staff of Nimm and survive. In SPEAKEASY, you, as a local treasury agent, must break a counterfeit ring. In SKIING you guide your skier safely down the slopes using the joysick. In SNALUMOR the snalumors attempt to seed the earth with deadly Nerds in order to render the planet helpless against attack.

In SLALOM you are the American team's only hope of a gold medal in the Olympic giant slalom. In BASKETBALL you are playing as the U.S. Olympic basketball team and the computer is China. In DARTS you can play up to twenty players at one time. The object is to score as many points as you can. RUSIAN-ROU is a game of Russian Roulette. In GUNNER you are the officer in charge, giving orders to a gun crew, trying to avoid a hit within 100 yards.

In the BOXING game you will go three rounds, trying to win two out of three. TRAP is a game in which you must guess a number between 1 and 100 that ADAM is thinking of. In BOMBS-AWAY you are a pilot in a World War II bomber with a mission to accomplish. BOMBARD presents a battlefield with 4 platoons and 25 outposts where they may be placed. The object is to fire missiles at the computer's outposts. The computer will do the same to you. The one who destroys all 4 of its enemy's platoons first wins.

Library

- #501 BUSINESS
- #502 EDUCATIONAL
- #503 TRAVELER GAMES
- #504 ADVENTURE GAME
- #505 JOURNEY GAME
- #506 GAMES
- #507 MISCELLANEOUS
- #508 SCIENTIFIC
- #509 MATHEMATICS
- #510 GRADEBOOK
- #511 GRAPHICS
- #512 HOME FINANCE
- #513 GAMES II
- #514 EDUCATIONAL II
- #515 HOME ADDRESS MANAGER
- #516 GAMES III
- #517 UTILITY I
- #518 BUSINESS II
- #519 GAMES IV
- #520 UTILITY II
- #521 ALPHA (Logo)
- #522 TURTLE (Logo)
- #523 SLOT (Logo)
- #524 GRAPHICS II
- #525 GAMES V
- #526 UTILITY III
- + #527 CHESS & GOLF
- + #528 HELP with CP/M
- + #529 CATALOG
- #530 ASTROLOGY
- #531 MATHEMATICS III
- #532 EDUCATIONAL III
- #533 GAMES VI
- * #534 MORSE CODE+ (Utilities)
- * #535 DIET PARTNER
- * #536 U.S. PRESIDENTS* (Educational)
- * #537 U.S.A. RACING & GAMES (Games)

* New Contributions
+ CP/M Programs

Disks/dps are \$10.00 each. If you do not state that you want a disk, we will send the data pack. Include your ID# on your check. Library descriptions are available for a stamped, BUSINESS SIZE, self-addressed envelope sent to AUG Library, Box P, Lynbrook, NY 11563.

If YOU have have developed your own program(s) for the Library, send in the disk or data pack. (First make a duplicate to keep.) Tell us which program you would like in return. See earlier issues of AUGment for directions on making duplicates. DO NOT SEND PROGRAMS COPIED FROM PRINTED MATERIAL OR COPYRIGHTED PROGRAMS.

FUTURE VISION™

VIDEOTUNES \$34.95

Play music on your Adam!! Use sheet music or compose your own songs. VideoTunes plays up to three notes at a time and has a four octave note range, displays treble and bass clefs and four octaves of piano keys. The notes light up on the screen as the music plays. Store your songs on tape or disk. Includes eleven demonstration songs and complete instructions. Rated 10 out of 10.

AUTOAID \$29.95

Enhances SmartBasic. Generates new line numbers as you type in Basic lines. Defines function keys to beany command or character string, i.e. press the "get" key to do a "LOAD", press the "store" key to do a "SAVE". You can even use cursor keys in the definition. New printer controls: automatic print buffering (you can continue to work while the printer is still printing). AutoAid skips over the perforations on continuous form paper, indents your printouts, and allows you to print form feeds. Included with AutoAid is a set of routines: sound output, alter text and background colors, character display in GR and HGR modes, a higher density low resolution graphics mode, direct read and write to the video display chip and the 64K expansion memory. Complete graphic sprite control and much more! Rated 9.9 out of 10.

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PRACTICAL PROGRAMS

BASIC MANAGER V1.1 - Make Basic more user friendly. Special binary file loads very fast from Basic. Nice looking display shows current drives, free space, volume name, and up to 34 file names on one screen (read from directory). Uses arrow keys to select program and Smartkeys to rename files or volume name, delete or UNDELETE, lock or unlock, catalog (all on 1 screen), recover files, run regular or FASTRUN type files, load regular files, goto Basic or SmartWRITER, reselect drive, and change display colors. Comes with INITitALL, which will correctly init any DP/disk, even Basic! Disk or DP \$15.95 US

FASTRUN V2.0 - A memory resident, machine lang. program which converts your Basic program in memory into a form which may be saved up to 3 times faster and reloaded up to 11 times faster (ex. 24 blocks loads in 32 sec on DP). Disk or DP \$15.95 US

BASIC MANAGER with INITitALL + FASTRUN Disk or DP \$25.95 US

MULTICART BACKUP - Backup most ColecoVision compatible game cartridges. Up to 8 on DP or 5 on disk. Special binary type file loads very fast from Basic and makes 100% machine lang., self loading, backups. Loads game title directory loads in a flash. Printout game directory. Disk or DP \$10.95 US

ADAMNET CABLES - 25 or 12 foot straight cable from keyboard or disk drive to memory console. 12' = \$6.95 US, 25' - \$10.95 US

Minimum: \$10. Orders payable in CAN \$ add \$2 US and use current conversion rates. Mail CK/MO (No COD's/Credit Cards), or for free info to:

**PRACTICAL PROGRAMS
P.O. BOX 244
KALAMAZOO, MI 49005**

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Bob's Business

This Issue we will enter the final inputs into our "Fundamental Analysis" program and analyze the results. NOTE: first enter the inputs from the last two issues, through "Total liabilities, last year" 283998.

The following are from the "Stockholder's Equity" section of the Balance Sheet:

Shareholders Equity, this year 110060
Shareholders Equity, last year 120011

Total Shares outstanding, this year 6331.323
Total shares outstanding, last year 6320.347

Dividends per share, this year .64
Dividends per share, last year .64

Preferred shares, this year 442
Preferred shares, last year 448

Preferred shares, per value, this year 11063
Preferred shares, per value, last year 11228

Preferred dividend per share, this year 2.20
Preferred dividend per share, last year 2.20

These last inputs will be from the company's "Statement of Changes in Financial Position":

Working capital from operations, this year 12793
Working capital from operations, last year 18330

Dividends paid, this year 4743
Dividends paid, last year 4725

Capital expenditures, this year 12644
Capital expenditures, last year 18165
Want a hard copy? (y/n)

Now we have a printout of the ratios for DiGiorgio. The analysis of the ratios we have not interpreted yet is as follows:

Dividend yield, this month: 4.03%. This measures how much we will earn per year if we buy DiGiorgio based on the dividend we will receive annually.

Payout ratio, this year: 67.37%. This measures how much of its earnings the company is paying out in dividends. 67% is high, since only 33 cents of each dollar DiGiorgio earns will be left to expand operations.

Current price/sales ratio: .0968. This measures the relationship between the cost per share of a company's stock and its sales per share. In general, this number is evaluated as "the lower the better." A lower number means you are getting more sales per share relative to what you pay for the share, and it is sales that eventually generate profits. This ratio is becoming more widely used in recent years.

Current Book Value per share: 15.61. This measures the value per share of a company as follows: If all debts were paid off and the company's assets were all turned into cash at their original cost, how much would be left to pay on each share of stock. \$15.61 means that if we sold all of DiGiorgio's assets at their original cost and used the proceeds to pay off all the company's debts, \$15.61 would be left for each share of common stock.

This value is often compared to the market price per share of stock. If the market price is less than the book value, it indicates some safety net of value since the company is worth at least its book value. However, this safety net may be illusory - the assets are assumed to be liquidated at their original cost, which may not be what they can be sold for in the marketplace.

Current net current asset per share: -1.773. This measures what would be left for each share of stock if all debts were paid off using only current assets. It is a measure similar to Book Value per share, but is more conservative since the non-current assets (machinery, buildings, land, etc.) are assumed to be worth \$0.

We will finally wrap up DiGiorgio next issue with an analysis of the 10 ratios remaining. We'll also try to take an overview to what the ratios mean.

Bob Trezevant
1865 Mountain View Drive
Tiburon, CA 94920



Chapter News



KITIMAT ADAM USERS GROUP
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Kitimat, B.C., Canada V8C 1P8

ADAM USER CLUB HOLLAND
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Vondelstraat 56 2712 RE
Zoetermeer, Holland

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San Francisco, CA 94123

MONTGOMERY USER'S GROUP
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Montgomery, AL 36109

ADAM'S APPLE
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4535 Edsal Road
Cleveland, OH 44124

ADAM SOFTWARE CONSORTIUM (ASAC)
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San Antonio, TX 78230

ADAM USERS' GROUP OF SAN DIEGO COUNTY
Contact: Bill Askew
868 N. Second Street, #242
El Cajon, CA 92021

If you wish to start a chapter in your area, send a stamped, self-addressed envelope for our TIPS booklet. It contains information on selecting a meeting place, starting a library and a newsletter, setting agenda, deciding on dues, and adopting bylaws.

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CANADA & MEXICO..... \$20.00 (U.S. FUNDS)
INTERNATIONAL..... \$25.00 (U.S. FUNDS)

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Al Gerson, Editor and Publisher

Although it is a policy to check material placed in the AUGment for accuracy, AUG offers no warranty either expressed or implied and is not responsible for any losses due to the use of any material in this newsletter. Articles which are submitted by users and published in

An Invitation To Join The W/P Users' Group

Chances are that your ADAM™ is being used for many applications...and one of them is probably Word/Processing.

If you are using your computer to type reports, write a book or any other kind of writing, you should think about becoming a member of the W/P Users' Group. Our bi-monthly newsletter, *Scroll*, published by the same people who bring you the AUGment, contains information that will help you do more with your computer. Articles such as:

- Reviews of the latest word processing software;
- Basic tutorials and hints on using W/P software;
- Tutorials on using the operating system for W/P;
- Special columns devoted to business, professional and educational writing... for the secretary, too;
- Glossary of computer terms mentioned in each issue.

- A vendor column of W/P software suppliers;
- Box 144, our informal mail information exchange;
- Listings of local W/P User Groups.

In addition, we operate our own national Bulletin Board system. This information and the best of *Scroll-BB* is printed in the newsletter.

Annual membership fee of \$15.00 (U.S.) must be accompanied by a letter stating your name, address, telephone, computer model, and the word/processing program that you are presently using. AUG members can save 20% by just including their AUG I.D. number along with a check for \$12.00.

Become a W/Pug member and learn how many other writers are saving time and effort while producing professional documents on their computers.

JOIN NOW!!!

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Malverne, NY 11565

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ALPHA-1

DISCOUNT HOME COMPUTER SUPPLIER

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COMPUTER PERIPHERALS FOR THE ADAM

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TRACTOR FEED ASSEMBLY.....80.00

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Emphasis, Courier 72.....Each 5.50
PRINTER RIBBONS FOR ADAM.....Each 5.50
DUST COVER FOR ADAM.....18.50
(Vinyl brown 3 piece — CPU, KYBD, PRT)
LORAN DIGITAL DATA PACKEach 5.50
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