

THE **PUNN** NEWSLETTER  
**Wordplay**

P.O. BOX 15037  
PORTLAND, OREGON 97215

*Portland*  
*July 86*  
*AUG*

**1986 PUNN Officers and Staff**

**PRESIDENT**

Cricket Raybern 246-0382

**VICE PRESIDENT**

Duane Goodman 232-3785

**SECRETARY**

Ted Peterson 244-1587

**TREASURER**

Keith Fast 777-1531

**STAFF**

**LIBRARIANS**

**SOFTWARE:**

Ron Mayer 232-7363

Walt Morey 239-5105

Jim Thomas 284-2425

**HARDCOPY:**

Mike Calkins 636-1839

**PROGRAM CHAIRMAN**

Martin Crommie 222-9070

**WORKSHOP CHAIRMAN**

Andy Lengyel 771-4427

**MEMBERSHIP CHAIRMAN**

Dale Kirkwood 646-4354

**BBS CHAIRMAN**

Duane Goodman 232-3785

**COMMITTEE:**

Ron Mayer 232-7363

Mike King 357-4413

Martin Crommie 222-9070

Al Kinney 640-5860

**NEWSLETTER EDITOR**

Al Kinney 640-5860

One of our PUNN members recently decided to sell his TI and purchase another computer that would better serve his current needs. As we were talking about his decision he commented that the decision to change computers was easier than facing the realization that he would now have little in common with the other members of PUNN. We discussed the fact that PUNN is more than just a place to learn and share information about our TI computers. Because, in the process of sharing computer info we also share some of ourselves. As a result we develop friendships that are very special. I think perhaps that is the most important part of being a User Group...the people. This month we are having a meeting that is "Just for the fun of it"! We will have some library offerings, but the main purpose of the meeting is to just have fun seeing the Dinosaurs together. If you were thinking about not joining us because there will not be much "computer" business, why don't you reconsider?! Come join the fun. Bring your family, let them meet those crazy people you meet with each month. We'd like to meet them too! Come...join the FUN,

Cricket

## MEETING PLACE CHANGE

Don't forget, August's meeting is a "social" meeting (No formal business session), and will be held at the Oregon Museum of Science and Industry (OMSI) instead of our traditional PGE location.

Bring a couple of extra bucks, for you'll surely want to visit the DINOSAURS DISPLAY after the regular meeting. Admission to the User Group meeting is free, just tell'em at the door that "Cricket sent me". But the regular Group Rates will apply for the rest of the museum, which are: \$4.00 for Adults (18 and over); \$2.00 for kids (3 to 17). You can also make use of special \$1.00 off coupons which may be found in THRIFTWAY ads in the "This Week" newspaper insert, and on FRANZ bread ads.

## TURN OFF TV INTERFERENCE!

BY ASHLEY READ

For T.V. tubes that look like herring bones when the computer is turned on, a simple fix is available. Just acquire a cardboard tube such as a paper towel core, a little bit of electrical tape, and you're in business. Start with one turn of tape, then make one turn of the modulator cord that connects the computer to the TV, securing it with tape. Then add at least 10 turns more of the cord, wrapping securely with tape, to prevent it from unwinding. Place the completed unit at a 90 degree angle to the TV station(s) and you should have a clear screen! Mine worked perfectly the first time. Good luck.

(Based on a helpful hint from FamilyComputing Magazine)

## KRACKER CRUMBS

BY TED PETERSON

There is some trouble when you are using the Personal Record Keeping module in the GRAM KRACKER. The PRK module will load, but will not run like all the others. To use it, load like any other, but when you run the PRK, TURN OFF THE LOADER on the GRAM KRACKER. When you are unloading the PRK module from the GRAM KRACKER, you will have to initialize the module (#3 on the GRAM KRACKER).

## INFO & NEWS

by Duane Goodman

Here are some items that I thought would be of interest to everyone. I will have a limited number of printed ads from the Captain's Wheel at the "next meeting for those interested.

\*\*\*\*\*

From: The Captain's Wheel  
TI-99/4A SPECIALISTS  
17295 CHIPPENDALE AVE  
FARMINGTON, MN 55024  
(612) 460-6348

32K MEMORY FOR \$39.00 in Quantities of two or more. (\$49.00 for one. Many extra options with the 32K; such as a load interrupt switch (\$10), a reset switch (\$10), additional memory bank option (\$10), plus much more. Call for details.

3 SLOT EXPANSION SYSTEM KIT FOR \$35.00

The three slot expansion kit is still available at the still unbelievable low price of \$35.00! This kit includes all of the parts to build the three slot-expansion board and bring it to operating status. (Expansion cases will no longer be available. The kit expansion kit includes instructions for building your own case.) Also if you desire to power a

disk drive from the same power source you must order it with that option. Directions are simple and easy to follow. The average person should be able to complete this kit in about two hours. For someone without a p-box, this would be a cheap way to go!!!

\*\*\*\*\*

From: ALL ELECTRONICS CORP.  
 905 S. VERMONT AVE.  
 P.O. BOX 20406  
 LOS ANGELES, CA 90006  
 (800) 826 5432

Combination power supply and transformer for the TI99/4A. \$6.50 cat # PS-30TX

New Keyboard \$6.50 cat# KP-48

Sound and Video Modulator \$5.00 cat # AVMOD

Serial RS-232 Y cable \$6.50 cat # TIY

Dual cassette cable \$5.00 cat # TCC  
 \*\*\*\*\*

From:RAVE 99 Co.  
 23 Florence St.  
 Bloomfield, CT 06002

Two IBM style keyboards for your TI-99/4A. Standard key layouts which eliminate the awkward two key inputs for cursor control and function keys. Alpha lock function which does not interfere with joystick operation on any version of the TI-99. COMPATIBILITY - Works with all systems. NO P.E. Box required. Numeric keypad with seperate Enter key and numeric operators. High quality keyboards. One key entry of word processing commands such as TAB, BACK TAB, DELETE, BACKSPACE, and HOME when using TI-WRITER. Will have prices and more details available at the next meeting.

\*\*\*\*\*  
 \*\*  
 \*\* FOR SALE \*\*  
 \*\*  
 \*\* DIGITAL EQUIP. CORP. \*\*  
 \*\* DUAL DISK SYSTEM \*\*  
 \*\* SS/DD DISK DRIVES \*\*  
 \*\* W/POWER SUPPLY AND \*\*  
 \*\* ENCLOSURE \*\*  
 \*\*  
 \*\* PRICE: \$150.00 \*\*  
 \*\*  
 \*\* (OR MAKE OFFER) \*\*  
 \*\*  
 \*\* CALL DUANE GOODMAN \*\*  
 \*\* PHONE (503) 232-3785 \*\*  
 \*\*  
 \*\*\*\*\*

**NEW SOFTWARE**

Released into public domain by Thomson Software:

DISK + AID, Ver 3.0  
 CREDIT CARD DATA BASE  
 MEMORY MANIPULATOR

DISK + AID - A single sectoring utility with over 28 menu driven operations for the TI-99/4A. This program will allow you to read sectors into RAM, alter the needed data and then write the sector back out to disk. (Plus much more!!!) This is a "must" utility for your file. The disk contains 8 files (program and documentation) and takes up 254 sectors on a disk.

CREDIT CARD DATA BASE - Just what the name implies. It is a program to allow you to record your credit cards and the payments and charges on each card. Allows you to keep track of your spending (yuk!!). This disk has 5 files and uses 169 sectors.

MEMORY MANIPULATOR - This is a program that will operate in a similar fashion to MILLER GRAPHICS' EXPLORER, in that it will Scan, Search, Compare, Move and Print any memory in the TI-99/4A. It can be used from the E/A or

Extended Basic environments, and is potentially a very useful programmers tool. These disks will be available in the library at the September meeting or thru the library on a special order basis.

**FREE!! TI-WRITER MANUAL!!**

by Duane Goodman

For the time involved in a phone call and the cost of shipping you can get a free TI-WRITER manual. Cost is \$3.00 for shipping. Phone number is 1-800-TI-CARES.

shipping you can get a free TI-WRITER manual. Cost is \$3.00 for shipping. Phone number is 1-800-TI-CARES.

\*\*\*\*\*

**NEWS OF INTEREST**

From the Salt LAke and VallEy 99er Users Group  
(SLAVE)

More info on CorComp RAMdisk. RAMdisk capability can be selected as DSK 1,2,3,4,5,R. SAVE AND RETRIEVE FILES just as you would from a disk drive. INTERNAL RAMdisk MANAGER accessed through TI Basic and Extended Basic by CALL RMGR allows file copy, catalog, change name and format for both RAMdisk and ALL disk drives. NO CARTRIDGE OR DISKETTE REQUIRED!! UP TO 10 TIMES FASTER than disk drive file accessing. LIGHTNING LOAD SPEED. TI-Writer from disk takes 11 sec., from RAMdisk it will take 1 1/2 sec.! STORAGE GALORE - The 256K version gives you 3 times more storage than a SS/SD drive. The 512K version will give you 2.8 times more storage than one DS/SD drive and 35% more than a DS/DD! EXCELLENT FOR DISK INTENSIVE programs such as data base storage and sorting. EXTERNAL POWER supply for retaining 256/512K memory when system is shut down. Each product

can be purchased as either an upgradeable 256K or as a fully expanded 512K version. For those purchasing the units at 256K and wishing to upgrade at a later date, CorComp will provide that service through the factory and extend the warranty the entire unit or they will sell you the chips for user installation but not extend the warranty. Watch for news about COR-WARE, new software programs from CorComp especially designed to take advantage of the 256/512K memory.

**CORCOMP RUMOR!!**

From an unnamed source I heard that CorComp is soon going to be back in the thick of things with a new computer. My source said that this will be a beefed up "99/8". Whether a card for the P-Box, a new console, or untrue, only time will tell.

\*\*\*\*\*

**BBS Report.**

By Duane Goodman

After many hard weeks months of labor on the new software, it is ready to go. (There is no truth to the rumor that we had Al chained to his computer!!) I do not have very much info on the new system, since I haven't been able to test it yet, but will say from what I have seen of the unfinished version that it will be a much needed improvement over the old. The new will be using the real time clock and the 128K card donated to us by Scott Swenson, President of MorningStar Software. Many thanks to Al Kinney and Mike King for the many hours spent in writing the new software. Those of you who do not have a modem yet, should seriously think of picking up an inexpensive 300 baud modem just to get your "modem legs." If you are already sure that you want and will use a modem, than I would urge you to seriously consider the purchase of a 1200 baud modem. As one user recently told me,

"I'll never go back..." If you are unsure what telecommunication is all about, then find a friend who has a modem and take a test drive. I think you will find that this will be an exciting new addition to your computing experience!!

**SEATTLE TI-FAIR REPORT**  
BY WALT COVEY

The upcoming "1986 State of Washington TI-99/4A Convention" will be held this September 26, 27 and 28 at the SEA-TAC Holiday Inn, Seattle, Washington. I was in Seattle recently, so visited the sponsoring business, "QUEEN ANNE COMPUTER SHOPPE" to get more information. Speaking with Barbara Wiederhold, I discovered some things in addition to the generally known information. For instance, the idea is to BREAK EVEN, not make a profit, so any profits will be equally shared between participating Users Groups. Also, the expected speakers are no less than some of the more well known luminaries of the TI world, Craig Miller of MILLERS GRAPHICS, Cheryl Whitlaw (better known to many as REGENA), Chris Bobbitt of ASGARD SOFTWARE and Lou Phillips of MYARC Computers. Just to quickly recap the information that was in the information flyer sent around to all the Users Groups:

There will be a special PRESIDENT'S DINNER Friday evening, at \$25.00 per person, except User Group Presidents, who will dine complimentary. There will be a number of Door Prizes, including a COMPLETE P.E. Expansion system, Dual Disk Drives, 128K card, "MYARC's Extended Basic IV, the New Extended Basic from West Germany's MECHATRONICS, DS/DD Disk Controller cards, etc. Rooms are available (RESERVATIONS REQUIRED!!) at the Holiday Inn, for \$70 per night, which can be split four ways if you're willing to share.

There will be a special room set aside for Users Groups to have tables (We ARE going, aren't we?) as well as another room set aside for Retail Sales. Don't miss this great chance to see all the new and important (and not-so-new or important, just interesting) things that are happening around our TI community. For further information, you may contact:

QUEEN ANNE COMPUTER SHOPPE  
OFFICE 206-283-0953 (Working hours)  
BBS 206-283-0953 (After hours)  
6 1/2 BOSTON STREET #4  
SEATTLE, WA 98109

!@P-!@P+!@P-!@P+!@P-!@P+!@P-!@P  
by Keith Fast

No, it is not what you say when you kick the computer's power plug at one-thirty in the morning. The code '!@P-', and the code '!@P+', is a nifty little item that TI built into the Extended Basic modules (version 110) that allows advanced programmers (and in my case, not so advanced) to reduce the time from "RUN" to actual program execution. Most of you a very aware of the wait when you when you tell a program to "RUN", especially in console basic. When you tell your computer to "RUN" a program, it first must look at the program line by line, to allocate memory space and locations for variables and subroutines (CALL statments). This is called prescanning. With a long program this can take some time. TI has allowed us the option, in Extended Basic, of turning on and off this prescanning. To do this however, all variables and subroutines must be stated or used during a portion of the program that is scanned, otherwise the computer will not know what to do with these 'unknown variables'.

100 GOTO 110:: A,B,C,D,A\$, B\$, C\$ ::  
CALL COLOR :: CALL SCREEN ::  
!@P-

```

110 A,B,C,D=10 :: A$,B$,C$::CALL
SCREEN(15) ::CALL COLOR(5,7,9)
120 !@P+
130 CH$="HELLO" :: !@P-
140 END

```

In this example, when the program is "RUN" it starts prescanning. It sees variables A,B,C,D,A\$,B\$ and C\$. It also recognizes CALL SCREEN(15) ::CALL COLOR. Then it sees !@P-. At this point it races through the remainder of the program looking only for the !@P+ which would tell it to continue looking for new variables and subroutines. Make sure you don't put additional code on the same line after !@P+, as the '!' tells the computer, during program execution, that the remainder of the line is a remark, and will be ignored. After this program is prescanned the program starts. It begins with the lowest number line, 100, and is told to jump to line 110 and ignores the remainder of line 100. Just to give you some idea of what all this means, an inventory database program I have with a length of 58 sectors originally took 40 seconds before you saw the program title. After reworking the program, utilizing prescan disable, the program now boots and is running in less than 2 seconds (are there still unbelievers?). These are some of the basic principles of prescan. A little more information can be seen in the Extended Basic addendum (Pg.7-10).

Now we will discuss some of the things that TI didn't tell us about the prescan commands. During the prescan process not only is the computer looking for variables and subroutines, but it is also doing error checking. It is for this reason that it is recommended that a program be debugged before disabling prescan. Probably the most critical are for-next loops. I have found, however that if programs are developed with prescan disabled, that you can do a lot of things that prescan will kick

out as an error. Let me show you some examples:

```

1 DIM A(9),C$(9):: GOTO 2 :: B,D ::
CALL SCREEN :: !@P-
2 FOR B=0 TO 9 :: IF A(B)=10 THEN
PRINT "5" :: A(5)=0 :: GOTO 2 ELSE
NEXT B :: PRINT "NO MATCH" ::
A(5)=A(5)+1 :: GOTO 2
3 END
9 C$(5)="#" :: FOR B=0 TO 9 :: FOR
D=0 TO 99 :: NEXT D :: IF C$(B)="#"
THEN CALL SCREEN(5):: NEXT B
ELSE B=10 CALL SCREEN(15)::
NEXT B :: GOTO 9
10 END
1000 FOR A=0 TO 10 :: IF
(A>0)AND(D<=50)THEN PRINT A
ELSE NEXT A
1010 END

```

Note first in line 2 and line 1000 the use of an if-then-else statement in the middle of a for next loop ON THE SAME LINE, not normally allowed. Note also in line 9 the use of two next statements with one for statement, also not normally allowed. I have also noticed the allowing of very complex logical statements, all of which function as if they were done on separate lines. This can allow some program crunching as well as faster execution. BUT...I can not over emphasize...When programming with complex multiple next and if-then-else statements, debugging can become very weird, very fast. Something like.."These are trained professionals, do not attempt this stunt at home..."

Well I'm sure there are many more things that can be done with this that I haven't found by accident yet. If there is anyone who knows of other statements not normally allowed, I'd like to know about them. I have found these shortcuts very helpful in the past. Have we found all the hidden powers of this machine?...I doubt it!

>>keith<<



REMEMBER THE  
DINOSAURS!

P.O. BOX 15037  
EAST PORTLAND STATION  
PORTLAND, OR. 97215



## DISCLAIMER

The Portland Users of Ninety Nines (PUNN) is a non-profit organization, not affiliated with, nor sponsored by TI and has no relationships with them, implied or otherwise.

Mention of a company or product is not to be construed as an endorsement by PUNN, unless specifically stated otherwise.

PUNN is not a subsidiary or branch of any other Users Group, and any relationship that we may have with other groups shall be on the basis of equals.

Neither PUNN nor its officers may be held liable for any damages arising as a result of information contained herein.

**NOTICE !!**  
**NEXT MEETING**  
**AUGUST 5 1986**  
**IS AT 7:00PM**  
**OREGON, MUSEUM OF**  
**SCIENCE & INDUSTRY**  
**- (OMSI) -**