

8612 PUNN 036

WORDPLAY!

THE PUNN NEWSLETTER

F.O. BOX 15037
PORTLAND, OREGON 97215

AT THE NEXT MEETING:

DECEMBER 2, 1986 7 PM

THE PGE BUILDING
3700 S.E. 17TH

There will be a business meeting to elect new officers for the coming year. Our constitution does not allow absentee ballots, so you must be there to make your vote known. Lets have a good turn-out to support your computer group and its officers.

Also, this will be the 2nd annual PIZZA night. We again will have 6" individual pizzas there for \$1.50 each. The choice will be Pepperoni and Canadian Bacon with Pineapple. Martin also has a "SPECIAL" surprise in store for us which you must be there to experience.

Since this will be a business/pleasure meeting as opposed to our usual group meeting, the PUNN library will not be set up for disk copying. If you wish to get a certain program from the library, then call one of the members of the library committee and order it before hand or leave a msg on the PUNN BBS to any of the officers or the librarians. They can then have it at the meeting for you. We will also have available at this meeting copies of the latest software that we received from TI. This is a disk of diagnostic programs that will allow you to test various parts of the hardware that make up your computer. We received two versions, 1) for Extended Basic, and 2) for Mini Memory. The Ex-Basic version contains the following tests:

- 0. P/code test
- 1. Expansion Box test
- 2. Impact Serial test
- 3. Impact Parallel test
- 4. Speech test
- 5. Thermal Printer test
- 6. Disk Exerciser
- 7. RS232 test
- 8. Modem test
- 9. Catalog test
- 10. RS232/1&2 test
- 11. RS232/3&4 test.

Option #6 above only works with a TI-Disk controller, and option 7 requires you to make a special cable (instructions included).

The MM version has the following options:

Under the file name "DIAGNOSTIC" you get the following:

- 1. Diagnostic
- 2. Keyboard test
- 3. Speech test
- 4. Joystick test

The file name P/CARDS has the following options:

- 1. Pascal Card test
- 2. Memory Expansion test
- 3. RS232 Interface test
- 4. Cassette Test
- 5. Bit-Map Mode test

Also included on the MM disk are the programs to check the following:

- 1. Impact Serial Printer test
- 2. Speech test
- 3. Thermal Printer test
- 4. Impact Parallel Printer test.

The four preceding programs require the Extended Basic cartridge for operation.

File name DIAGNOSTIC includes the following:
1) Color test, 2) Sound test, 3) Sprite-coincidence test, 4) Character & Text mode, 5) VDP test, 6) ROM test, 7) GROM test, and 8) 6810s (static raas) test.

The file P/CARDS contains the program(s) to check the following: 1) P-Code card test, 2) Memory Expansion test, 3) RS232 interface test (requires special cable), 4) Cassette test, and 5) Bit-Map mode test.

The diagnostic test packages will be available for \$5.00 complete with 11 pages of documentation. This will include the documentation plus either the Mini Memory disk, or the Ex-Basic disk. If you want both disks there will be an additional \$2.50 charge for the 2nd disk. If you bring in a blank disk(s) in exchange, there will be a reduction of \$1.00/disk exchanged. After viewing both

disks, I have concluded that it would be beneficial to have both in my library of utility programs. While there is some overlapping of tests performed, there are some things in the MM version that are not included in the Ex-basic version.

TYPEWRITER:

By Norm Minks

Here is a simple program that will let your Computer/Printer combination perform like a typewriter. For each line of text type in about 76 characters or less and then press <ENTER>. The printer will then print that line and then you will be prompted to type the next line or end the program if you desire.

A listing of this program follows below. Have fun.

```
10 ! *****
20 ! *           *
30 ! * -TYPEWRITER *
40 ! *           *
50 ! *****
60 !
100 OPEN #1:"PIO"
110 CALL CLEAR
120 PRINT "Type Line (or END to stop)"
130 INPUT "-":I$
140 IF I$="END" THEN 170
150 PRINT #1:I$
160 GOTO 120
170 CLOSE #1
180 END
```

Thanks to Norm Minks for this input into the news-letter. It has been many months since we have had ANY input from the membership for inclusion in the news-letter.

From The Board:

< < < PUBLIC MESSAGE 388 > > >

TO: ALL 11/26/86
FM: ANDY LENGVEL 30 17:48:41
SB: NEWS

MG formerly known as Millers's Graph Inc, has discontinued the GK, citing a "host" of reasons, also they will not be coming out with their new keyboard, because parts are too hard to find, they did however dream up a new one, and that is some kind of hazy promise to consider an IBM emulator or some such nonsense. Craig Miller has a long history of make a buck and switch. Remember "the smart programmer". Anyway, all this clouding of the issues makes a lot more sense when veiwed

with this in mind. GENEVE will have built in GK, and and IBM style keyboard comes with it. And now for the good news! Phillips finally received his long awaited gate array chips and after testing a few of them, Lou declared they were as expected. Now the release of GENEVE IS IMINENT or real soon anyway.

The above is mainly one man's opinion mine. Andy Lengyel

< < < PUBLIC MESSAGE 390 > > >

TO: ANDY LENGVEL 30 11/26/86
FM: AL KINNEY 27 18:09:44
SB: Reply to Message #389

Hot Darn! That IS good news, Andy! About the Chips arriving (finally) for the Myarc machine. I was beginning to despair!! Now, all I have to do is figure how I'm gonna' get my hands on one of those puppies! I suppose I could work something out, though! Boy, I've been checking out COMPUSERVE almost every day, to see if they had come in yet, and nothing so I am real pleased to hear about the news!! I was also aware of Millers Graphic's taking the low road AGAIN!! I think the guy may be very bright, but he APPEARS to be a fast buck artist!

Well, anyway, let's hear it for the GENEVE!! This could be the thing that will give new life to our User Community. It certainly needs it!

MYARC Demonstration of 9640 highlights Chicago's TI-Faire:

by John Koloen

Reprinted from MICROpendium/November 1986.

No matter where he goes, Lou Phillips is surrounded. The President of Myarc Inc, and chief drumbeater for the company's much-discussed 9640 computer, Phillips is accustomed to spending hours fielding questions from TI users. There seems to be no end to the number of questions he takes on, whether they are asked by visitors to this company's booth on an exhibit floor or behind a podium in a packed conference room. Always there is patience in his voice, no matter how many times he hears the same question. And always he is animated when he speaks about his company's products, particularly the 9640, dubbed the Geneve ("it's just a catchy name," Phillips insists).

Trying to visit with Phillips requires patience. It is not uncommon for a ring of people three deep to surround his booth, each person waiting to get a question or comment. The wait can last a half-hour. Phillips seldom gives a yes-or-no answer to even the simplest question. And his listeners seem to like it that way.

Unlike last year's Chicago TI Faire, at which a demonstration of Myarc's computer was promised but never materialized, this year Phillips brought along "the first production board" of the 9640. The board, which is fitted into a Peripheral Expansion Box, included 512K of dynamic RAM, a Texas Instruments 9995 microprocessor, a

boot ROM, a high-speed, no wait state static ROM for storing the code for floating point arithmetic and to display images on the screen, a real time clock and the same sound generator chip as used in the 4A. The board used the same 9901 chip as in the 4A as an interrupt controller. A 9938 chip, produced jointly by Microsoft and Yamaha, with 128K of DRAM, is also on the board. Connectors include an 8-pin DIN connector for video, five pins of which are the same as the composite video connector used on the 4A. Users will thus be able to use their present monitor with the 9640. The remaining three pins are for RGB blue and green and the RGB synch signal. A jumper is used for the red signal. A user will be able to select RGB or composite display at any time. The board also includes ports for a mouse, joystick and IBM compatible keyboard. The only things not supported by the board is a cassette port and cartridge port.

The built-in mouse interface is compatible with the Commodore Amiga mouse. The RGB connector is also Amiga compatible. The joystick port is the same as used on the 4A.

The software bundled with the the 9640 includes a disk operating system that is similar to MS-DOS 2.1. Commands are virtually "the exact same," Phillips said. Also included is Advanced BASIC by Myarc. Patches for TI-Writer and software to save cartridges will also be provided. The format of the cartridge-saving software is the same as used by Miller Graphics' GRAM Kracker. Thus, those who have saved cartridges to disk using 6K will be able to load the software into the 9640.

According to Phillips, production of th board is being heldup because the gate array is not available. (Ed. note: From info in article "From the Board" apparently the gate array chips are now in and we should be seeing the Myarc computer real soon now!) "This is the chip that should have been in long ago, and it's one that we custom-designed ourselves. It has 84 pins on it, 21 on a side. The gate array contains all the logic, the dynamic RAM refresh logic, the wait state logic so we can run this machine at various speeds... It also handles the memory mapping that the 9995 uses to access more than 64K."

Phillips described at length the features of the 9938 chip, dwelling on its graphics and display capabilities. "It's really the most exciting feature of this board," he said.

In addition to a variety of commands, including draw, search, fill and an animation mode, are its graphics modes. While the 4A has four graphics modes: graphics 1 mode with 32 columns, a 40-column text mode, a multicolor mode and a high resolution graphics mode, the 9938 offers a bit-mapped graphics mode that allows users to control each pixil on the screen. The chip's high resolution mode displays 512x424 lines and in this mode any pixil may be any one of 16 available colors. Another mode is a 256x212 display allowing the user to select any of 256 colors for any bit on the screen.

Phillips says the 9640 supports a variety of existing disk controller and RS232 cards, including those manufactured by Texas Instruments, Myarc Inc, and CorComp

Inc. The Horizon RAMdisk by Horizon Computers Ltd. and Myarc's RAMdisk card are also supported.

While it shouldn't come as a surprise to anyone, Phillips noted that he's not involved in the TI market to make a killing, and doesn't expect to make one with the 9640.

"The attitude we've taken all along is that one is certainly not going to make a fortune in this market anymore. The early '80s are long gone," he told the hundreds who listened to his presentation in Chicago.

Phillips was assisted in his presentation by Paul Charlton, developer of the Fast-Term Terminal emulator, and J.Peter Hoddie, developer of Font-Writer and other software. Both are involved in the Myarc computer project.

Hoddie is modifying TI-Writer for 80-column display, which he demonstrated. Among the features of Hoddie's TI-Writer is the addition of a View File command that allows the use to look at a D/V or D/F 80 file on disk without having to load it into memory. Thus, a user would be able to work on a document in memory and look at a second document without erasing the first document from memory.

Other modifications may include moving the status line from the top to the bottom of the screen, a Show Directory command that will offer the option of listing only text files to the screen and the ability of the user to determine how much memory to devote to a text buffer. Mouse support for the cursor is also under consideration. The editor and formatter will reside in memory simultaneously.

Hoddie is also toying with the idea of creating a windowing capability that would include 255 columns. Text with 80 columns or less will be saved in D/V 80 format while text with longer lines will be saved in D/V 255, he said.

"Everything that is in TI-Writer is still there. You're not losing anything, but is's a lot faster," particularly with the inserting and deleting functions, he said. The Find String function is also changed so that it can be used to locate all occurrences of a string, rather than just the first occurrence. "It will work just like the Replace String function," he said.

Phillips said that Mack McCormick is working on an 80-column patch for Microsoft Multiplan and Pecan Systems is supporting UCSD Pascal software, version 4.21. This will allow users to compile Pascal, Fortran 77, Cobol and BASIC. Myarc is also developing a two-pass BASIC compiler. Pike Creek Computers, producers of the TI-Count package of business programs, is developing business software for the system.

Charlton is modifying his Fast-Term terminal emulator for the new machine. Inscobot, which markets TI-Artist, is developing a MacPaint equivalent and windowing software, Bright Data is developing professional business accounting software that will print reports while simultaneously allowing data entry, and Clint Pulley, developer of C for the TI, is developing a C Compiler. Asgard Software, DataBioitics and other companies are also developing software for the new

machine, Phillips said. Asgard is working on a multi-tasking operation system similar to the DX10 operation system used on TI mini-computers.

"We feel that this will be a well-supported machine by the fact that it runs most 99/4A software. It will immediately start off with thousands of pieces (of software)," Phillips said. "As we all know, when Atari released (its) 520 they didn't even have a BASIC interpreter. But, painful as it was, we finally have our own BASIC interpreter, version 2.11, and we've been getting quite a few calls with raves as far as what it can do versus TI's Extended BASIC. And since our Extended BASIC 3 is based upon that we think it will be virtually bug-free or close to it on first release."

Existing 99/4A software that uses a keyscan method other than the standard console keyscan routine, such as Fast-Term and 4A-Talk, won't be compatible with the 9640, Phillips said. Also, some software won't work because of the timing used in addressing the VDP memory. "When we turn the machine on in the 4A mode, we look exactly like a 4A. Everything is memory mapped in the same place."

Noting the popularity of Lotus 1-2-3 in the PC and business market, Phillips said "that's the next area of concentration, a Lotus 1-2-3 look-a-like so that you can use your data disk from your IBM-PC and plug it in this machine."

Phillips said that benchmark tests between IBM-PCs using Basic and the 9640 using BASIC 3 "we're running about 50 percent faster on some things than the PC. Considering the fact that all of our numbers are in double-precision floating point, I think that's saying something. What we're talking about is a machine that is about 50 percent more powerful than the PC and comes with the capability of addressing two megabytes."

Although the 9640 will be able to use files written using a PC, Phillips stressed that PC programs won't run on the machine, "because an 8088 is not a 9995. I want to have data file compatibility, but assembly language programs won't work. I would say that if anything, we want to be compatible from the point of view of compilers and things like that."

"For example, there's a big difference between the TI BASIC interpreter and the Microsoft BASIC. In many respects the TI interpreter is much more powerful than the IBM, in its structure and its capability of interfacing with assembly language programming. On the IBM, it's horrendous. On the TI you just CALL LOAD, CALL LINK."

However, when asked about the likelihood of an IBM compatibility card, Phillips said, "Once you have an IBM keyboard like that I think it's down the road a short time from now. Today, though, we're selling 9640s and we want to support that. It's a very powerful and very capable computer."

Holding up the 5 x 7-inch board containing the 9640, Phillips said, "it's the equivalent of an IBM-PC mother board, it's the equivalent of an EGA graphics card, it's the equivalent of an MS mouse interface card and it's the equivalent of a Quadram card minus the parallel and serial interface. I think we've done one of the finest

jobs in terms of packaging a product in the entire personal computer field."

REFLECTIONS 1986

by Duane Goodman

I think it is time to take a few moments to reflect on where we have come from and where we wish to go as a computer club.

We can be thankful that our membership has staid fairly stable thru the year. We have been successful in attracting new members. The negative part of that is that we have had a number of what I call "one timers"; those who join and come to one or two meetings and then never show up again. We need to maintain these people, either by changing meeting times, or offering something that they need. We need to continue our efforts to reach out into the TI community for those who bought a computer when TI opted out of the Home Computer field, then finding that they didn't really know what to do with their new computer. We can, as a club, be of great benefit to those individuals! We need to make greater effort to reach them.

We can be thankful that we have a strong Treasury! After a couple of experiences that we have had in the past, that is indeed a good thought. With some of the plans we have that we would like to impliment in the coming year, we will need a strong treasury. Thanks Keith for the job well done!!

We can be thankful for the leadership of Cricket Raybern. She has been a strong effective President providing a guiding hand and a moderating influence.

My strongest praise goes this year to the two individuals who have donated hundreds of hours of time working on the PUNN BBS. Al Kinney and Mike King. These two have spent weekends at a time maintaining and improving the BBS. It is to the point where I feel that we now have the BEST BBS in town. These two have certainly made my job of BBS Chairman a breeze. Thanks guys!!!

Thanks to all of the other officers and staff who have made this year interesting. A lot of hard work has gone into this year and you deserve to be proud!

In the future, we need to strive to be as strong, or stronger than we were this year. We need to reach out to other TI computer owners who haven't heard of us. We can offer them our knowledge and advise them. That is certainly better than starting off by yourself like many of us did.

We also have several projects and plans for the up-coming year. Without a strong PUNN, which means your help and involvement, none of these plans can be implemented or even mean anything. So lets stay involved, work hard, and strive for a better year in '87 than we had in '86.

Thanks to one and all!

Happy Holidays!!!

Duane

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This will be the last issue of the Tips from the Tigercub.

I started this newsletter over 3 years ago, as a means of promoting my software business. It has never been a success for that purpose, but I have kept it going because of the many interesting newsletters that I have received in exchange, and the many friends that I have made around the world.

I know, from the editors' comments in many of your newsletters, that many of you are finding it difficult to finance a newsletter for your shrinking membership, and even more difficult to find the time, and the material to print. For a one-man user's group pretending to be a business which is getting very little business, it has become impossible. User group members have never been good customers for anyone's software, for reasons which you all know, and those who are remaining active in the TI world are wanting more sophisticated software than I have to offer.

Some of you have offered to subscribe to my Tips, but I just don't have the time to get involved in anything like that. I have had some other projects on the back burner for too long, and it's time I got to work on them - they can hardly turn out to be less profitable than trying to sell software!

I am NOT going out of business, and I am NOT releasing my programs to the public domain. I will continue to sell them, and will continue some classified advertising.

My heartfelt thanks to the many user group editors and officers who have tried in many ways to encourage and help me. Many thanks to those who have purchased my programs.

I will greatly miss your

newsletters. I do hope to keep in contact with some of you. Perhaps now I can find time to browse in the TI sections of CompuServe or GENIE, and perhaps I will meet you there.

The answer to the challenge in the last Tips? For a clue, try -

DISPLAY AT(24,1):0 in Basic. Still don't get it? In Basic, DISPLAY is the same as PRINT, but AT is not recognized, so the computer thinks you are telling it to print the variable AT(1,1) - which; being undefined, is 0 - and advance to the next line (the ;) and print 0.

I have always wanted a pocket calculator with several memories and a window to display the contents of each one. So, since there is plenty of room for windows on a TV screen, I wrote one.

It does not require any use of the Enter key, but each CALL KEY input must be validated and processed, so don't type too fast. It will accept such inputs as M1=7= or M1=7+1= or M2=1-M1= to put a value in a memory, or 6+7= or 6+M2= to calculate and display, or 6+7M1 or M1-M2M3 to calculate and put into memory, and will even do multiple calculations such as 1+2-3/4=5%3, subtotalling after the first two.

```
100 CALL CLEAR :: CALL SCREE
N(5):: DEF S$(X)=SE$(A$,X,1)
)&" = " :: CALL PEEK(8198,A)
:: IF A<>170 THEN CALL INIT
110 CALL LOAD(-31806,16):: O
N WARNING NEXT :: GOTO 140
120 SET,M$( ),K,S,A$,S$( ),R,C
,N,N1,N2,N1F,N2F,M1F,M,MF,DF
,FF,VF,EF,FL,N$,F2,T,M2,MEM(
),ST,NX,ZF
130 CALL COLOR :: CALL CHAR
:: CALL KEY :: CALL SOUND !0
P-
140 FOR SET=0 TD 4 :: CALL C
```

```

DLOR(SET,16,1):: NEXT SET ::
FOR SET=5 TO 8 :: CALL COLO
R(SET,5,16):: NEXT SET :: CA
LL CHAR(64,"#")
150 FOR SET=9 TO 12 :: CALL
COLOR(SET,16,1):: NEXT SET
160 DISPLAY AT(1,10):"TIGERC
UB": " MULTIMEMORY@CALCULAT
OR": "MEMORY #1": "MEMORY
#2": "MEMORY #3": "MEMORY
#4": "MEMORY #5"
170 M$(1)="0123456789.+-%/=
CXN" :: M$(2)="0123456789.AS
MDFECXM" :: DISPLAY AT(20,1)
:"use ?": "(1) symbols": "(2)
alpha characters"
180 CALL KEY(0,K,S):: IF S=0
OR K<49 OR K>50 THEN 180 ::
A$=M$(K-48)
190 DISPLAY AT(20,1):S$(12);
"add";TAB(16);S$(16);"percen
t" :: DISPLAY AT(21,1):S$(13
);"subtract";TAB(16);S$(17);
"equals"
200 DISPLAY AT(22,1):S$(14);
"multiply";TAB(16);S$(18);"c
ancel" :: DISPLAY AT(23,1):S
$(15);"divide by";TAB(16);S$
(19);"clear all"
210 DISPLAY AT(24,1):"M1 to
M5 = memories #1 to #5"
220 R=15 :: C=1 :: N,N1,N2,N
1F,N2F,M1F,M,MF,DF,FF,VF,EF,
FL,ZF=0 :: N$="" :: DISPLAY
AT(18,1):""
230 CALL KEY(3,K,S):: IF S<1
THEN 230 :: CALL SOUND(50,5
00,5):: DISPLAY AT(R,C):CHR$
(K):: C=C+1
240 ON POS(A$,CHR$(K),1)+1 G
OTO 260,270,270,270,270,270,
270,270,270,270,270,290,290,
250,290,290,290,340,410,420,
430
250 IF VF=1 OR MF=1 THEN 290
:: ZF=1 :: N$="-" :: GOTO 2
30
260 DISPLAY AT(R,C-1):"? " ::
C=C-1 :: GOTO 230
270 IF MF=1 THEN 260 :: FL=0
:: VF=1 :: IF DF=0 AND ZF=0
THEN N=N+10+K-48 :: GOTO 23
0 ELSE N$=N$&CHR$(K):: GOTO
230
280 IF DF=1 THEN 260 :: DF=1
:: MF,FL=0 :: IF ZF=1 THEN
N$=N$&". " :: GOTO 230 ELSE N
$=STR$(N)&". " :: GOTO 230
290 IF C=2 OR FL=1 THEN 260
:: FL=1 :: IF FF=0 THEN 320

```

```

300 F2=POS(A$,CHR$(K),1)-11
:: IF VF=1 THEN GOSUB 480
310 GOSUB 520 :: N1=T :: DIS
PLAY AT(18,1):"SUBTOTAL":T
: N2F,N2=0 :: FF=F2 :: GOTO
230
320 IF VF=0 THEN 330 :: VF,M
F=0 :: GOSUB 480
330 MF=0 :: FF=POS(A$,CHR$(K
),1)-11 :: GOTO 230
340 IF C=2 OR(FF=0 AND M1F=0
)OR(C=4 AND M1F=0)OR FL=1 TH
EN 260
350 IF C=4 THEN EF=1 :: M2=M
:: N1F,MF=0 :: GOTO 230
360 IF VF=1 THEN GOSUB 480
370 IF EF=0 THEN 400
380 IF N2F=0 THEN MEM(M2)=N1
:: DISPLAY AT(M2*2+2,11):N1
:: GOTO 220
390 GOSUB 520 :: MEM(M2)=T
: DISPLAY AT(M2*2+2,11):T ::
GOTO 220
400 GOSUB 520 :: DISPLAY AT(
15,C):T :: GOTO 220
410 DISPLAY AT(R,1):""::""::
"" :: GOTO 220
420 MEM(1),MEM(2),MEM(3),MEM
(4),MEM(5)=0 :: FOR R=4 TO 1
2 STEP 2 :: DISPLAY AT(R,10)
: "" :: NEXT R :: GOTO 410
430 IF EF=1 AND MF=1 THEN 26
0
440 CALL KEY(3,K,ST):: IF ST
<1 OR K<49 OR K>53 THEN 430
ELSE CALL SOUND(50,500,5)::
M=K-48 :: DISPLAY AT(R,C):CH
R$(K):: C=C+1 :: MF=1 :: FL
=0 :: IF VF=1 THEN GOSUB 480
450 IF N1F=0 THEN M1F,N1F=1
:: N1=MEM(M):: IF ZF=1 OR DF
=1 THEN N1=VAL(N$&STR$(N1)):
: DF,ZF=0 :: GOTO 230 ELSE 2
30
460 IF N2F=0 THEN N2F=1 :: N
2=MEM(M):: IF ZF=1 OR DF=1 T
HEN N2=VAL(N$&STR$(N2)): DF
,ZF=0 :: GOTO 230 ELSE 230
470 GOSUB 520 :: MEM(M)=T ::
DISPLAY AT(M*2+2,11):T :: G
OTO 220
480 IF DF=0 AND ZF=0 THEN NX
=N ELSE NX=VAL(N$):: DF,ZF=0
490 IF N1F=0 THEN N1=NX :: N
1F=1 :: GOTO 510
500 N2=NX :: N2F=1
510 VF,N=0 :: N$="" :: RETUR
N
520 IF FF=1 THEN T=N1+N2 ELS
E IF FF=2 THEN T=N1-N2 ELSE

```

```

IF FF=3 THEN T=N1*N2 ELSE IF
FF=4 THEN T=N1/N2 ELSE T=N1
*N2/100
530 RETURN

I have always been annoyed
by the difficulty of hyphen-
ating with TI-Writer, when I
want to avoid the gaping
holes that wraparound and
Fill and Adjust can cause.
Manually filling and adjust-
ing with carets is slow, and
leaving a space after the
hyphen is unreliable, so I
wrote this program.

100 DISPLAY AT(2,10)ERASE AL
L:"TIGERCUB": " HYPHENATED F
ILL AND ADJUST"
110 DISPLAY AT(6,1):" Prepar
e text with TI-Writer": "Edit
or. Leave left TAB at 0,": "s
et right TAB at the actual"
:"value of the line length d
e-"
120 DISPLAY AT(10,1):"sired
(i.e., for a 28-char": "lin
e, set it at 28)."
130 DISPLAY AT(12,1):" Inden
t as desired. Center": "hea
dings as desired but be": "
sure to follow them with a
": "line feed (Enter). Hyphen
ate"
140 DISPLAY AT(16,1):"as de
sired and follow the": "hyp
hen immediately with a": "
line feed (Enter)."
150 ON ERROR 160 :: GOTO 170
160 ON ERROR 160 :: RETURN 1
70
170 DISPLAY AT(20,1):"INPUT
FILE? DSK" :: ACCEPT AT(20,1
6)BEEP:F$ :: OPEN #1:"DSK"&F
$,INPUT
180 DISPLAY AT(22,1):"OUTPUT
FILE? DSK" :: ACCEPT AT(22,
17)BEEP:N$ :: OPEN #2:"DSK"
&N$,OUTPUT
190 DISPLAY AT(24,1):"LINE L
ENGTH?" :: ACCEPT AT(24,14)V
ALIDATE(DIGIT):L
200 LF$=CHR$(13):: H$="-"&CH
R$(13)
210 ON ERROR 210 :: GOTO 220
220 ON ERROR 210 :: RETURN 3
10
230 LINPUT #1:M$ :: IF M$="
" OR M$=LF$ OR M$="" OR ASC(

```

```

M$)>127 OR(LEN(M$)=L AND POS
(M$,LF$,1)=0)OR POS(M$," ",1
)=0 THEN 310
240 IF POS(M$,LF$,1)<>0 AND
POS(M$,H$,1)=0 THEN 310
250 IF POS(M$,H$,1)<>0 THEN
M$=SEG$(M$,1,LEN(M$)-1)
260 IF LEN(M$)=L THEN 310
270 P=1
280 X=POS(M$," ",P):: IF X=P
THEN P=P+1 :: GOTO 280 ELSE
Y,P=X :: IF POS(M$," ",P)=0
OR P=L THEN 310
290 M$=SEG$(M$,1,X)&" "&SEG$
(M$,X+1,255):: IF LEN(M$)>L
THEN 310 ELSE P=X+2
300 X=POS(M$," ",P):: IF X=0
THEN P=Y :: GOTO 300 ELSE G
OTO 290
310 PRINT #2:M$ :: IF EOF(1)
<>1 THEN 230 ELSE CLOSE #1
: CLOSE #2

Here is one for the pre-
schoolers -
100 CALL CLEAR :: CALL SCREE
N(14):: CALL COLOR(1,11,11,1
2,5,5):: DISPLAY AT(3,10):"S
EE-N-SAY": " : "PRESS ANY KEY
" !by Jim Peterson based on
a routine by Michael Lyons
110 DIM E$(16),PAT$(16):: CA
LL CHAR(123,RPT$("F",16))
120 DATA " ", " {", " {
", " { {", " { " { {", " { {
", " { { {", " { " { { { {
", " { { { {", " { " { { { {
", " { { { { {
130 FOR J=0 TO 15 :: READ PA
T$(J):: NEXT J
140 CALL KEY(0,K,S):: IF S=0
THEN 140
150 CALL CHARPAT(K,CP$):: FO
R X=1 TO 16 :: Y=ASC(SEG$(CP
$,X,1)): E$(X)=PAT$(Y+(Y>57
))>7-48):: NEXT X :: IF K>96
AND K<123 THEN K=K-32
160 CALL CLEAR :: CALL SAY(C
HR$(K)): FOR X=2 TO 16 STEP
2 :: DISPLAY AT(8+(X/2),12)
:E$(X-1);E$(X):: NEXT X
170 CALL SAY(CHR$(K)): GOTO
140

And so, one more time

MEMORY FULL

Jim Peterson

```

1986 OFFICERS & STAFF

CRICKETS CORNER

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
 Jim Smith 295-2150
 MEMBERSHIP CHAIRMAN
 Dale Kirkwood 646-4354
 NEWSLETTER EDITOR
 Vacant
 BBS CHAIRMAN
 Duane Goodman 232-3785
 COMMITTEE:
 Ron Mayer 232-7363
 Mike King 357-4413
 Martin Crommie 222-9070
 Al Kinney 640-5860
 PUNN BBS 233-6804
 300/1200 BAUD 24 hr

Nomines for PUNN officials for 1987
 are as follows:

For President:
 Duane Goodman
 Dorman Blazer
 For Vice-President:
 Keith Fast
 Dale Kirkwood
 For Treasurer:
 Mike King
 Chuck Neal
 Dorman Blazer
 For Secretary:
 Don Barker
 Charles Ball

Holiday Greetings to All!

This is the busy season for most of us...Thanksgiving has past and Christmas is just around the corner. (If you have been on the BBS lately you even know how many shopping days remain.)

For PUNN it is also a busy time...it is time for elections. Do not take this time lightly! It is the people we elect as our officers who will determine the direction of our User Group.

During the past two years we have had an active Board of Directors and several active committees. Some of the results have been:

* a great news letter

* ads in the paper to let TI owners know of our existance (from these we have gained several new members)

* one of the finest BBS's around

* a library with many excellent programs at great prices

For a computer which has been an orphan for many years now I don't think we're doing half bad.

This next year is going to be important to TI owners. New hardware and software may make the difference between remaining with the TI or moving on to something else.

PUNN is where you will find out what is available, and is the place you can buy it for the best prices. Elect officers who will keep you informed, officers who care about PUNN, officers who care about YOU!

Thank you for allowing me to be an active part of the last two years. They have been great, but they are only the beginning!

Cricket

NEXT PUNN MEETING
IS DECEMBER 2ND
AT 7PM
PGE BUILDING
3700 SE 17TH

PUNN

P.O. BOX 15037
PORTLAND, OREGON 97215

