THE PUG PERIPHERAL

From the President.....

It's newsletter time again. There seems to be a lot going on in the TI community of late, including the Lima OH fair May 26, which is free. the 12th Annual Wheeling Hamfest and Computer Fair May 20, from 8-3 at Wheeling Park, Wheeling WV. Door prizes, free parking, and women and kids under 16 free. There's even a TI Flea Market May 12th at the Rt. 90 Ramada Inn, Erie PA. Also the Boston and Ottawa fairs. I'm looking for some good reports on those. We'll have more info on Lima, including hotel accomodations, etc. at the meeting. It thrills me to see such interest and initiative at work, not to mention the opportunity to meet first-hand authors and vendors whose knowledge of the TI is astounding...

On the local front, the PUG BBS is expanding by leaps and bounds, both in software and hardware. Gary has been busy, and so have other users. It took me over an hour to download all the new programs, even at 2400 baud! That's saying something.

While I'm on the subject of telecommunications, let me digress for a moment. It has been stated that when all other modes of software acquisiton have been exhausted, and the third party vendors have shifted to more lucrative investment, the TI will continue to survive...How, you ask? Because of BBS's like ours all over the WORLD which support the TI. In the March and April issues of Micropendium, many of over 220 TI BBS's are listed. They should finish the list in the May issue. A word of caution; the list is not entirely current, as I found out by trial and error. After a few out-of-service numbers, I was rewarded by 3 boards which had a good solid hour of TI downloads which, when unarced and sorted, took up '8' SSSD disks. Not a bad haul, I'd say. I know BBS'ing is not for everyone, but it's something I like doing. Anyone who would like to know more, either leave me a message on the PUG board (if you can), or talk to me at the meeting. I'd be glad to host a SIG at my home if there's any interest. Enough said.

I would appreciate some input at the May meeting about what the club would like to do in the next 6 months or so: Hardware projects, Special Interest Groups, Educational groups, Swaps, Flea Markets, etc...the Exec. Committee can make decisions for you, but the ideas have to come from somewhere. Remember, this is YOUR club.

I'll be having a group on configuring BOOT at 3PM, followed by a QA session unless something better comes along. We plan on several demos, including Gary Kuehn with the new Spellchecker from Asgard Software, Audrey Bucher with RagPatch and myself with the dollar disks. And as a bonus treat, if you can stay awake, I will be bringing in my system so we have DSDD capacity. If I gotta bring it in, I might as well show a little speed comparison between floppy and hard drives. Yes ladies and gentlemen, this and much more fun will be had at the May PUG meeting. Be sure to bring your friends, family, neighbors, and whoever you find walking along the street who has the slightest interest in the TI; we'll get them hooked!

Make sure to check out the club's library; Sue Harper is always hard at work making copies of the sold disks in order to have a complete selection available at each meeting. Personally, I don't know how she keeps track of all of it! Each month it seems that more and more disks keep coming in...

Last but not least I'd like to give a special thanks to Gary Taylor for once again coming to the rescue and running last month's meeting. And He thought he retired! Between the BBS and correspondence, I think he's more tied up than before.

Until next month....

BULLETIN BOARD NEWS BY Gary Taylor

The clubs bulletin board has under gone some changes recently. The biggest change has been its relocation to my house in March. The new number to call is 412-341-4820. The board is up 24 hours per day, 7 days per week, and uses 8-N-1 communication settings.

I am using version 3.20 of Paradigm BBS written By Mike Kimble. This version was released on February 20, 1990. This is a fairware bbs system for which the club has contributed. We also have a copy of the program in our library for those of you who want to try and set up their own bbs system. Good Luck!

The hardware on the bbs has changed significantly in the last few months. I have removed the 180k Horizon ram disk and replaced it with my personal Myarc 512k card. This has allowed me to increase the message base size from 100 messages to 200 messages. I have since sold the Horizon ram disk and I am going to use the money to purchase a new HFDC card. The recent prices of these cards have drop to the point that it is more advantageous to buy the HFDC than a larger ram disk, which was the original intent. All this has been done under the auspices of your clubs executive board.

Unfortunately. The modified console that contains the 32k on the 16 bit bus can not be used with the Myarc Card. So I had to trade off the performance of the CPU with the increased capacity of the ram disk.

I have also added one of my 3 1/2" disk drives to the system. This increases the downloads capability by another 720 sectors. This is an 80 track device. When the HFDC arrives, I will be able to have 2880 sectors on this one drive! Of course, there are two of these drives mounted in a case with the power supply but the other one can not be used with the TI disk controller. These two drives will provide 5760 sectors for download in the future.

Disk Drive one:

Mickey Schmitt uploads two new adventure games to disk drive one at the beginning of each month. She has uploaded one game for the Adventure Module and one game for the Tunnels of Doom Module each of the last four months. I will keep as many files as space permits on drive 1. If you have a specific request for an adventure game then leave Mickey a message and she will try to accomodate you. Also , if you have a game that you would like to share with us please get a copy to Mickey so that she can put it on the BBS. This drive also contains the bbs program files that I use to maintain the system.

Next month I will bring you up to date on our progress to upgrade the BBS. I will also tell you about what is on drives 2, 3, and 4.

HOMONYMY
by Jim Peterson
Tigercub Software

PROGRAM REVIEW
by Sue Harper
Pittsburgh User Group

Homonymy is a game that really grabbed me. The program begins by defining homonym, antonym, and synonym. A homonyn is a word that sounds the same when said. but is spelled differently. Hoe and ho are given as examples in the program, two, to and too is another set of homonyms.

For this game, the computer displays a word, and the user has to type in the homonym. For example, the computer displayed PAIL. The homonym is PALE For each correct answer you gain a note for the song "The Is A Tavern In the Town", and the computer plays the song for you at the end.

There are three levels to this game: level 1 is grade school, level 2 is high school, and level 3 is three word - Example sight. site and cite.

I really enjoyed this game, and my husband came in the room while I was playing it, and didn't leave. Some of the words were a challenge, and I think many of you in the TI community would enjoy this game, too.

Remember, Jim and the Tigercub have supported the TI community for a long time. Check out what else Jim has up his disk drive!

THE KIDDIE CORNER

by Sue Harper
Pittsburgh Users Group

For kids of all ages - a series of articles on how to get started making your own programs.

When last we met, it was February, and we were talking about color. Here's a little program to remind you of the color format:

```
10 CALL CLEAR
20 CALL COLOR(7,1,9)
30 CALL SCREEN(10)
40 PRINT "CAB"
50 GOTO 50
```

This short program will print the word CAB at the bottom of the screen, and make the letter dark red, and the rest of the screen light red.

Now, what if you wanted the word CAB to appear somewhere else on the screen? Well, there are a few different ways to do that. One of the most exact is to use the CALL HCHAR and CALL VCHAR statements. For what we are doing today, we will only use CALL HCHAR, but we will get into the differences eventually.

If you wanted the word cab at the middle of the screen, in dark red on a light red background, this program would do it:

```
10 CALL CLEAR
20 CALL HCHAR(12,15,67)
30 CALL HCHAR(12,16,65)
40 CALL HCHAR(12,17,66)
50 CALL SCREEN(10)
60 CALL COLOR(7,1,9)
70 GOTO 70
```

CALL HCHAR and CALL VCHAR divide the screen into a grid, kind of like graph paper. The upper left hand corner is CALL HCHAR(1,1,___) or CALL VCHAR(1,1,___).Where the line is, you must put in the ASCII value of the letter you want placed there.

The upper right is CALL HCHAR(1,32,___)
The lower left is CALL HCHAR(24,1,___)
The lower right is CALL HCHAR(24,32,___)
The center is CALL HCHAR(12,16,___)

So far in this explanation, you can use VCHAR instead of HCHAR in any of the

commands outlined. And that is about all we have room for this month.

For next time, work on a program that will print TI-99 in the upper right hand corner of the screen. Choose the color you want to use. And run this little program here - It is called "Wallpaper."

See you next month. . .

```
10 CALL CLEAR
20 CALL COLOR(14,16,2)
30 CALL HCHAR(1,1,42,768)
40 FOR LOOK=1 TO 100
50 NEXT LOOK
60 STOP
```

HINTS AND HELPS

To remove a strip of labels from your printer when you have finished printing labels, place a piece of paper between the labels and the platen cover. The label strip can now be pulled out backwards from around the platen roller...From ROM

Ramdisk owners, here is a short program to drop you into Extended Basic without doing the time consuming search for a LOAD program on drive one. This has appeared in various newsletters.

```
10 CALL INIT :: CALL
LOAD(-31952,255,0,255,0)
20 END
```

When in Basic (or XBasic), if you press Fctn-3 by mistake and ERASE your data, DON'T PRESS ENTER! Instead, press Fctn P (the quotation mark) and then <ENTER>. You will get a syntax error message (the computer will find unmatched quotation marks). In XBasic, you can press Fctn 8 (the Redo key) and view the missing line or in either Basic, type the missing line's number and Fctn E (or X)...LA99ers

FROM THE LIBRAIAN. . .

First of all, thanks for the votes of confidence! I will be the librarian again this year thanks to all of you. And I hope to be able to keep giving you what you want.

At this point, I do not have anything new for the library this month, but as you all know, that is subject to change at a moments notice, so be sure to check out the library at the meeting.

I wanted to briefly go over the rules for purchases from the library. First of all, no disks are more than $2.00 each, and sometimes we have specials, especially on package sets like when the new Funnelweb was released. You can pick out disks at the meetings, or call me at home (the phone number is on the back of the newsletter) and special request any number of disks. These will then be brought to the the meeting and held for you at no extra cost.

If you are aware of a disk that you want, and you will not be able to attend the meeting, or you DID attend, but too late to get what you wanted, let me know and we can make arrangements for you. I have had a number of people come to my house to pick up disks, or I can mail them to you for $2.00 per disk plus $1.00 for mailing. Any checks sent to me should be made out to the PUG, not to me.

If you know of a program that you think we should have, please let us know. We want to have the best library around. If you have a program you would like to donate, please do! We will even give you credit for it in the newsletter!

One last note: We do not carry any programs in the library that are for sale, such as TI BASE. We do, however, have shareware programs such as PR BASE. The $2.00 fee for the disk that you give to the PUG pays for the disk and the copying, not the shareware donation to the author. When you run a program and see the request for payment, please take it seriously. These people spend hours working on the programs, and without we as users financing their efforts, they have no reason to go on creating these wonderful programs. Please keep that in mind, and send in your shareware donations. With some authors, this will also get you on a mailing list for updates and future releases.

See you at the meeting. . .

LET GO ...

In response to your request for additional information in block number three of the accident reporting form, I put "Poor Planning" as the cause of the accident. You said in your letter that I should explain more fully, and I trust that the following details will be sufficient.

I am a bricklayer by trade. On the day of the accident, I was working alone on the roof of a new six story building. When I completed my work, I discovered that I had about 500 pounds of brick left over. Rather than carry the bricks down by hand, I decided to lower them in a barrel using a pulley which fortunately was attached to the side of the building at the sixth floor. Securing the rope at ground level, I went up to the roof, swung the barrel out, and loaded the brick into it. I then went back to the ground and untied the rope, holding it tightly to insure a slow descent of the 500 pounds of brick. You will note in block number eleven of the accident reporting form that I weigh 135 pounds. Due to my surprise at being jerked from the ground so suddenly, I lost my presence of mind and forgot to let go of the rope. Needless to say, I proceeded at an alarming rate up the side of the building. In the vicinity of the third floor, I met the barrel coming down. This explains the fractured skull and broken collarbone. Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley. Fortunately, by this time I had regained my presence of mind and was able to hold tightly to the rope in spite of my pain. At approximately the same time, however, the barrel of bricks hit the ground, and the bottom fell out of the barrel. Devoid of the weight of the bricks, the barrel now weighed approximately fifty pounds. I refer you again to my weight in block number eleven. As you might imagine, I began a rapid descent down the side of the building. In the vicinity of the third floor, I met the remnant of the barrel coming up. This accounts for the two fractured ankles and the lacerations of my legs and lower body. The encounter with the barrel slowed me enough to lessen my injuries when I fell onto the pile of bricks. Fortunately, only three vertebrae were cracked. I am sorry to report, however, that as I lay there on the bricks — in pain, unable to stand, and watching the empty barrel six stories above me — I AGAIN lost my presence of mind and....
LET GO OF THE ROPE!

```
 ~~~~~~~~~~~~~~~~~~~
W-AGE/99 * NEW-AGE/
99 * NEW-AGE/99 * N
EW-AGE/99 * NEW-AGE
/99 * NEW-AGE/99 *
 ~~~~~~~~~~~~~~~~~~~
```

---

* by JACK SUGHRUE, Box 459, East Douglas, MA 01516 *

#4

Many of my computer correspondents have a basic 4A system upgraded to include a tape recorder and that's where they want to (or have to) stay. Though I could hardly imagine life without multi-drives, RAMdisk, ugraded controllers, and all the rest, computer life in the slower lanes is not all that bad. After all, Harry Wilhelms (E-Z KEYS) and Eric LaFortune (ROCK RUNNER) produced two of the most powerful items in TI software using just the tape recorder. In the process they both discovered unknown (and thus untapped) potentials of our great machine. Most tape sources have dried up: IUG, Amnion Helpline, Tigercub. User groups, Triton, Asgard, Texcomp, and Kidware are about the only regular tape sources left. Some user groups (like Lima and MUNCH) still have extensive tape libraries for members. TI fairs everywhere still have piles of tapes available. At last year's New England Fayuh, for example, I purchased a dozen new (still in packages) tapes:

BEGINNER'S BASIC TUTOR (from TI), far better to use with a novice or kids than TI's TEACH YOURSELF BASIC (which is too mathematical for most casual users).

BEST COMPUTER COACH: TEXAS INSTRUMENTS (from Boston Electronic Systems Training) extremely clever. It comes with two cassettes - one with programs and data and the other an audio tape to listen to and easily follow along while computing.

LEMONADE (from Kidware), though less graphic than Apple's version, is many times better. I use both in my classroom. Kids prefer Kidware with more options and more intelligent control. All Kidware tapes have Side Two. LEMONADE contains a super code-breaker game... Kidware stuff is always good TI stuff.

THE WIZARD'S DOMINION (from American Software Design and Distribution Co.) fantasy adventure with a superb manual (unusual for adventures) making it a joy to play.

COSMIC CAVER (from CompuTech Distributing Inc.) timed space arcade game with twists, including a possibly-bottomless pit.

COSMOPOLY (from Not-Polyoptics) has got to be the most bizarre form of Monopoly ever devised. The setting is the Universe of the future and the options in this fast-paced, ingenious game are wonderful.

HANG-GLIDER PILOT (from Maple Leaf Micro Ware) up to four players test "gliding/landing" skills.

STARSHIP CONCORD (from Futura) another spaceship game with a good manual and so-so graphics.

MISSILE WARS (from Asgard) by John Behnke is one of the best of this genre on tape.

AZTEC CHALLENGE (from Cosmi) well-done, multi-level ancient obstacle course game tha's fun and quick.

CAVERN QUEST (from Moonbeam) about as "acadey" as you'll get on tape and one of the best multi-level graphic obstacle games.

My final tape purchase that day, ROMEO (from Extended), was lost or stolen after I gave a demo of it a few years ago. I'm not very good about making backups of my originals, unfortunately. By the time ROMEO disappeared, it couldn't be purchased anymore. So my joy at seeing one

for sale at the fair was great. Cute Romeo has to get past a series of sand dunes via balloons, is unceremoniously dropped into a shark-ridden sea, swims into a dangerous cave, and so on in his quest for the fair Juliet. It's one of those delightfully addictive, nonviolent games. Now a new generation (my 5th-graders) are discovering the joys of noble quests.

These twelve tapes are things I didn't own but now use and enjoy. Original prices on these items were from $49.95 to $9.95. I picked up most for under $2 (not counting the ones from Kidware and Asgard still being distributed today).

When I came across these tapes in class the other day, I realized how often the kids continue to use most of them, along with some other tapes that I have in large bookcase-style tape racks. Tapes get used a great deal: Jim Peterson's always exceptional educational tapes; Intellestar's (CELLS), early TI's (HAMMURABI, WORD SAFARI), and many others. I teach ASL (American Sign Language) in class, and the kids use the PD FINGERSPELL program to learn, review, write, and decode through the manual alphabet. This is in EVERY user-group library.

Last week we were studying the skeletal system. I put on Regena's "Name That Bone." I often use the tape recorder on the disk-system TI I have at school, also. Once a program is loaded into memory, I take the little tape recorder to the next machine and repeat the process. Sometimes I bring a third computer in from home, but I still just go from one to the other with the same tape recorder.

But that day I loaded up "Name That Bone" by tape into the two TIs, and all the kids during the day had a chance to successfully complete this great program.

There's no problem using tape. I load them into the computers before school, while I'm getting my other stuff ready for the day. I keep the volume on the TVs high so I can hear when one computer had loaded; then I repeat the process for the others. By the time the kids arrive, I've had my coffee, put up the computer schedule, and we're all rarin' to go. I still think the 4A is the best educational computer tool in existence.

I often think about users with the basic diskless systems. There are still tapes readily available for the Adventure, Tunnels of Doom, and LOGO modules (though the last requires 32K). Triton still has cassettes of all kinds for as low as $1.99. I just bought a SAMS book for $2.49 (TI-99/4A GAMES) that included a cassette of all the games. I usually pay more for blank cassettes alone.

Peruse the mail order palaces to see the number of extremely low-priced MODULES still available. Triton's start at $2.49 and go up to $29.95 (for Extended BASIC). There are recreation (MOONSWEEPER, FATHOM, MUNCHMAN), productivity (PERSONAL REAL ESTATE, HOME FINANCIAL DECISIONS); education (READING FLIGHT, NUMERATION I); and other cartridges. TEXCOMP's module prices start at $4.95 and have many more cartridges not listed by Triton, including the last of the Atarisoft ones like Donkey Kong.

So a person with a very basic 4A system (console, TV, Extended BASIC cartridge, and tape recorder) still has an extremely powerful tool at his or her command with options for many other diskless peripherals. But most early owners have closeted or tossed their TIs. Recently, I went to a flea market in a nearby town and picked up a used (but very new looking) silver and black console with cables for $3! That's what I'm writing this article on right now. So DON'T QUIT! Your 4A is alive & well & kicking up its heels all over the world.

TIPS FROM THE TIGERCUB

#51

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TIGERCUB SOFTWARE
156 Collingwood Ave.
Columbus, OH 43213

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having another hundred CALLs
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TIPS FROM TIGERCUB VOL.5
Another 49 programs and
files from issues No. 42
through 50. Also $10 ppd
###############################

TIGERCUB CARE DISKS #1,#2,#3
and #4. Full disks of text
files (printer required).
No. 1 contains the Tips news
letters #42 thru #45, etc.
Nos. 2 and 3 have articles
mostly on Extended Basic

programming. No. 4 contains
Tips newsletters Nos. 46-52.
These were prepared for user
group newsletter editors but
are available to anyone else
for $5 each postpaid.

I believe this word game is
totally different from any-
thing you have ever seen,
and very challenging if you
don't use the AID key. The
first time you run it, pick
option 3 to create a file of
phrases and give it the file
name COMPUTE. This will then
become the computer's file,
option 1, and you can create
as many of your own files as
you want. Recommend phrases
of several to as many as 20
words - short ones are too
difficult.

```
100 DIM W$(20):: DIM D$(20)
110 GOTO 150
120 Q$,K,S,Q,F$,E,FLAG,X,J,X
$,Y$,A,B,M$,DY$,V,A$(),C$,CH
,CH$,Y,W$(),L,M,D$(),F,Z,C,R
,H
130 CALL CHAR :: CALL KEY ::
CALL SOUND :: CALL CLEAR ::
CALL CHARPAT :: CALL COLOR
:: CALL SCREEN :: CALL VCHAR
:: CALL SPRITE :: CALL LOCA
TE :: CALL DELSPRITE    .
140 !@P-
150 CALL CHAR(94,"3C4299A1A1
99423C")):: DISPLAY AT(2,1)ER
ASE ALL:"TIGERCUB SHUTTLESEA
RCH V.1.1":"":"^ Tigercub So
ftware for free":"distributi
on but no price"
160 DISPLAY AT(6,1):"or copy
ing fee to be charged":"":"I
f you should feel moved to":
"send me a few bucks for my"
:"work, I won't be offended!
"
170 DISPLAY AT(12,1):"Jim Pe
terson":"156 Collingwood Ave
.":"Columbus, OH 43213"
180 DISPLAY AT(16,5):"Instru
ctions? (Y/N) N" :: ACCEPT A
T(16,26)SIZE(-1)VALIDATE("YN
"):Q$ :: IF Q$="N" THEN 260
190 DISPLAY AT(2,1)ERASE ALL
:" The computer will display
a":"phrase or saying concea
led":"within a grid of rando
```

a":"letters."
```
200 DISPLAY AT(6,1):" The wo
rds will be horizon-":"tal,
one word per line and":"on c
onsecutive lines, but":"not
necessarily beginning on"
210 DISPLAY AT(10,1):"the to
p line, and the phrase":"may
'wrap around' from the":"bo
ttom row to the top."
220 DISPLAY AT(13,1):" You c
an find the phrase by":"shut
tling columns of letters":"u
p and down, looking for":"co
nsecutive rows with letter"
230 DISPLAY AT(17,1):"combin
ations that could be":"parts
of words.":" A cheat key is
available,":"if you are rea
lly stuck, but"
240 DISPLAY AT(21,1):"try no
t to use it!"
250 DISPLAY AT(23,8):"PRESS
ANY KEY" :: DISPLAY AT(23,8)
:"press any key" :: CALL KEY
(0,K,S):: IF S=0 THEN 250
260 DISPLAY AT(3,2)ERASE ALL
:"Do you want to - 1":"":" (
1) Solve a saving from my
file?":"":" (2) Solve a p
hrase from        your file
?"
270 DISPLAY AT(11,2):"(3) Cr
eate a file of":"      phrase
s?":"":" (4) Have someone ty
pe in a       phrase to solve
?"
280 ACCEPT AT(3,19)SIZE(-1)V
ALIDATE(DIGIT):Q :: IF Q<1 O
R Q>4 THEN 280
290 ON Q GOTO 300,310,410,47
0
300 F$="1.COMPUTE" :: E=1 ::
GOTO 320
310 DISPLAY AT(18,1):"Filena
me? DSK" :: ACCEPT AT(18,14)
:F$ :: E=2
320 ON ERROR 370
330 IF FLAG=1 THEN 350 :: FL
AG=1 :: OPEN #1:"DSK"&F$,FIX
ED,RELATIVE,INPUT :: ON ERRO
R STOP
340 INPUT #1,REC 0:X :: CLOS
E #1 :: FOR J=1 TO X :: X$=X
$&CHR$(J):: NEXT J :: Y$=X$
350 RANDOMIZE :: A=INT(RND*L
EN(Y$)+1):: B=ASC(SEG$(Y$,A,
1)):: Y$=SEG$(Y$,1,A-1)&SEG$
(Y$,A+1,255):: IF LEN(Y$)=0
THEN Y$=X$
```

```
360 OPEN #1:"DSK"&F$,FIXED,R
ELATIVE,INPUT :: ON ERROR ST
OP :: INPUT #1,REC 8:M$ :: C
LOSE #1 :: GOTO 490
370 FOR J=1 TO 10 :: DISPLAY
AT(20,1):"" :: DISPLAY AT(2
0,1):"CANNOT OPEN FILE!" ::
CALL SOUND(-99,110,5,-4,5)::
NEXT J
380 ON ERROR 390 :: CLOSE #1
390 FLAG=0 :: INPUT "CHECK D
ISK AND DRIVE, PRESS ANY KEY
":DY$
400 IF E=1 THEN RETURN 260 E
LSE IF E=2 THEN RETURN 310 E
LSE RETURN 410
410 DISPLAY AT(8,1)ERASE ALL
:"Filename? DSK" :: ACCEPT A
T(8,14):F$
420 E=3 :: ON ERROR 370 :: O
PEN #1:"DSK"&F$,FIXED 124,RE
LATIVE,OUTPUT :: ON ERROR ST
OP :: X=0
430 DISPLAY AT(12,1):"Enter
END when finished";"";"";"Ty
pe phrases, not more than 20
words and 124 characters"
440 X=X+1 :: ACCEPT M$ :: IF
LEN(M$)>124 THEN PRINT "TOO
LONG!" :: X=X-1 :: GOTO 440
450 IF M$<>"END" THEN PRINT
#1,REC X:M$ :: GOTO 440
460 PRINT #1,REC 0:X :: CLOS
E #1 :: GOTO 260
470 CALL KEY(3,K,S):: DISPLA
Y AT(12,1)ERASE ALL:"Type a
phrase of less than  20 word
s and press Enter"
480 ACCEPT M$ :: CALL CLEAR
490 DISPLAY AT(3,2)ERASE ALL
:"Choose skill level - 1";""
:" (1) All words begin in":"
   first column"
500 DISPLAY AT(8,2):"(2) All
words begin in same":"
column";"";" (3) Each word m
ay appear in";"     a differ
ent column"
510 DISPLAY AT(14,2):"(4) As
No. 3 but AID key is":"
disabled";"";" (5) Quit"
520 ACCEPT AT(3,23)SIZE(-1)V
ALIDATE(DIGIT):V :: IF V<1 O
R V>5 THEN 520 :: IF V=5 THE
N CALL CLEAR :: STOP
530 DISPLAY AT(12,6)ERASE AL
L:"SCRAMBLING......"
540 A$(1)="jkzae klmpr vgaho
nceci sdufy bqijw astrf urd
sa nvjxe blbig trakv nobth w
```

```
ehey vnijo oherq umbai rtika
opleq nosvs tarkh zeski "
550 A$(2)="'boiu m.fgt krac,
pjip? tn-un osheg kar,q ibl
.o tons' idrix ?uhig ebarf u
ks,k ,,jhge vifyt kibrn taga
, .'ry lakle ilf.' inst"
560 C$=A$(1)&A$(2)
570 FOR CH=65 TO 90 :: CALL
CHARPAT(CH,CH$):: CALL CHAR(
CH+32,CH$):: NEXT CH :: CALL
CHAR(42,"82444428281010")
580 CALL CHAR(143,"18243C4A4
A3C2418"):: CALL COLOR(14,16
,1)
590 M$=M$&" " :: Y=1
600 X=POS(M$," ",1):: M$(Y)=
SEG$(M$,1,X):: L=LEN(M$(Y))=
: M=MAX(M,L):: RANDOMIZE ::
M$(Y)=M$(Y)&SEG$(C$,INT(230*
RND+1),20-L)
610 Y=Y+1 :: IF Y=21 THEN 62
0 :: M$=SEG$(M$,X+1,255):: I
F LEN(M$)>0 THEN 600
620 FOR J=Y TO 20 :: M$(J)=S
EG$(C$,INT(230*RND+1),20)::
NEXT J
630 ON V GOTO 670,640,650,65
0
640 X=INT(RND*(20-M))+M+1 ::
FOR J=1 TO Y :: M$(J)=SEG$(
M$(J),X,255)&SEG$(M$(J),1,X-
1):: NEXT J :: GOTO 670
650 FOR J=1 TO Y :: X=INT(RN
D*(20-M))+M+1 :: M$(J)=SEG$(
M$(J),X,255)&SEG$(M$(J),1,X-
1):: NEXT J :: GOTO 670
660 ! the string
670 FOR J=1 TO 20 :: FOR L=1
TO 20 :: D$(J)=D$(J)&SEG$(M
$(L),J,1):: NEXT L :: NEXT J
680 IF V=1 THEN F=M ELSE F=2
0
690 FOR J=1 TO F :: Z=INT(20
*RND+1):: D$(J)=SEG$(D$(J),Z
,255)&SEG$(D$(J),1,Z-1):: NE
XT J
700 CALL CLEAR :: CALL SCREE
N(5):: FOR S=1 TO 13 :: CALL
COLOR(S,5,16):: NEXT S :: C
ALL VCHAR(1,31,1,96)
710 CALL VCHAR(4,5,143,20)::
CALL VCHAR(4,28,143,20)
720 FOR C=1 TO 20 :: FOR R=1
TO 20 :: CALL VCHAR(R+3,C+6
,ASC(SEG$(D$(C),R,1))):: NEX
T R :: NEXT C
730 DISPLAY AT(1,1):"s&d to
select, e&x to scrollfctn 7
aid, fctn 8 restart"
```

```
740 H=1 :: C=48 :: CALL SPRI
TE(#1,42,7,18,C)
750 CALL KEY(3,K,S):: IF S=0
THEN 750 ELSE ON POS("EXSD"
&CHR$(1)&CHR$(6),CHR$(K),1)+
1 GOTO 750,800,810,820,830,7
60,840
760 IF V=4 THEN 750
770 FOR S=5 TO 8 :: CALL COL
OR(S,16,5):: NEXT S
780 CALL KEY(3,K,S):: IF S=-
1 THEN 780
790 FOR S=5 TO 8 :: CALL COL
OR(S,5,16):: NEXT S :: GOTO
750
800 D$(H)=SEG$(D$(H),2,19)&S
EG$(D$(H),1,1):: FOR R=1 TO
20 :: CALL VCHAR(R+3,H+6,ASC
(SEG$(D$(H),R,1))):: NEXT R
:: GOTO 750
810 D$(H)=SEG$(D$(H),20,1)&S
EG$(D$(H),1,19):: FOR R=1 TO
20 :: CALL VCHAR(R+3,H+6,AS
C(SEG$(D$(H),R,1))):: NEXT R
:: GOTO 750
820 C=C-8-(C=48)*8 :: H=C/8-
5 :: CALL LOCATE(#1,18,C)::
GOTO 750
830 C=C+8+(C=200)*8 :: H=C/8
-5 :: CALL LOCATE(#1,18,C)::
GOTO 750
840 CALL CLEAR :: FOR J=1 TO
20 :: D$(J)="" :: NEXT J ::
M=0 :: CALL DELSPRITE(#1)::
IF Q=1 OR Q=2 THEN 350 ELSE
470
```

Here are three screen dis-
play subprograms of the type
you will find on my Nuts and
Bolts disks. Note that sub-
programs can read DATA from
the main program. The double
colons in the DATA statement
cause input of null strings
of data for spacing between
the lines. The M$() in the
subprogram parameter lists
is necessary, even though
the array is not passed from
the main program, in order
to DImension the array in
the subprogram - unless you
prefer to place the DIM in
the subprogram itself. T is
the number of DATA items to
be read.

```
100 CALL CLEAR
110 DATA THIS IS A DEMO,,OF
```

THREE SCREEN PRINTING,,SUBPR
OGRAMS PUBLISHED IN,,TIPS FR
OM THE TIGERCUB,,No. 51,,BY
TIGERCUB SOFTWARE

```
120 DIM M$(11):: CALL DOWNPR
INT(M$(),11):: FOR D=1 TO 10
00 :: NEXT D :: CALL CLEAR :
: RESTORE 110 :: CALL DIAGPR
INT(M$(),11)
130 FOR D=1 TO 1000 :: NEXT
D :: CALL CLEAR :: RESTORE 1
10 :: CALL INWARD(M$(),11)
1000 SUB DOWNPRINT(M$(),T)
1001 FOR J=1 TO T :: READ M$
(J):: L=INT(LEN(M$(J))+.5)::
M$(J)=RPT$(" ",14-INT(L/2))
&M$(J):: M$(J)=M$(J)&RPT$("
",28-LEN(M$(J))):: NEXT J
1002 FOR J=1 TO 28 :: FOR L=
1 TO T
1003 DISPLAY AT(L,1):SEG$(M$
(L),1,J):: NEXT L
1004 NEXT J :: SUBEND
2000 SUB INWARD(M$(),T):: FO
R J=1 TO T :: READ M$(J):: N
EXT J :: R=1 :: FOR A=1 TO T
2001 L=INT(LEN(M$(A))):: F=1
3-L/2 :: G=L+F
2002 FOR J=1 TO INT(L/2+.5):
: DISPLAY AT(R,F+1):SEG$(M$(
A),J,1);:: DISPLAY AT(R,G):S
EG$(M$(A),L-J+1,1);:: F=F+1
:: G=G-1 :: NEXT J :: R=R+1
:: NEXT A :: SUBEND
3000 SUB DIAGPRINT(M$(),T)::
FOR J=1 TO T :: READ M$(J)
: L=INT(LEN(M$(J))+.5):: M$(
J)=RPT$(" ",14-(L/2))&M$(J):
: M$(J)=M$(J)&RPT$(" ",28-LE
N(M$(J))):: NEXT J
3001 FOR J=1 TO 28+L :: FOR
L=1 TO T
3002 IF J<L THEN 3007
3003 DISPLAY AT(L,1):SEG$(M$
(L),1,J-L):: NEXT L
3004 NEXT J :: SUBEND
```

Just in case you didn't know
- to jump directly to the
first or last line in a TI-
Writer file, use FCTN 9 and
S(earch) and 1 for the first
line or E for the last.

MEMORY ALMOST FULL...

                    Jim Peterson

T.I. MULTIPLAN V 4.0

A Review
by Audrey Bucher
Pittsburgh User's Group

I just received in the mail this week, the new Fairware enchancement of the TI Multiplan Package by R.A.Green of Rag Software. The updates have been made to the Multiplan version released by Texas Instruments to all user groups.

The disk is a floppy and contains the standard version for those who use the MP cartridge. The flip side is for Gram devices (PGRAM or GRAM KRACKER).

Features include:

1. Almost a 50% reduction in run time.
2. Patches documented for default filenames.
3. Slight change in entering default disk, so as to accomodate Hard Disk users.
4. An MP Startup Loader for RAM Disk or Hard Disk users.
5. Patch documented for setting screen colors.

I compared the recalculation of a large spreadsheet, using the old version and RAG's new one and did indeed find the new one to be much faster.

Simply copy the files, MPBASE, MPCHAR, MPDATA, MPINTR and Overlay to your old MPlan disk and you are ready to go. In an article I wrote on Mplan in the December 1987 issue of the Peripheral, I mentioned that the time it takes to initialize MPlan and the response time when it is working with the overlay file is affected by the location of the files on the disk. I don't know if this holds true for version 4.0, however, I did copy by files one at a time in the following order. Overlay, MPHLP, MPCHAR, MPDATA, MPINTR and then MPBASE.

I really dislike white characters on a dark blue screen and always hit the space bar 11 times before loading the MPlan disk, so that I have black characters on cyan. Imagine my suprise, when after doing this, MPlan v 4.0 loaded with white characters on dark blue. I wasn't pleased with that.

However, included with MPlan v4.0 is a public domain program called Ragpatch that will lay assembly patches into your program.

In his review in the March Micropendium, Harry Brashear mentioned that he had read the docs for RAGPATCH, and couldn't understand a single word of them. Needless to say, when I read the docs, I didn't understand them either.

But since the desire to change my screen colors was so great, I decided to brave it and use the patch included on the disk. I loaded SETUP/STD into Funnelweb and proceeded to change the screen color from F4 to 17. While I was at it, I also edited the Default drive to DSK2. I saved the file and then loaded RAGPATCH thru the Option 5 loader (Program file).

Presto, in a matter of seconds, the patch was made. Now I no longer need to use the space bar to obtain the colors I want and no need to use a sector editor to permanently change the default drive.

I'm sure I will never write a patch (which is what the docs for RAGPATCH are explaining) since I don't understand assembly language. However, I was happy to have the patch available to edit and use. Also included is a patch for setting up Hard Disks and RAM Disks.

If you use MPlan, I'm sure you will appreciate version 4.0. It is available from:

RAG SOFTWARE
R. A. Green
1032 Chantenay Dr.
Cloucester, Ont.
Canada
K1C 2K9

WELCOME
The PUG would like to welcome William J. Maruca, our newest member. We would also like to thank Dr. Steven Justham and Gerald Graff for renewing their memberships.

THE PUG MEETS
ON THE 3RD SUNDAY OF THE MONTH
AT COMMUNITY COLLEGE OF ALLEGHENY COUNTY
OFF ROUTE 885 NEAR CENTURY III MALL

CLASSES BEGIN AT 3 PM
GENERAL MEETING BEGINS PROMPTLY AT 6PM

MAY 1990						
S	M	T	W	T	F	S
6						
13						
20	MEETING					
27						

JUNE 1990						
S	M	T	W	T	F	S
3						
10						
17	MEETING					
24						

```
                PUG OFFICERS
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Cor. Sec.:   Gary Taylor      412-341-6874
NL Editor:   Audrey Bucher    412-881-5244
```
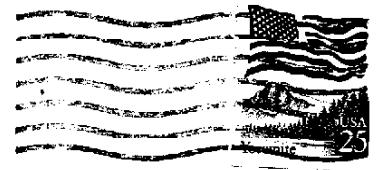
```
                   SCHEDULE
3-4:30 Configuring Boot...................Rm. 482
4:30-6 Questions and Answers with Don........Rm. 482

6:00-? General Meeting
       Demos.....RAGPATCH for MPlan v4.0
                SPELLIT new Spellcheck Pgm.
```

DUES $15/YR

PITTSBURGH USER'S GROUP
P.O. Box 8043
Pittsburgh, PA 15216

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