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PRESIDENT'S NOTES...by Jay Seaberg

We are about to begin our fourth year of existence as a User's Group. The last year has been full of discoveries about the computer we support. Hopefully, we have all learned to make better use of the machines we have.

I would like to take this opportunity to thank all of you for your support during the last year. Our software library has grown tremendously and many of you have taken advantage of it. Our group has also grown slightly over the past year.

We continue to publish a newsletter we can all be proud of. The newsletter presents a balanced diet of software and information. For the past several months, all the programs published in the newsletter has been available at meetings on disk and tape. In addition to the programs found in the newsletter, there are also many other programs available from other user groups.

The survival of our group and the other groups around the world proves the basic reliability and worth of an 'orphan' computer. The 99/4A is an orphan to TI only! We have shown that we can survive without corporate backing. This is something to be proud of.

The existence of this User's Group, and all other organizations like ours, depends on the continued support of all the members. We have come a long way against heavy odds and I am sure that progress will continue. If we pull together, we can keep the supply of hardware and software coming.

Soon, the UG will be holding elections for new officers. If you are contacted, please consider serving the group. Any and all help will be greatly appreciated. The activities of this UG benefit us all. Let's support each other and continue our adventure in the world of computing!

CLUB NEWS

The following fairware programs have arrived and are in the group library:

FUNLWRITER: By Funnelweb Farm (Australia). Professionally written utility program package that includes TI-WRITER, DM 1000, E/A, and others including room for adding your own. No need for command modules. Several enhancements to TI-WRITER including an upgrade of the Show Directory command. Requires 32K, EXB module, and disk drive.

BA-WRITER: By Paolo Bagnaresi (Italy). High quality substitute for the TI-WRITER module. Runs out of TIW, EXB, E/A, or MMM modules. Also contains an enhanced version of the Show Directory command. Also requires 32K and disk drive.

99-CALC: Spreadsheet program by Phil Barnes. Requires only the standard console and a cassette player. Available on disk or cassette. For those who are looking for a spreadsheet but do not have expanded systems.

The group has 60 blank disks for sale. They have plain white tyvek jackets and hub reinforcements. The price will be \$7.00 for 10 disks. We'll take orders for more if anyone is interested. See one of the officers at the meeting.

A few of you had questions last month about producing graphics in TI-WRITER. Well, Anne Dhein of the Northeast Iowa Computer User's Group wrote an excellent article that was long to print. Anyone who wants to learn more about it should get a copy.

It is important that everyone comes to the next meeting so that we can discuss the future direction of our group. The term of office for last year's officers is about to expire and we need to hear your views on how to proceed.

Many of us have let our memberships lapse without a word as to why, while others have continued to maintain a strong interest. Many have upgraded their systems with new products from third party vendors.

Still others have renewed their memberships without showing up at the meetings-- apparently content with only receiving the monthly newsletter. And again, there are those who have joined us recently with a wide range of equipment and a lot of enthusiasm.

Also, you can't forget those of us who can only show up with the help of others due to the fact that they are not old enough to come by themselves. They are ones who probably have interests that differ from the rest of us.

The point is, that unless each one of us speaks out and helps out, we will continue to come up short when trying to fulfill everyone's interests. Why not make the most out of the opportunities you have before you and volunteer for next year?

TIPS FROM THE TIGERCUB

#34

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156 Collingwood Ave.
Columbus, OH 43213

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Over 130 original programs in Basic and Extended Basic, available on cassette or disk, only \$3.00 each plus \$1.50 per order for PPM. Entertainment, education, programmer's utilities. Descriptive catalog \$1.00, deductible from your first order.

Tips from The Tigercub, a full disk containing the complete contents of this newsletter Nos. 1 through 14, 50 original programs and files, just \$15 postpaid.

Tips from the Tigercub Vol. 2, another diskfull, complete contents of Nos. 15 through 24, over 60 files and programs, also just \$15 postpaid. Or, both for \$27 postpaid.

Nuts & Bolts (No. 1), a full disk of 100 Extended Basic utility subprograms in merge format, ready to merge into your own programs. Plus the Tigercub Menuloader, a tutorial on using subprograms, and 5 pages of documentation with an example of the use of each subprogram. All for just \$19.95 postpaid.

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postpaid, or both Nuts Bolts disks for \$37 postpaid.

Tigercub Full Disk Collections, just \$12 postpaid! Each of these contains either 5 or 6 of my regular \$3 catalog programs, and the remaining disk space has been filled with some of the best public domain programs of the same category. I am NOT selling public domain programs - my own programs on these disks are greatly discounted from their usual price, and the public domain is a FREE bonus!

- TIGERCUB'S BEST PROGRAMMING TUTOR
- PROGRAMMER'S UTILITIES
- BRAIN GAMES
- BRAIN TEASERS
- BRAIN BUSTERS!
- MANEUVERING GAMES
- ACTION GAMES
- REFLEX AND CONCENTRATION
- TWO-PLAYER GAMES
- KID'S GAMES
- MORE GAMES
- WORD GAMES
- ELEMENTARY MATH
- MIDDLE/HIGH SCHOOL MATH
- VOCABULARY AND READING
- MUSICAL EDUCATION
- KALEIDOSCOPES AND DISPLAYS

For descriptions of these send a dollar for my catalog!

While they last, and the supply is limited, I will sell a single Texas Instr. cassette interface cable for \$2.00 with any order for cassette software.

My sincere apologies for a serious goof in the Sort Watcher program in Tips #33. The GOSUB in line 120 should go to line 1020, not 32767! Also, in line 210 please change the 920 to 930.

Steven Shouse of TIRUG sent this improvement to the GRAPHPAGE in Tips #33 -
100 OPEN #1:"DSK1.GRAPHPAGE"
,OUTPUT::PRINT #1:TAB(4);R
PT#("_",75)::FOR J=57 TO 1

STEP -1 :: J\$=STR\$(J)

The 99/4A National Assistance Group (which is a commercial enterprise, not a user's group, although they charge a fee to "join"), sells public domain programs at \$3.00 each - but you can't order individual programs, you have to buy a package deal.

I sell good copyrighted programs, written by myself, for \$3.00, I let you pick and choose, even just one program if you want. I don't pretend to be a user's group (I know that Tigercub often gets misspelled as Tiger Club but I can't help that!), and I don't charge you to "join".

The reason for these remarks is that one of the public domain programs sold by that group is listed as SAMARKAND. It may be only an odd coincidence that I wrote a random music composer entitled SONG OF SAMARKAND and put it in public domain because I didn't think it was worth selling. Anyway, if you want it, here it is.

```

100 CALL CLEAR
110 REM - SONG OF SAMARKAND
    programmed by Jim Peterson -
    Version 3
120 RANDOMIZE
130 CALL CHAR(94,"00")
140 CALL CHAR(95,"00")
150 CALL SCREEN(11)
160 PRINT "From the Third Mo
    vement of":"": THE NEVER
    -ENDING SONG":"": b
    y Emir Abdul Aziz":"":.....
    .....
170 PRINT : : : : : : :
    : : : : :
180 FOR J=1 TO 23
190 CALL HCHAR(12,5+J,ASC(SE
    G$("^THE^SONG^OF^SAMARKAND^
    ,J,1)))
200 NEXT J
210 CALL HCHAR(11,6,94,23)
220 CALL HCHAR(13,6,94,23)
230 M$="187EFF42668124C3DB66
    5A18423C5AA542817E995A001800
    248DBD3C667E66668100243C0042
    187E5AA53CC3427E3C81817E5AE7
    669924187E4299240081818DBC3"
240 DIM N(30),S(11)
250 F=220
260 FOR J=0 TO 36
270 X=X+1+(X=12)012
280 IF (X=2)+(X=5)+(X=7)+(X=
    10)+(X=12)THEN 310
290 Y=Y+1
300 N(Y)=INT(F#1.059463094^J
    )
310 NEXT J
320 CALL HCHAR(1,1,32,320)
330 CALL VCHAR(1,31,95,96)
340 CALL HCHAR(24,1,95,64)
350 CV=2
360 K=8
370 K=K-INT(5#RND+1)+INT(5#R
    ND+1)+(K>21)02-(K<1)02
380 IF (K<1)+(K>21)THEN 370
390 CALL SOUND(-999,N(K),0,N
    (K)0CV,0,N(K)03.75,30,-4,0)
400 X=INT(40#RND)
410 IF X>12 THEN 370
420 ON X+1 GOTO 430,490,540,
    580,660,730,770,850,870,970,
    990,1040,1060
430 IF INT(4#RND)<3 THEN 390
440 FOR T=K TO 20
450 CALL SOUND(-999,N(T),0)
460 NEXT T
470 K=1
480 GOTO 390
490 FOR T=K TO 1 STEP -1
500 CALL SOUND(-999,N(T),0)
510 NEXT T
520 K=T+1
530 GOTO 390
540 FOR T=K TO 1 STEP -1
550 CALL SOUND(-999,30000,30
    ,30000,30,N(T)03.75,30,-4,0)
560 NEXT T
570 GOTO 370
580 FOR TT=K TO K-INT(5#RND+
    1)STEP -1
590 IF TT<2 THEN 370
600 FOR T=1 TO INT(7#RND+3)
610 CALL SOUND(-999,N(TT),0,
    N(TT)02,0)
620 CALL SOUND(-999,N(TT)01.
    03,0,N(TT)02.06,0)
630 NEXT T
640 NEXT TT
650 GOTO 370
660 FOR T=K TO K-INT(3#RND+3
    )STEP -1
670 IF T<2 THEN 370
680 FOR D=0 TO 15 STEP 2
690 CALL SOUND(-999,N(T)02,D
    ,N(T)03,D,N(T)03.75,30,-4,0)

```

```

700 NEXT D
710 NEXT T
720 GOTO 370
730 FOR X=1 TO 15
740 CALL SOUND(-999,N(X),0,N
(16-X),0,N(1),30,-4,5)
750 NEXT X
760 GOTO 370
770 FOR T=K TO K-INT(4#RND+1
)STEP -1
780 IF T<2 THEN 370
790 CALL SOUND(100,N(T),0,N
(T)#2,0,N(T)#3.75,30,-4,5)
800 FOR TT=N(T) TO N(T-1)STEP
-10
810 CALL SOUND(-999,TT,0,TT#
2,0,TT#3.75,30,-4,5)
820 NEXT TT
830 NEXT T
840 GOTO 370
850 CALL CHAR(32,SEG$(M$,INT
(57#RND+1)#2-1,16))
860 GOTO 370
870 IF INT(4#RND)<3 THEN 390
880 CALL SOUND(-3000,N(K),0,
N(K)#2,0,N(K)#3.75,30,-4,0)
890 FOR J=1 TO INT(5#RND+5)
900 S(J)=INT(21#RND+1)
910 NEXT J
920 CALL SOUND(-1,3000,30)
930 FOR T=1 TO J-1
940 CALL SOUND(-999,N(S(T)),
0,N(S(T))/1.68,0,N(S(T))#3.7
5,30,-4,0)
950 NEXT T
960 GOTO 370
970 CALL CHAR(95,SEG$(M$,INT
(57#RND+1)#2-1,16))
980 GOTO 370
990 IF INT(4#RND)<3 THEN 390
1000 FOR J=220 TO 660 STEP 2
0
1010 CALL SOUND(-999,J,0,880
-J,0,N(12)#3.75,30,-4,0)
1020 NEXT J
1030 GOTO 370
1040 CALL CHAR(32,"0")
1050 GOTO 390
1060 CV=CV+(CV=2)/2-(CV=1.5)
#.5
1070 GOTO 370

```

If you are trying to exchange newsletters and are using the listings of user groups published by Texas Instruments and by others, you are finding that they are way out of date! Send me a disk and some return

postage - or just send \$1.50 - and I'll send you my address list of about 140 groups I exchange with. It is updated every month from return addresses on newsletters I receive.

For those of us who are still struggling along with one disk drive, this routine will transfer any number of D/V80 files, totalling up to about 42 sectors, from one disk to another in one pass, and will optionally save under changed names.

```

100 DIM M$(2000),F$(25),C$(2
5):: CALL CLEAR :: T%=CHR$(1
)
110 DISPLAY AT(8,6):"TIGERCU
B FILEMOVER" :: DISPLAY AT(1
5,1):"PRESS ENTER WHEN FINIS
HED"
120 F=F+1 :: IF F>25 THEN 13
0 :: DISPLAY AT(12,1):"FILEN
AME? DSK"&T% :: ACCEPT AT(12
,14)SIZE(-12)BEEP:F$(F):: IF
F$(F)<>T% THEN 120
130 F=F-1 :: FOR J=1 TO F ::
ON ERROR 260 :: OPEN #1:"DS
K"&F$(J),INPUT :: DISPLAY AT
(12,1):"READING "&SEG$(F$(J)
,3,255)
140 X=X+1 :: LINPUT #1:M$(X)
:: C=C+LEN(M$(X))
150 IF C>10000 THEN DISPLAY
AT(20,1):"INSUFFICIENT MEMOR
Y FOR "&SEG$(F$(J),3,255)::
GOTO 190
160 IF EOF(1)<>1 THEN 140
170 X=X+1 :: M$(X)=T% :: CLO
SE #1
180 W=W+1 :: NEXT J
190 X=0 :: DISPLAY AT(15,1):
"" :: DISPLAY AT(12,1):"INSE
RT COPY DISK AND PRESS":"ENT
ER"
200 CALL KEY(0,K,ST):: IF ST
=# THEN 200 :: DISPLAY AT(13
,1):""
210 FOR J=1 TO W :: IF F$(J)
=CHR$(2) THEN 230
220 DISPLAY AT(12,1):"FILENA
ME? DSK"&F$(J):: ACCEPT AT(1
2,14)SIZE(-12)BEEP:C$(J)230
NEXT J :: FOR J=1 TO W :: IF
F$(J)=CHR$(2) THEN 250 :: OP
EN #1:"DSK"&C$(J),OUTPUT ::
DISPLAY AT(12,1):"SAVING "&S

```

```

E6$(C$(J),3,255)
240 X=X+1 :: IF M$(X)<>T% TH
EN PRINT #1:M$(X):: GOTO 240
ELSE CLOSE #1
250 NEXT J :: END
260 ON ERROR STOP :: DISPLAY
AT(22,1):"CANNOT OPEN "&SEG
$(F$(J),3,255):: F$(J)=CHR$(
2):: RETURN 180

```

Here is a very ingenious idea published in the Corpus Christi UG newsletter by H. Macdonald. He could not find the author/newsletter which gave him the idea, so if you know, tell me and I'll print due credit.

I have modified it a bit. This short routine will load quickly and enable you to bypass loading and running the Menu Loader program on a disk when you already know the filename of the program you want to run.

```

Save the Menu Loader under the filename MENULoader and save this routine under the filename LOAD - be sure to save it before you try it, because it erases itself!
100 CALL INIT :: CALL LOAD(-
31806,16):: DISPLAY AT(12,1)
ERASE ALL:"RUN MENULoader? (
Y/N)"
110 CALL KEY(3,K,S):: IF S=#
THEN 110 ELSE IF K=78 THEN
130 ELSE DISPLAY AT(12,1)ERA
SE ALL:"LOADING MENULoader"
:: RUN "DSK1.MENULoader"
130 CALL CLEAR :: CALL LOAD(
-31952,55,215,55,215):: END

```

Here is one with a bit of a surprise at the end. Key the v,A in line 190 as FCTN V, CTRL comma, CTRL A.

```

100 CALL CLEAR :: CALL SCREE
N(16)
110 DATA 80C8A0988445269,00
0000000007E81,0103050911224
A96,0000000101010100,21409C2
A492A1CC0,9999336600001824
120 DATA 8482395492543903,00
00000000000000,000000000000
0000,18244281423C0000,0F19030
7E1020400,000000FF80000000
130 DATA 000F13E620221D00,0C
FB3467A22DC00,814224FF,30DF

```

```

200041443B00,00F0C86F0447B87
F,000000FF01F901F9
140 DATA 80FF0868808686,00
FF006666006666,00FF003F3F3F3
F3F,01FF01F9F9F9F9F9,0086868
86868093,00666600666600FF
150 DATA 00666600666600E6,3F
3F3F3F3F3F3F3F,F9F9F9F9F9F9F
9F9,00000000E01C3AE2,9380FF,
FF00FF,E600FF0007000000
160 DATA 3F00FF00FF1988FF,F9
01FF00FF8744FF,1F09090FF3198
AFC
170 FOR CH=96 TO 129 :: READ
CH% :: CALL CHAR(CH,CH%):
NEXT CH
180 DISPLAY AT(1,14)ERASE AL
L:"ab" :: DISPLAY AT(2,13):
"cdefg" :: DISPLAY AT(3,14):
"hij" :: DISPLAY AT(4,12):"k
lanopq"
190 DISPLAY AT(5,12):"rsssst
u" :: DISPLAY AT(6,12):"vwxyz
(" :: DISPLAY AT(7,12):"!
)}~v,A" :: DISPLAY AT(9,12)
:"TIGERCUB"
200 DISPLAY AT(11,12):"SOFTW
ARE" :: DISPLAY AT(13,7):"15
6 COLLINGWOOD AVE." :: DISPL
AY AT(15,7):" COLUMBUS OH 43
213" :: CALL HIGHCHAR
210 GOTO 210
220 SUB HIGHCHAR :: FOR CH=3
2 TO 129 :: CALL CHARPAT(CH,
CH%): X%=SEG$(CH%,3,12)&SEG
$(CH%,13,4):: CALL CHAR(CH,X
%): NEXT CH :: SUBEND

```

Thanks to Ramon Martinez in the Orange County UG news letter - a double NEXT is accepted if the pre-scan is turned off.

```

100 J=1
110 !@P-
120 FOR J=1 TO 100 :: IF J/1
0<>INT(J/10) THEN NEXT J ELSE
PRINT J :: NEXT J

```

A computer without a program is like a car without gas. If everyone who filled up at a self-service pump drove away without paying, how soon would all the gas stations be closed?

MEMORY FULL!

Jim Peterson

The following short program converts the keyboard of the 99/4A into an electronic organ. It scans each side of the keyboard so two notes may be played at one time completely independently of one another.

The numbers in the DATA statement are simply the frequencies that I have assigned to each key. For more information, refer to your TI reference manual that was supplied with your computer.

```

100 REM MINI TI ORGAN
110 REM *****
120 REM JUNE 1984 jdc
130 REM *****
140 REM
150 OPTION BASE 0
160 DIM NOTE(20)
170 REM
180 REM *****
190 REM read note freq
200 REM *****
210 REM
220 FOR I=0 TO 20
230 READ NOTE(I)
240 NEXT I
250 DATA 40000,220,247,262,294,3
30,349,392,440,494,523,587,659,6
98,784,880,988,1047,1175,1319,13
97
251 REM
252 REM *****
253 REM CLEAR DISPLAY
254 REM *****
255 REM
256 CALL CLEAR
    
```

```

257 DISPLAY TAB(7);"TI MINI ORGA
N": : : : : : : : : : :
260 REM
270 REM *****
280 REM SCAN KEYS
290 REM *****
300 REM
310 CALL KEY(1,K1,S)
320 CALL KEY(2,K2,S)
330 REM
340 REM *****
350 REM CONVERT DATA
360 REM *****
370 REM
380 K1=K1+1
390 K2=K2+1
400 REM
410 REM *****
420 REM PLAY NOTE & REDO
430 REM *****
440 REM
450 CALL SOUND(-1000,NOTE(K1),0,
NOTE(K2),0)
460 GOTO 310
    
```

REGENA!

REGENA of COMPUTE! magazine is now on her own. REGENA is now offering her programs on a direct basis for those who are interested.

If you have purchased COMPUTE!, COMPUTE'S Gazette, or books by REGENA, you may get a copy of a program for a \$3.00 copying fee plus a blank cassette and self-addressed mailer, or \$5.00 and REGENA will provide the cassette and postage. The following are some of the titles that are available from REGENA:

- \$30.00-TYPE ETTE- 6 programs to learn to touch type.
- \$10.00-LEARN THE BONES- major bones of the body.
- \$10.00-COUNTIES OF UTAH- drill to learn counties.
- \$10.00-CIVIL ENGINEERING FUNDAMENTALS, revised-simple.
- \$10.00-ELECTRICAL ENGINEERING RESISTANCE, revised.
- \$10.00-HOUSEWORK MIX UP- matching game

FOR A COMPLETE LIST OF PROGRAMS SEND \$1.00 TO:

REGENA
P.O. BOX 1502
CEDAR CITY, UTAH 84720

Gene Thomas of the Jacksonville Users Group of Jacksonville, Arkansas, published a list of some of the characteristics of various dialects of BASIC. He notes, for example, that the following items are virtually identical in all brands of BASIC: ABS, ASC, CHR\$, DATA, DIM, END, GOTO, GOSUB, INT, LET, PRINT, READ, REM, RESTORE, RETURN, SQR, STR\$, DEF, IF-THEN AND VAL.

But he didn't stop there. He also offers a list of some of the statements that you can expect to be different and their TI equivalents. Here they are:

- CLS - CALL CLEAR
- CLEAR - NEW(Not used within TI programs.)
- CHANGE - ASC & CHR\$
- CINT, FIX - INT
- CLG - LOG(Base 10)
- CLOAD - Open cassette file and load
- COLOR - CALL COLOR
- CSAVE - Open cassette file and save
- DEFINT - DEF'NT(Declare DEF statement numerals to integers.)
- DEFSNG - May be ignored
- DEFSTR - May be ignored
- DLOAD - Open disk file and load.
- DSAVE - Open disk file and save.
- SET, DOT - CALL HCHAR, VCHAR
- EQ - Equal sign
- FRE - May be ignored.
- GET, INKEY\$ - INPUT, CALL KEY
- GOSUB-OF - ON GOSUB
- GOTO-OF - ON GOTO
- INSTR - SEG\$
- LLIST, LPRINT - LIST, output to printer
- MID\$ - SEG\$
- LEFT\$(S\$,N) - SEG\$(S\$,1,N)
- RIGHT\$(S\$,N) - S=LEN(S)/(N+1)::SEG\$(S\$,S,N)
- RND(N) - INT(RND*N)+1
- PRINT USING - PRINT, DISPLAY USING
- STRING\$(10,65) - S=RPT\$(65,10)::PRINT S\$
- WAIT - FOR-NEXT delay loop ?-PRINT

FLIP STRIPS

TOM RHODES
320 TIVERTON WAY
LEXINGTON, KY.
40503

\$3.00 + \$.50 S&H

This neat little gadget was brought to our attention by club member, Erwin Enders. Have you ever been bogged down by too many overlay strips, having to take TI-WRITER out to put the Basic strip back in? Now there is an easier way, FLIP STRIPS. Tom has combined all these overlay strips into one plastic spiral FLIP STRIP. Strips include: TI-WRITER, TEII, MULTIPLAN, LOGO, BASIC, EDITOR ASSEMBLER, FORTH, DATA BASE MANAGER, and several blank strips. Please include 50 cents for shipping and handling.

(This article was written by Doug Bohrer and Ted A. Bear. It appeared originally in a DEC Users Group newsletter, and then wound up in the February 1986 issue of The National 99'er by way of the Amarillo (Texas) 99/4 Users Group newsletter of November 1985.—What a grapevine, huh !)

APL, BASIC, COBOL, PILOT, FORTRAN, FORTH, and PASCAL are programming languages that are well known and (more or less) loved throughout the computer world. There are numerous other languages, however, that are less well known yet still have ardent devotees. In fact, these little known languages generally have the most fanatic followers. For those who wish to know more about these obscure languages -- and why they are so obscure -- we present the following catalog.

"C minus" - This language is named for the grade received by its creator when he submitted it as a class project in a graduate programming class. C minus is best described as a "low level" programming language. In general, the language requires more C minus statements than machine code instructions to execute a given task. In this respect it is very similar to COBOL.

"DOG0" - Developed by MIOT (Massachusetts Institute of Obedience Training), DOG0 heralds a new era of computer literate pets. DOG0 commands include SIT, HEEL, STAY, PLAY_DEAD, and ROLL_OVER. An innovative feature of DOG0 is "puppy graphics", a small cocker spaniel-shaped sprite that occasionally leaves deposits as it travels across the screen.

"FIFTH" - FIFTH is a precise mathematical language in which the data types refer to quantities. These data types range from CC, OUNCE, SHOT, and JIGGER to FIFTH (hence the name of the language), LITER, MAGNUM, and BLOTTO. Commands refer to ingredients such as CHABLIS, CABERNET, GIN, VERMOUTH, VODKA, SCOTCH, BOURBON, CANADIAN, COORS, BUD, EVER_CLEAR, and WHAT_EVERS_AROUND.

The many versions of the FIFTH language reflect the sophistication and financial status of the user. Commands in the elite dialect include VSOP, LAFITE, and WAITERS_RECOMMENDATION. The "gutter" dialect commands include THUNDERBIRD, RIPPLE, AND HOUSE_RED. The gutter dialect is a particular favorite of frustrated FORTH programmers who end up using this language.

"LAIDBACK" - This language was developed at the Marin County Center for T'ai Chi, Mellowness, and Computer Programming (now defunct) as an alternative to the more intense atmosphere in the nearby Silicon Valley. The center was ideal for programmers who liked to soak in hot tubs while they worked. Unfortunately, few programmers could survive because the center outlawed pizza and Coca Cola in favor of tofu and Perrier. Many mourn the demise of LAIDBACK because of its reputation as a gentle and non-threatening language (all error messages were in lower case letters). For example, LAIDBACK responded to syntax errors with the message, "I hate to bother you, but I just cannot relate to that. Can you find the time to try it again?"

"LITHP" - This otherwise unremarkable language is distinguished by the absence of an "s" from its character set. Programmers and users must substitute "th". LITHP is said to be most useful for word prophething. This language was developed in San Francisco.

"REAGAN" - This language was also developed in California, but it is now widely used in Washington, D.C. It is the current subset of the international bureaucratic language known as DOUBLESPEAK. Commands include REVENUE_ENHANCEMENT, STOCKMAN, CAP WEINBERGER, MALCOMB BALDRIDGE, CABINET, CHOP WOOD, LAXALT, and SCENARIO. WATT, BURFORD, and HECKLER have been removed from the current dialect while there are efforts being made to add NEESE. The operating system used is NEW RIGHT and memory is designated THE RANCH. COMMIES (program bugs) are removed with the GRANADA command. A REAGAN program commences with the LANDSLIDE command and terminates with SENILITY.

"RENE" - Named after the famous French philosopher and mathematician Rene Descartes, RENE is a language used for artificial intelligence. Creators say they have almost succeeded in getting a computer to think. One problem, however, is that each time the machine fails to think it ceases to exist.

"SARTE" - Named after the late existential philosopher, SARTE is an extremely unstructured language. Statements have no purpose, they just are. Thus SARTE programs are left to define their own functions. SARTE programmers tend to be boring and depressing and are no fun at parties.

"SIMPLE" - SIMPLE is an acronym for Sheer Idiot's Monopurpose Programming Linguistic Environment. This language was designed to make it impossible to write code with errors in it. The statements are therefore confined to BEGIN, END and STOP. No matter how you arrange the statements, you cannot make a syntax error.

"SLOBOL" - SLOBOL is best known for the speed, or lack of it, of its compiler. Although many compilers allow you to take a coffee break while they compile, the SLOBOL compiler allows you to travel to Columbia to pick up the coffee from Juan Valdez himself. Forty-three programmers are known to have died from boredom sitting at their terminals, waiting for a SLOBOL program to compile.

"VALGOL" - From its modest beginnings in Southern California's San Fernando Valley, VALGOL is enjoying a dramatic surge of popularity across the industry. VALGOL commands include REALLY, LIKE, WELL, Y&KNOW. Variables are assigned with =LIKE and =TOTALLY operators. Other operators include the California Booleans, AX and NOWAY. Repetitions of code are handled in FOR - SURE loops. A sample program is shown below :

```

LIKE, Y&KNOW (I MEAN) START
IF PIZZA      = LIKE BITCHEN AND
GUY           = LIKE TUBULAR AND
VALLEY GIRL  = LIKE GRODY&MAX(FERSURE)&2
THEN
FOR I = LIKE 1 TO OH&MAYBE 100
BARF(I) = TOTALLY GROSS(OUT)
SURE
LIKE BAG THIS PROGRAM
REALLY
LIKE TOTALLY (Y&KNOW)
IM&SURE
GOTO THE MALL
    
```

VALGOL is characterized by its unfriendly error messages. For example, when the user makes a syntax error the interpreter displays the message "GAG ME WITH A SPOON!!!"

A letter in the April MICROpendium provided the kind of little programming challenge that I like to take on. Writers in several issues have discussed how to implement a data input capability similar to the extended BASIC ACCEPT AT statement, but which would accept more than one line of text. Barry Traver submitted a subroutine that accepts up to 140 characters. It senses key strokes with CALL KEY, but after every stroke it updates a character string, segments it into 5 parts and displays each part. This makes keyboard response terribly slow:

900 M\$="" ! Multi-Line ACCEPT AT subroutine by Barry Traver. (No cursor.)	passed to subroutine	930 IF K<32 OR K>126 OR LEN(M\$)=140 THEN 920 ELSE M\$=M\$&CHR\$(K):: GOTO 910	950 RETURN ! This version is set for 140-character maximum (like LINPUT).
910 DISPLAY AT(R,1):SEG\$(M\$,1,28):SEG\$(M\$,29,28):SEG\$(M\$,57,28):SEG\$(M\$,85,28):SEG\$(M\$,113,28)! Row (R) must be	920 CALL KEY(0,K,S):: IF S<1 THEN 920 ELSE IF K=8 THEN 940 ELSE IF K=13 THEN 950 ELSE IF K=7 THEN 900 ! Backspace (FCTN-S) and Erase (FCTN-3) are active.	940 IF LEN(M\$)<>0 THEN M\$=SEG\$(M\$,1,LEN(M\$)-1):: GOTO 910	

My routine also uses CALL KEY, but between keystrokes it simply updates the one character on the screen. Only when ENTER is hit does it collect the characters from the screen into the character string. This not only gives much faster key response, it provides a variable maximum length up to 255 characters:

900 ! Multi-Line ACCEPT-AT by Sid Smart. GOSUB 900 with R=row to accept at, & M=max length accepted (up to 255). Value is returned in M\$.	<127 AND L<M THEN 930 ELSE IF K=8 THEN 940 ELSE IF K=7 THEN 950 ELSE IF K=13 THEN 960 ELSE 920	:: L=L-1 :: GOTO 920	CHAR(Y,X,K):: M\$=M\$&CHR\$(K):: W=W+1
910 L=M :: GOTO 950	930 L=L+1 :: GOSUB 900 :: CALL HCHAR(Y,X,K):: GOTO 920	950 W=INT(L/28+.99):: FOR W=R TO R+W-1 :: CALL HCHAR(W,3,32,28):: NEXT W :: L=0 :: GOTO 920	970 NEXT X :: NEXT Y
920 CALL KEY(0,K,S):: IF S<1 THEN 920 ELSE IF K>31 AND K	940 IF L=0 THEN 920 ELSE GOSUB 900 :: CALL HCHAR(Y,X,32)	960 M\$="" :: W=0 :: FOR Y=R TO 24 :: FOR X=3 TO 30 :: IF W=L THEN RETURN ELSE CALL G	980 I=INT((L-1)/28):: Y=R+1 :: X=L-I*28+2 :: RETURN

Both of the above proceed on a CALL KEY status of +1. If -1 is also allowed, a held key will be accepted repeatedly. This gives a response time test. The first routine accepts 140 characters in 48 seconds. Mine takes 15 seconds, for a key response ratio of over 3 to 1. If the first routine is modified to accept more characters, the key response time suffers. My routine's key response is independent of maximum length, but does have a length-dependent delay for collecting the characters after ENTER is hit. This delay is about 2 seconds per line actually entered.

I also wrote a version which shows a flashing cursor. It accepts 140 characters in 23 seconds with the same 2 second per line delay after ENTER:

900 !Multi-Line ACCEPT-AT w/ CURSOR by Sid Smart. GOSUB 900 with R=accept-at row, M=max length accepted (up to 255). Value returned in M\$.	930 IF K>31 AND K<127 AND L<M THEN 940 ELSE IF K=8 THEN 950 ELSE IF K=7 THEN 960 ELSE IF K=13 THEN 970 ELSE 920	L=L-1 :: GOTO 920	980 W=W+1 :: NEXT X :: NEXT Y
910 L=M :: GOTO 960	940 L=L+1 :: GOSUB 900 :: CALL HCHAR(R1,C1,K):: CALL HCHAR(R2,C2,30):: GOTO 920	960 W=INT(L/28+.99):: FOR W=R TO R+W-1 :: CALL HCHAR(W,3,32,28):: NEXT W :: L=0 :: CALL HCHAR(R,3,30):: R2=R :: C2=3 :: GOTO 920	990 I=INT(L/28):: R2=R+1 :: C2=L-I*28+3
920 CALL KEY(0,K,S):: IF S=1 THEN 930 ELSE CALL COLOR(0,1,1):: CALL KEY(0,K,S):: IF S=1 THEN 930 ELSE CALL COLOR(0,2,1):: GOTO 920	950 IF L=0 THEN 920 ELSE GOSUB 900 :: CALL HCHAR(R1,C1,30):: CALL HCHAR(R2,C2,32)::	970 CALL HCHAR(R2,C2,32):: M\$="" :: W=0 :: FOR Y=R TO 24 :: FOR X=3 TO 30 :: IF W=L THEN RETURN ELSE CALL GCHAR(Y,X,K):: M\$=M\$&CHR\$(K)	1000 I=INT((L-1)/28):: R1=R+1 :: C1=L-I*28+2 :: RETURN

Any of these subroutines can be driven with a program such as:

```
100 DISPLAY AT(10,1)ERASE ALL:"ENTER INPUT" :: R=12 :: M=140 :: GOSUB 900 :: PRINT M$ :: STOP
```

Convert BASIC to Extended BASIC

John Behnke, of the Chicago TI Users Group, has a program that is a real time-saver for those who want to convert BASIC programs into Extended BASIC programs. Called VDP Utility II, the program was published in the Chicagoans newsletter, Chicago Times. Since the VDP Utility II must be merged with the BASIC program you want to convert, it is recommended that you not change the line-numbering. Save the program in MERGE format. After loading a BASIC program in Extended BASIC, merge the VDPUTILITY2 program into it and save the two programs as one. Then run it.

The program, requires Extended BASIC, a disk system and memory expansion.

```

32700 "VDF UTILITY II"
32701 'BY JOHN BEHNKE
32702 '
32703 'CHICAGO, ILL.
32704 'WILL CONVERT ANY BASIC
32705 'PROGRAM TO X-BASIC
32706 'DIRECTIONS: LOAD BASI
C
32707 'PROGRAM INTO X-BASIC.
32708 'THEN INFUT:
32709 '"MERGE DSK1.VDPUTILITY2"
32710 'WHEN FINISHED, RE-SAV
E
32711 'BASIC PROGRAM. THE RE
SULTING
32712 'PROGRAM WILL RUN IN
32713 '-BASIC
32714 'VDFUTILITY2
32715 CALL CLEAR :: CALL INI

```

```

32716 CALL LOAD(16360,80,79,
75,69,82,32,38,12,80,79,75,6
9,86,32,37,164,80,69,69,75,8
6,32,37,36)
32717 CALL LOAD(9491,100)
32718 CALL LOAD(9508,2,224,3
7,20,3,0,0,0,2,0,0,100,200,0
,37,18,4,192,2,1,0,1,4,3,2,3
2,12,4,32)
32719 CALL LOAD(9536,32,24,1
8,184,192,32,131,74,2,1,37,0
,208,160,131,18,9,130,2,34,2
55,255,4,32,32,44)
32720 CALL LOAD(9562,4,197,2
09,34,36,255,9,132,19,21,4,1
95,60,224,37,18,200,5,131,76
,200,5,131,78,200,5)
32721 CALL LOAD(9588,131,80,
2,5,64,0,161,68,2,131,0,1,17
,6,2,5,65,0,161,67,6,196,200
,4,131,76)
32722 CALL LOAD(9614,200,5,1
31,74,4,192,192,66,5,129,4,3
7,254)
32723 CALL LOAD(9636,2,224,3
7,20,3,0,0,0,4,192,2,1,0,1,2
00,1,37,18,4,32,32,12,4,32,3
2,24,18,184)
32724 CALL LOAD(9664,200,32,
131,74,37,0,184,32,131,18,37
,19,2,3,0,2)
32725 CALL LOAD(9680,4,192,1
92,67,4,32,32,12,4,32,32,24,
18,184,216,224,131,75,37,0,5
,131,136,3)
32726 CALL LOAD(9704,37,18,2
2,242,192,32,37,0,2,1,37,2,1
92,131,2,34,255,254,4,32,32,
36)
32727 CALL LOAD(9726,4,192,2
16,0,131,124,2,224,131,224,4
,96,0,112)
32728 CALL LOAD(9740,3,0,C
,4,192,2,1,0,1,4,32,32,12,2,
0,32,131,74,37,18,2,1,0,2,4,

```

```

32729 CALL LOAD(9770,32,24,1
8,184,192,32,131,74,208,32,3
7,19,4,32,32,48,4,91)
32730 CALL LOAD(8194,39,04)
32731 SUREND
32732 SUB CHAR(A,A0): L=LEN
(A$)
32733 A$=A$RPT$("0",16-L)
32734 FOR I=1 TO 16 STEP 2
32735 A1$=SEG$(A$,I,1)
32736 A2$=SEG$(A$,I+1,1)
32737 IF A1$<" THEN A1=VAL
(A1$)*16 ELSE A1=(ASC(A1$)-5
5)*16
32738 IF A2$<" THEN A1=A1+
VAL(A2$)ELSE A1=A1+ASC(A2$)-
55
32740 CALL LINK("POKEV",767+
8*A+(I+1)/2,A1)
32741 NEXT I
32742 SUBEND
32743 SUB COLOR(A,B,C)
32744 CALL LINK("POKEV",2063
+A,(B-1)*16+C-1)
32745 SUBEND

```

THIS PROGRAM IS A REPRINT FROM "ENTER", BY TRAVIS WORKS OF RINGOLD, GA. IT IS WRITTEN IN TI BASIC.

PRESS A NUMBER KEY AND THEY CHANGE STEPS. HOLD ONE KEY DOWN, FOUR KEEP RIGHT ON DANCING.

```

10 RANDOMIZE
20 GOSUB 250
30 PRINT "BREAKDANCING!!!"
40 PRINT "HUMAN OR COMPUTER
CONTROL???"
50 INFUT CONS
55 CALL CLEAR
60 IF CONS="HUMAN" THEN 120
70 BD=INT(RND*5)+153
80 CALL KEY(O,W,E)
90 IF E=1 THEN 120
100 GOSUB 180
110 GOTO 70
120 CALL KEY(O,BD,N)
130 IF N=0 THEN 120
140 IF BD=32 THEN70
150 BD=BD+102
160 GOSUB 180
170 GOTO 120
180 CALL VCHAR(12,10,BD-(INT
(RND*2))+1)
190 CALL VCHAR(12,12,BD-(INT
(RND*2))+1)
200 CALL VCHAR(12,16,BD)
210 CALL VCHAR(12,20,BD+(INT
(RND*2))+1)
220 CALL VCHAR(12,22,BD+(INT
(RND*2))+1)
230 RETURN
240 GOTO 120
250 REM CHARACTERS
260 CALL CHAR(131,"0000000000
4BB43B")
270 CALL CHAR(155,"000082443
83B3B54")
280 CALL CHAR(153,"0010FE3B3
844B2")
290 CALL CHAR(154,"8090FC3A3
94B4B0B")
300 CALL CHAR(155,"0000000000
0B47936")
310 CALL CHAR(156,"00107CBA7
C2B1B0B")
320 CALL CHAR(157,"1424247B3
B")
330 CALL CHAR(158,"41493E1C1
C2214")
340 CALL CHAR(159,"40281E1D1
41414")
350 RETURN

```

BREAKDANCING


```

1 230 CALL COLOR(10,15,15):: C
1 ALL VCHAR(1,A+21,111,48)
2 240 CALL COLOR(11,16,16):: C
- ALL VCHAR(1,A+23,119,48)
; 250 CALL COLOR(12,14,14):: C
) ALL VCHAR(1,A+25,127,48)
: 260 CALL COLOR(13,12,12):: C
: ALL VCHAR(1,A+27,135,48)
: 270 CALL COLOR(14,11,11):: C
ALL VCHAR(1,A+29,143,48)
280 GOTO 280

```

-----And again from the West Penn 99ers we have the following little program that will take lines out of one program that you might want to use in another program.

*****The following program also comes to us from the West Penn 99ers*****

YE OLDE' TEST PATTERN
by H MacDonald

While programming the other day I came to a part I wanted to print to the screen. I've set up many screen formats and am sick of blue or light green, so I whipped out the Quick Reference Card and opted #14 - magenta. I finished the program and ran it just as my wife came into the room. "Oh what a pretty shade of red!", she said. "No, that's not red, that's magenta!", I said. She said something like "mumble mumble", and left. So I looked magenta up and found out it is really a shade of purple. (She told me later she thought magenta was red.) So the following program prints a Test Pattern like my Dear Ol' Dad used to use in the TV Repair Shoppe when I was just a child in 1955 BC (before color).

I tried just putting it into a loop but the colors are not lined up in any way to compare them properly. Also, if you want to use it in Console Basic, just start a new line every time you see ::. Run the program and use the test pattern to adjust the color "HUE" and "INTENSITY" controls on your TV or monitor. You too can have purple magenta or red. Orange red is nice too. Olive green magenta is not so nice.

Mac

```

100 CALL SCREEN(16)
110 CALL CLEAR
120 A=1
130 CALL COLOR(0,4,4):: CALL
VCHAR(1,A+1,31,48)
140 CALL COLOR(1,3,3):: CALL
VCHAR(1,A+3,39,48)
150 CALL COLOR(2,13,13):: CA
LL VCHAR(1,A+5,47,48)
160 CALL COLOR(3,10,10):: CA
LL VCHAR(1,A+7,55,48)
170 CALL COLOR(4,9,9):: CALL
VCHAR(1,A+9,63,48)
180 CALL COLOR(5,7,7):: CALL
VCHAR(1,A+11,71,48)
190 CALL COLOR(6,8,8):: CALL
VCHAR(1,A+13,79,48)
200 CALL COLOR(7,6,6):: CALL
VCHAR(1,A+15,87,48)
210 CALL COLOR(8,5,5):: CALL
VCHAR(1,A+17,95,48)
220 CALL COLOR(9,2,2):: CALL
VCHAR(1,A+19,103,48)

```

```

31996 ! PROGRAM TO EXTRACT L
INES FROM ONE PROGRAM TO BE
INCLUDED IN ANOTHER PROGRAM
31997 ! ELIMINATES UNWANTED
LINES OR SEGREGATES PARTS OF
ONE PROGRAM TO REMOVE

```

```
31998 ! ROUTINES OR TO SAVE
```

```
31999 ! REKEYING ROUTINES
```

```

32000 CALL CLEAR :: CALL INI
T :: INPUT "Line numbers of
routine to be saved : First
t, Last? " : L,M :: G=256
:: CALL PEEK(-31952,H,I,J,K)

```

```

32001 C=INT(M/G):: D=M-C*G :
: F=(J-G)*G+K :: FOR E=(H-G)
*G+1 TO F STEP 4 :: CALL PEE
K(E,A,B):: IF A=C AND B=D TH
EN 32003

```

```

32002 NEXT E :: PRINT "Line
";O;"not found!" :: STOP !@P
-

```

```

32003 H=INT(E/G):: I=E-(G*H)
:: H=H+G :: C=INT(L/G):: D=L
-C*G :: FOR E=E+4 TO F STEP
4 :: CALL PEEK(E,A,B):: IF A
=C AND B=D THEN 32005 !@P-

```

```

32004 NEXT E :: PRINT "Line
";N;"not found!" :: STOP !@P
-

```

```

32005 E=E+3 :: J=INT(E/G)::
K=E-(G*J):: J=J+G :: CALL LO
AD(-31952,H,I,J,K):: STOP !@
P-

```

```
32006 !@P-
```

To use this program, add it to the end of the program you wish to work with. The easiest way to do this is to save this program in "merge" format (for example---SAVE DSK1.EXTRACT, MERGE). When you need to use it you would merge it into the program in memory by typing MERGE DSK1.EXTRACT. Then run it by typing RUN 31996. This will run only the "extract" routine at the programs end. You will be asked to input the first and last lines of the program you want to save. In a short time ready will come back on your screen. List the program and you should see only the lines you wanted. This could be real handy for saving subroutines from one program to be "MERGED" into another.

CEGAR VALLEY 99ER U.G.
 288 WINDSOR DR. NE
 CEDAR RAPIDS, IA 52402



NEXT MEETING DATE:
 THURSDAY, JUNE 12, 1986

ALL MEETING DATES:
 6:30 PM TO 8:30 PM
 DECATUR PUBLIC LIBRARY
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>>>>JUNE MEETING DATE<<<<

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11>>	12<<	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

 * DECATUR 99er HOME COMPUTER USERS GRP *
 * APPLICATION FOR MEMBERSHIP *
 * * * * *
 * DATE / /85 *
 * * * * *
 * NAME _____ *
 * * * * *
 * ADDRESS _____ *
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 * CITY _____ ZIP _____ *
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 * PHONE _____ *
 * * * * *
 * WORK PHONE _____ *
 * * * * *
 * DUES: MEM, STUDENT \$15 *
 * ADD'L FAMLY \$ 5 *
 * OR NEWSLETTER ONLY \$12 \$ _____ *
 * (25 MAX) *
