```
R E M I N D E R   +   R E M I N D E R
E     N E X T   M E E T I N G      E
M            TUESDAY    1/30/90     M
I            7 ' O C L O C K  P.M.  I
N            R O U N D  T A B L E  P I Z Z A   N
D            W E S T  4th & V I N E    D
E            R E N O,  N E V A D A     E
R E M I N D E R   +   R E M I N D E R
```

IN THIS ISSUE!

* TIPS FROM THE TIGERCUB #57
  Courtesy: Jim Peterson (Tigercub Software)

* XB SPEED - Word Hunting
  Courtesy: Jack Sughrue - IMPACT 99

* infoBITS (TI News)

  TI FEST WEST!
  Courtesy: Jim Ely - VAST NEWS / Jan '90.

* SHORTBYTES (Type-in Programs)

  TI-ARTIST FONTSCAN (Freeware graphic utility - XB)
  Courtesy: L. Dorais, Ottawa Users' Group - via the WEST
  PENN 99'ers / Nov '89.

* WORD SAFARI (Word puzzle)
  Theme: SUPERBOWL!

* DISKS OF THE MONTH

  1. TETRIS (Fairware game - XB)
  Courtesy: Alexander Hulpke via LIMA 99/4A Users'
  Group.

  2. BOOT (Ver. 2/24/89 - Disk Directory Utility - XB,
  Super XB, Mechatronics XB)
  Courtesy: Miami Users' Group.

MEETING MINUTES - 12/20/89

THERE WERE NO MEETING MINUTES... Instead, the group
had a great little Christmas Party at Round Table Pizza.
Food and drink were provided courtesy of the 4N treasury.

The party began at 6:00 P.M. and ended around 8:30 P.M.
Over 20 people showed up for the festivities. The
evening included some demos of newsletter programs,
gift-swapping, Disks of the Month give-aways (Carfax
Abbey and Quest), and a blackout BINGO game. Joel Cote'
was the lucky winner of the Crocheted House - donated by
Mrs. Edie Dettling, and Roland Chapman won the
embroidered Christmas Sleigh - donated by Mrs. Audrey
Conradt. A.G.T.W.W.B.A! (A good time was had by all!)

OLD BUSINESS

"IMPORTANT REMINDER" Annual membership fees are due
and payable at the upcoming meeting - Tuesday, January
30, 1990. Please, bring cash or check and help support
your local users' group for another fun-packed,
educational year.
   If you are thinking of leaving the group because you
can no longer attend the monthly meetings but would like
to remain involved, why not consider an associate
membership? For only $15, you can receive the monthly
newsletter and will at least be kept informed as to the
latest goings-on in the TI community.

   The TI/99/4A POSTER of SPOCK will be handed out to
members at the January meeting for local distribution.

##

   A friend and longtime member of 4N, MR. JOE DETTLING,
passed away recently during the holidays. To his wife,
we offer our deepest sympathies... OUR HEARTS ARE WITH
YOU, EDIE.

##

DISK'S OF THE MONTH

The following two programs will be featured this month
and demoed after the general meeting by Ed Conradt:

   Disk #1 -

   BOOT (Utility software - XB, Super XB, or Mechatronics
XB required.) A copyrighted fairware disk utility offered
by Miami Users' Group, 6755 Tamiami Canal Road, Miami, Fl
33126. Asking for any amount in the way of donations
and/or comments.
   This is a sensational utility which should have been
thought of a long time ago for the XB environment. Noted
for its ease of operation and its valuable time-saving
steps, BOOT, quite simply, is a very versatile,
user-friendly disk directory program. It is similar in
many ways to the menu-driven directory program once
available only to Horizon Ram Disk owners. Some of
BOOT's credentials include:
   1. List directory to printer or screen
   2. View ANY file
   3. Run ANY program
   4. Add User configurable options

5. Change background colors
6. Change foreground colors
7. Delete ANY file
8. CALL a routine with one key
9. Cycle through all GROM's
10. Get and display a ROM cartridge header at >6000
11. Boot-tracking option
12. Toggle the XB color interrupt routine on or off
13. MORE...

An excellent and highly recommended utility. Docs are included.

Minimum system requirements:
* TI-99/4A console
* 32K memory expansion
* 1 SSSD disk drive
* ANY EXTENDED BASIC cartridge

Disk #2 -

TETRIS - (Fairware game, Ver. 1.3 - XB required.) Author: Alexander Bulpke, Sadowstrasse 68,d-5600 Wuppertal 1, West Germany. Asking $10 if you use his program.

The object of TETRIS is to assemble, as compactly as possible, an onslaught of various puzzle pieces as they plummet towards the bottom of the screen. There are only four basic shapes to contend with, each one different in color. Simple? Uhhhh...I don't think so.

Before you can start, though, you must choose the speed of descent; after which, you are given complete control of the pieces as they begin to fall, one by one, to the bottom. As soon as one piece is in place, a second one starts to drop immediately. While its falling, you can move each piece to the left or to the right, rotate it, or even drop it quickly to the bottom. This is a very well written program with great graphics, good music (Scarborough Fair), and is definitely a challenge to play. (I'll bet you can't keep from swearing even a little in this one! Try it for yourself.)

Minimum system requirements:
* TI-99/4A console
* 32K memory expansion
* 1 SSSD disk drive
* EXTENDED BASIC cartridge

****

*** Editor's Notes: ***
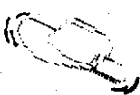
A TIp of the 10 gallon hat to:

Mr. Charles Good of the LIMA 99'ers users' group. He kindly sent us the latest FUNNELWEB update, version 4.21. It is available through the program library for a nominal fee. If you try it and like it, remember to send Tony & and Will McGovern a thank you message in the form of an international money order.

Charles Good is also offering to Users's Groups Only a video tape demonstrating the Configuration feature of FW, step by step. For those groups interested, send a blank VHS tape and paid return mailer, or $5 to: LIMA 99/4A UG, P.O. Box 647, Venedocia, OH 45894.

It has come to my attention that the CARFAX ABBEY disk given away at the Christmas Party last month had a bug in the loading sequence. It appears that while converting the program, I accidentally typed in two "D's" at the end of the second load filename, "CARF/LOAD". To correct this, simply fire-up your Disk Manager 2, (Or DM1000) and change the filename from "CARF/LOADD" to "CARF/LOAD". Sorry!

Also, for those of you who have taken the time to type-in the program, VICIOUS, from the December issue of the OUT*POST and can't seem to get it to run correctly; try examining line 150, which starts out: FOR A=4 TO 18... In the sequence following the DISPLAY AT command, there is a lower-case "L" in it, NOT the numeral "1". Make that simple correction and you won't (shouldn't) have anymore problems.

++
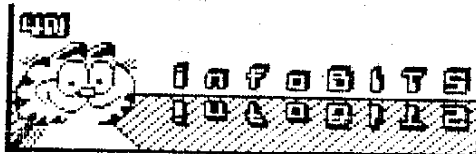
TI FEST WEST 1990!
By Jim Ely, VAST NEWS / Jan '90.

The Best Faire In The West is this year being hosted by the Southwest Ninety-Niners In Tucson. The dates to remember are February 17, 1990 from 9 A.M. to 5 P.M. and February 18, 1990 from 9 A.M. to 3 P.M. It is being held at the Days Inn, 88 E. Broadway, Tucson, AZ 85701. For room reservations call(602) 622-4000 and ask Olivia for Fest West hotel rates. Admission for the Faire is $4, under 15 years old free when accompanied by an adult. One of the main prizes to be given away is a MYARC HFD controller card. Other prizes and door prizes will also be announced. For more information, you can call the Cactus Patch BBS at (602) 795-1953 in Tucson. You can contact the Southwest Ninety-Niners directly at P.O. Box 17831, Tucson, Az 85730, (602) 747-5046. (I have two complete information packages for anyone interested. -Ed.)

++

(The OUT*POST is compiled with Will and Tony McGovern's FUNNELWEB (V4.21), Chris Faherty's TI-ARTIST+, and Jack Sughrue's PLUS)

++

TIPS FROM THE TIGERCUB

#57

Tigercub Software
156 Collingwood Ave.
Columbus OH 43213

I am still offering over
120 original and unique
entertainment, educational
and utility programs at
just $1.00 each, or on
collection disks at $5.00
per disk.

The contents of the first
52 issues of this news-
letter are available as
ready-to-run programs on 5
Tips Disks at $10 each.

And my three Nuts & Bolts
Disk, $15 each, each contain
over 100 subprograms for you
to merge into your own pro-
grams to do all kinds of
wonderful things.

My catalog is available
for $1, deductable from
your first order (specify
TIGERCUB catalog).

‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡
TI-PD LIBRARY

I have selected public
domain programs, by cate-
gory, to fill over 200
disks, as full as possible
if I had enough programs of
the category, with all the
Basic-only programs con-
verted to XBasic, with an
E/A loader provided for
assembly programs if poss-
ible, instructions added
and any obvious bugs cor-
rected, and with an auto-
loader by full program name
on each disk. These are
available as a copying ser-
vice for just $1.50 post-
paid in U.S. and Canada. No
fairware will be offered
without the author's per-
mission. Send SASE for list
or $1, refundable for
9-page catalog listing all
titles and authors. Be sure
to specify TI-PD catalog.
‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡‡

I like little programs
that load quickly and do
just what I want to do at
the moment. And one of the
things I wanted to do
quickly was to find phone
numbers. So, I used FUNLWEB
to create a little file -
SMITH,JOHN (999) 111-2222
BUSH, GEO. (000) 123-1234
GHADDAFI, O. (666)66-6666
and all my other frequent-
ly called numbers. I SAVEd
it as DSK1.PHONELIST and
wrote this little routine to
use it.

```
100 CALL CLEAR
110 OPEN #1:"DSK1.PHONELIST"
,INPUT
120 DISPLAY AT(12,1):"LAST N
AME?" :: ACCEPT AT(14,1):N$
130 LINPUT #1:M$ :: IF POS(M
$,N$,1)<>0 THEN DISPLAY AT(1
6,1):M$ :: RESTORE #1 :: GOT
O 120
140 IF EOF(1)<>1 THEN 130
150 DISPLAY AT(16,1):"NAME N
OT FOUND" :: RESTORE #1 :: G
OTO 120
```

Now actually, that was
all I needed, (even though it
did take several seconds to
find a name at the end of
the file), and it was easy
enough to load the file into
FUNLWEB when it needed
updating. But, programmers
are never satisfied, so I
decided to write a
self-contained program -

```
100 CALL CLEAR
200 DATA "ALDA, ALAN 888-999
9"
201 !@P-
300 DATA "BUSH, GEORGE 111-1
111"
400 DATA "PRESLEY, ELVIS 000
-0000"
499 !@P+
500 DISPLAY AT(12,1):"LAST N
AME?" :: ACCEPT AT(14,1):N$
600 READ M$ :: IF POS(M$,N$,
1)<>0 THEN DISPLAY AT(16,1):
M$ :: RESTORE 200 :: GOTO 50
0
700 ON ERROR 800 :: GOTO 600
```

```
800 DISPLAY AT(16,1):"NAME N
OT FOUND" :: RESTORE 200 ::
GOTO 500
```

That funny thing in line
201 turns off the prescan
and speeds up initializa-
tion. This routine is no
faster than the last, but
can be updated by editing
the program itself. It is
limited to about 500 records
due to the least-known and
greatest weakness of the TI,
that string storage is
limited to console memory.

But, computer users are
paranoid about speed, so I
decided to put my data into
a pre-loaded array with self
incrementing subscript num-
bers, and find the data by a
binary search.

```
100 !QUICKFINDER by Jim Pete
rson
200 DIM D$(50):: GOTO 300 ::
 D$(),X :: !@P-
300 X=X+1 :: D$(X)="ALDA, AL
AN (999) 666-1234"
400 X=X+1 :: D$(X)="BUSH, GE
ORGE (111) 111-1111"
500 X=X+1 :: D$(X)="GHADDAFI
, OMAR (999) 456-1234567"
600 X=X+1 :: D$(X)="KHOMEINI
, AYATOLLAH (666) 666-6666"
700 !@P+
800 INPUT "NAME? ":M$
900 IF M$>D$(X)THEN PRINT "N
OT FOUND":"CLOSEST IS":D$(X)
:: GOTO 800
1000 IF M$<D$(1)THEN PRINT "
NOT FOUND":"CLOSEST IS":D$(1
):: GOTO 800
1100 H=X :: S=INT(X/2)
1200 S$=D$(S):: IF POS(S$,M$
,1)=1 THEN 1700
1300 S$=D$(S+1):: IF POS(S$,
M$,1)=1 THEN S=S+1 :: GOTO 1
700
1400 IF S$>M$ THEN H=S :: S=
INT(H/2):: GOTO 1600
1500 S=S+INT((H-S)/2)
1600 IF S=S2 THEN 1800 ELSE
S2=S :: GOTO 1200
1700 PRINT D$(S):: GOTO 800
1800 PRINT "NOT FOUND":"CLOS
EST ARE"
1900 IF D$(S2)>M$ THEN PRINT
D$(S2-1):D$(S2+1):: GOTO 80
```

```
0
2000 PRINT D$(S2+1):D$(S2+2)
:: GOTO 800
```

Note that in this case
the records must be in
alphabetical sequence. New
records can be inserted in
intermediate line numbers,
in alphabetic sequence,
always preceded by X=X+1 ::
D$(X)= . Obsolete records
can be deleted, and records
can be corrected in place if
the correction does not
change the alphabetic
sequence.

This idea did not work
out as well as I hoped. The
maximum number of records is
less than 300, for the
reason mentioned above, and
this leaves so little free
memory that even a binary
search is slow. However,
for a smaller file this is
perhaps the best method.

For a large file, the
best method is certainly a
fixed sequential disk file,
accessed by a binary search
routine. But, that requires
other routines to delete,
add or change records, and
had best be the subject of
another Tips.

There is apparently a
mistaken belief that sprites
cannot be used together with
my BXB routine. Not so -
you can use all 28 of them!
However, you cannot change
their color with CALL
COLOR(#,N). The only other
limitations of BXB that I
can think of, are that a
single CALL COLOR cannot be
used for multiple character
sets and a single CALL CHAR
can only reidentify one
character. CALL CHARPAT
cannot return the hex code
of an ASCII above 143
because those ASCII's were
not supposed to be available
in Extended Basic.

I have used BXB on
hundreds of Basic-only
programs and have had only

two rare problems. If the program contains multiple line feed colons :::::::, the computer may rearrange them into pairs of double colons :: :: and lock up. Or, if the colons are before the text, as in PRINT :"something" you may get a puzzling error message.

Also on rare occasions you might get an error message indicating the subprogram was called from a line containing a CALL CHAR, if the programmer had inadvertently put more than 16 characters in the hex code. Basic just ignores any extra characters, and XBasic uses them to reidentify the following ASCII, but BXB crashes.

From the T‡I‡M‡E‡S news-letter from England, here is an extremely useful bit of assembly which should be assembled as ALPHA/O and placed on the disk of every joystick program, or imbedded in it with ALSAVE.

```
        DEF   ALPHA
‡ save old R12
ALPHA   MOV   R12,@>FFFC
‡ 9900 CRU base=0
        CLR   R12
‡ signal alphalock key line
        SBZ   21
‡ check alphalock other side
        TB    7
‡ jump if state=on
        JNE   STATE
‡ state=off
        SETO  @>FFFE
‡ as off skip next line
        JMP   JUMPA
‡ state=on
STATE   CLR   @>FFFE
‡ stop sending to alpha key
JUMPA   SBO   21
‡ restore R12
        MOV   @>FFFC,R12
‡ standard XB return now
‡ clear error for basic
        SB    @>837C,@>837C
‡ return to calling program
        B     @>0070
        END   ALPHA
```

Now, put this in the first lines of the joystick program -

```
1 ! by M. Gikow, Andover
    MA August 1988
2 ! used with ALPHA/O,
    will detect whether
    Alpha Lock is up (A=
    255) or down (A=0)
3 CALL CLEAR :: CALL INIT ::
  CALL LOAD("DSK1.ALPHA/O")
4 CALL LINK("ALPHA"):: CALL
  PEEK(-1,A):: IF A=0 THEN DIS
  PLAY AT(12,1):"RELEASE ALPHA
  LOCK" :: GOTO 4 ELSE CALL CL
  EAR
```

I published this one in the C.O.N.N.I. newsletter. Barry Traver picked it up and put it in the TI Forum in Computer Shopper, but their typesetter garbled it, so here is how it was supposed to be -

According to the TI-Writer Reference Guide, page 77, when you select the PrintF command, then type C and space once and then the device name, any control characters with ASCII less than 32 are removed before the file is printed.

With Funlweb, at least, this is not quite true. A carriage return character, ASCII 13, or a line feed character, ASCII 10, at the end of a line is actually not deleted but is changed to the space bar character, ASCII 32. This can be proved by running this little routine -

```
100 OPEN #1;"DSK1.(filename)
    ",INPUT
110 LINPUT #1:M$ :: PRINT M$
    :LEN(M$):: IF LEN(M$)>0 THEN
    PRINT ASC(SEG$(M$,LEN(M$),1)
    )
120 CALL KEY(0,K,S):: IF S=0
    THEN 120 ELSE 110
```

Therefore, when a file is Filled/Adjusted and the line feed characters are stripped with the C option, the lines are one character longer than they appear to be. An apparently blank line also contains ASCII 32.

Since these characters are blank, they normally do no harm. However, they can create problems when records are read into programs for multiple column printing or concatenation of strings. In these cases, this routine can be used to strip out any ASCII below 33 at the ends of records.

```
100 DATA INPUT,OUTPUT
110 FOR J=1 TO 2 :: READ J$
    :: DISPLAY AT(12,1)ERASE ALL
    :J$&" FILENAME?":"DSK" :: AC
    CEPT AT(13,4):F$(J):: OPEN #
    J:"DSK"&F$(J),UPDATE :: NEXT
    J
120 LINPUT #1:M$
130 IF ASC(SEG$(M$,LEN(M$),1
    ))<33 THEN M$=SEG$(M$,1,LEN(
    M$)-1):: IF LEN(M$)>0 THEN 1
    30
140 PRINT #2:M$ :: IF EOF(1)
    <>1 THEN 120 :: CLOSE #1 ::
    CLOSE #2
```

Attention all newsletter editors! If you are going to print any Tips (or anything else that contains program listings!) through the Formatter, PLEASE first replace and transliterate the ampersand, asterisk, period, carat and "@" sign!

Print this one through the Formatter and see why -

```
100 A=A&264 :: @=1
110 PRINT "1 . . . 2 . . . 3
    . . .4 . . . 5 . . . 6 . . .
    7 . . . 8 . . . 9 . . . 0"
120 M$=M$&A$&B$&C$ :: K=K^3
```

Here's how you do it. Load the above in the Editor, position the cursor at the beginning of the 1st line, hit FCTN 9, type RS and Enter, then /&/}/ and Enter. At the prompt, type A. Now get the cursor back to the beginning, repeat the above with /‡/‡/, and then /./\/ and /^/*/ and /@/{/ and the file should now look like this -

```
100 A=A!264 :: (=1
110 PRINT "1 \ \ \ 2 \ \ \ 3
    \ \ \ 4 \ \ \ 5 \ \ \ 6 \ \
    \ 7 \ \ \ 8 \ \ \ 9 \
    \ \ 0"
120 M$=M$}A$}B$}C$ :: K=K^3
```

Now use FCTN 9 to open 5 lines at the top and add this transliteration -

```
.TL 92:46
.TL 123:64
.TL 124:42
.TL 125:38
.TL 126:94
```

Save the result, go to the Formatter and print it.

If any multi-column Printall program (Tips from the Tigercub #45) won't run on your Epson-compatible printer, try changing line 250 to -

```
250 ACCEPT AT(12,3)VALIDATE(
    "123")SIZE(1):P :: IF P=2 TH
    EN PRINT #1:CHR$(27);CHR$(77
    )ELSE IF P=3 THEN PRINT #1:C
    HR$(15)
```

You might also need to change the 136 in line 280 to 132.

If your printer offers the elite condensed option, you might want to add -
:" (4) ELITE CONDENSED" to line 240, change the VALIDATE string in 250 to "1234", add ELSE IF P=4 THEN PRINT #1:CHR$(27);CHR$(77);CHR$(15) to the revised line 250 and add +(P=4)&160 to the first statement in line 290.

Memory almost full,

Jim Peterson

```
100 REM ## TI-ARTIST FONTSCA
N / L.Dorais, Ottawa U.G) /A
pril 1989
110 ON ERROR 430 :: CALL CHA
R(142,"000000FF",143,"007E42
5A5A5A427E")
120 B$=RPT$(" ",8):: L$=RPT$
(CHR$(142),28):: LD$=B$&SEG$
(L$,1,12):: L$=B$&SEG$(L$,1,
20):: F$=".,"
130 GOTO 150 :: A$,B$,C$,DT$
,F$,LC$,P$,SB$,UC$,A,C,DT,HB
,K,LB,LC,P,R,RS,S,SB,UC,V,I,
Y
140 CALL HCHAR :: CALL KEY :
: CALL CHARSET :: CALL ERR !
@P-
150 DISPLAY AT(6,1)ERASE ALL
:"UPPERCASE":L$: :L$: :"LOWE
RCASE":L$:L$: :LD$:"DIGITS
":LD$: :LS$:"OTHERS":CHR$(14
3)&"=space":LS$
160 DISPLAY AT(1,1):"SCAN WH
ICH FONT?": :"DSK"&F$ :: CAL
L CHARSET :: UC$,LC$,DT$,SB$
=""
170 ACCEPT AT(3,4)SIZE(-12)B
EEP:F$ :: F$="DSK"&F$
171 IF POS(F$,"/CH",6)>0 THE
N GOSUB 423 :: GOTO 280
180 IF POS(F$," F",6)=0 THEN
F$=F$&" F"
190 OPEN #1:F$,INPUT :: UC,L
C=4 :: DT,SB=12 :: RS=21 ! d
isplay column
200 ' ## scan file ##
210 LINPUT #1:B$ :: IF EOF(1
)THEN 280
220 IF LEN(B$)>1 THEN 210 EL
SE A=ASC(B$)! found a char.(
LEN=1)
230 IF A>=65 AND A<=90 THEN
CALL HC(8,UC,A,UC$):: IF A<>
65 THEN 210 ELSE GOSUB 350 :
: GOTO 210 ! upper case; if
A, draw it
240 IF A>=97 AND A<=122 THEN
 CALL HC(13,LC,A,LC$):: GOTO
 210 ! lower case
250 IF A>=48 AND A<=57 THEN
CALL HC(17,DT,A,DT$):: GOTO
210 ! digits
260 IF A=32 THEN A=143 ! spa
ce shows as a square on scre
en
270 CALL HC(RS,SB,A,SB$):: I
F SB<30 THEN 210 ELSE SB=12
:: RS=22 :: GOTO 210
280 CLOSE #1 :: DISPLAY AT(2
4,2)BEEP:"(A)NOTHER (P)RINT
(Q)UIT" ! end
290 CALL KEY(3,K,S):: IF S=0
 OR K<>65 AND K<>81 AND K<>8
0 THEN 290
300 IF K=65 THEN F$=SEG$(F$,
4,2):: GOTO 150 ELSE IF K=81
THEN END
310 OPEN #1:"PIO" :: B$="
320 PRINT #1:B$&B$&" FONT:"
"&UC$&SEG$(F$,6,10):: :B$&"UP
PER CASE: "&UC$:B$&"LOWER C
ASE: "&LC$:B$&B$&"DIGITS:
"&DT$:B$&B$&"OTHERS: "&SB$
330 PRINT #1:"":"":"" :: GOT
O 280
340 ! ## sub draw "A" ##
350 DISPLAY AT(1,19)BEEP:"A)
" :: LINPUT #1:A$ :: C=VAL(S
EG$(A$,1,1)):: R=VAL(SEG$(A$
,3,1)):: K=127
360 FOR I=1 TO R :: FOR Y=1
TO C :: LINPUT #1:A$ :: S=1
:: C$=""
370 P=POS(A$,",",S):: IF P=0
THEN P=LEN(A$)+1
380 V=VAL(SEG$(A$,S,P-S)):: 
IF V=0 THEN C$=C$&"00" :: GO
TO 400
390 HB=INT(V/16):: CALL CBYT
E(HB,C$):: LB=V-16&HB :: CAL
L CBYTE(LB,C$)
400 S=P+1 :: IF S<=LEN(A$)TH
EN 370
410 CALL CHAR(K,C$):: CALL H
CHAR(I,Y+23,K):: K=K+1 :: IF
K=142 THEN K=91
420 NEXT Y :: NEXT I :: RETU
RN
422 ! ## sub C.S.G.D. ##
423 OPEN #1:F$,INPUT ,INTERN
AL,VARIABLE 254 :: INPUT #1:
A,C,P,R
424 IF A<28 THEN 428 ELSE IF
 A)44 THEN 425 ELSE 426
425 LC$="abcdefghijklmnopqrs
tuvwxyz" :: DISPLAY AT(13,2)
:LC$
426 DT$="0123456789" :: DISP
LAY AT(17,10):DT$
427 SB$=" !@.,''::-" :: DISPLA
Y AT(21,11):SB$
428 UC$="ABCDEFGHIJKLMNOPQRS
TUVWXYZ" :: DISPLAY AT(8,2):
UC$
429 CALL HCHAR(21,12,143)::
SB$="&B "&SB$ :: RETURN
430 CALL ERR(I,Y,HB,LB):: IF
 I=130 THEN ON ERROR 430 ::
RETURN 170 !if error is I/O;
go back to accept filename
440 DISPLAY AT(24,1)BEEP:"ER
ROR:":I;" in LINE":LB :: STO
P ! other errors
450 !@P-
460 SUB HC(R,I,A,A$):: CALL
HCHAR(R,I,A):: IF A<>143 THE
N A$=A$&CHR$(A)ELSE A$="sp "
&A$
470 I=I+1 :: SUBEND
480 SUB CBYTE(I,C$):: IF I<1
0 THEN C$=C$&CHR$(I+48)ELSE
C$=C$&CHR$(I+55)
490 SUBEND
```

A LOT OF FONTS ARE AVAILABLE TO TI-ARTIST AND C.S.G.D. FANS, BUT ONLY IF YOU KNEW WHICH CHARACTERS WERE IN THE FONT, AND WHAT THEY LOOKED LIKE, WITHOUT HAVING TO LOAD THE GRAPHIC PROGRAM AND TYPE THE WHOLE RANGE JUST TO SEE! PETER HODDIE'S FONT WRITER AND GRAPHIC EXPANDER HAVE THE SCAN OPTION, BUT PERHAPS YOU DON'T OWN THEM; AND THEY HAVE A DRAWBACK: ALL CHARACTERS BEING LISTED TOGETHER, THE SYMBOLS AND PUNCTUATION CHARACTERS ARE HARD TO SPOT. SO I WROTE THIS QUICKIE, TO DISPLAY THE CHARACTERS IN FOUR CATEGORIES: UPPER CASE, LOWER CASE, DIGITS, AND OTHERS (SYMBOLS AND PUNCTUATION). THE LETTER "A" IF PRESENT, IS DRAWN ON THE SCREEN IN ACTUAL SIZE.

THE DIS/VAR 80 FONT FILE IS READ LINE BY LINE; WHEN A SOLE CHARACTER IS ENCOUNTERED IT MEANS "THIS IS THE CHARACTER DEFINED NEXT"; LINE 220 WILL TAKE IT'S ASCII VALUE A, AND THE SUB HC WILL SHOW IT ON THE SCREEN, IN THE APPROPRIATE CATEGORY; IT WILL ALSO BE ADDED TO A STRING FOR THE PRINTOUT. IF THE CHARACTER IS AN "A", THE PROGRAM JUMPS TO A SUBROUTINE.

TO DRAW THE "A", WE LINPUT THE NEXT LINE IN THE FILE: IN LINE 320, WE EXTRACT THE TOTAL COLUMNS AND ROWS; WE DON'T NEED THE THIRD VALUE IN THE LINE, "PIXEL JUMP". EACH SUBSEQUENT LINE CONTAINS THE DECIMAL EQUIVALENTS OF THE HEX BYTES FOR ONE CHARACTER DEFINITION, SEPARATED BY COMMAS. THESE VALUES ARE READ AND TRANSFORMED INTO THEIR HEX VALUE BY CALL CBYTE; WHEN THE STRING C$ IS COMPLETE, WE CALL CHAR A CHARACTER ABOVE 127 AND CALL HCHAR IT IN THE UPPER CORNER OF THE SCREEN (FOR VERY BIG CHARACTERS, COUNTER K REVERTS TO 91 UPON REACHING CHARACTER 142, ALREADY USED FOR THE SCREEN DISPLAY).

WHEN ALL THE FILE HAS BEEN READ, YOU CAN SCAN (A)NOTHER FILE, (P)RINT A LISTING (MINUS THE GRAPHIC "A"), OR (Q)UIT. IF YOU WISH TO GET A GRAPHIC DUMP OF THE SCREEN WITH THE "A", YOU CAN USE AN ASSEMBLY SCREEN DUMP AT THIS POINT (CALL LOAD THE FILE BEFORE LINE 150; CALL LINK REPLACES 310-320).

(I CHANGED THIS PARAGRAPH TO REFLECT THE FACT THAT THE PROGRAM LINES TO SCAN C.S.G.D. FONTS ARE ALREADY ADDED. [WOODY]). IN C.S.G.D. FONTS THE "A" WILL NOT BE DISPLAYED, AS I DON'T KNOW YET HOW IT'S DONE! THESE FONTS FOLLOW THE SAME PATTERN: UC ONLY, UC/DIGITS /OTHERS (ALWAYS THE SAME ONES), UC/LC/DIG/OTHERS; THE VALUE A, THE TOTAL NUMBER OF CHAR. IN THE FILE TELLS THE STORY. WHEN YOU WISH TO SCAN A C.S.G.D. FONT YOU MUST ADD THE "/CH" SUFFIX TO WARN TEX

XB SPEED

WORD HUNTING

Puzzles are a word-processing tool we often forget about. Although I'm not much of a word hunt person (word search, find-a-word, whatever), my fifth-grade students are. I prefer crosswords or cryptograms, but wordhunts have their value. They are also a very pleasant way to introduce the names of bones in the human skeleton or the Presidents or geometrical terms. Computers are great teacher helpers in these matters. All one has to do is find a puzzle-creator program from somewhere and type in the words. The sorting and placement and completion of the puzzle is done by our 99. So is the making of hardcopies of puzzle, wordlist, answers. It's so easy. But not always so quick.

Way back in 1982 *WORD SAFARI* was programmed for TI. It's amazing how many people own it but never use it. Most people got it with OLDIES BUT GOODIES before they got printers or disk drives. By the time they got these things they'd long since forgotten this puzzle gem.

I have six word hunt programs, PD and commercial, but there was always a few things about WS that appealed to me. (The "thinking numbers" on the lower right screen, for one.) Though it was soundless and colorless and was SLOW BASIC and had very poor printouts, the program had a structure I liked. The way the menu operation worked appealed to me.

I decided to use that original structure to make a more modern version of this puzzle, suited for disk. First it had to be XB for speed and because I don't know assembly. Then it had to have a continuing music pattern while the reading was going on internally. It also had to have color. And some better screen directions. And much better hardcopies (enlarged, double strike, etc.) with a better overall look. It also had to be drastically reduced in size, though XB would take care of some of that automatically.

I printed out all six of my word hunt puzzles to see what features I wanted for this new one and how I could most efficiently program it. It was fun. Besides the menu operation, I found the sizes offered were excellent for the different kinds of things I planned to do in my classroom. Each of the programs presented me with interesting concepts and interesting problems. However, after three days (nights, actually) I had a debugged version which satisfied me. Then, as I do with all programs, I gave it to some adults and some kids to play with. The input from them helped me fine tune the project. I then (as I always do) put it away for a couple weeks.

Later, I took the "worker" disk out of storage, turned on my Gemini, and set out to do my first "official" school puzzle: names of dinosaurs (thus I <u>had</u> to use the large square).

Perfect.

I made 27 copies of the puzzle and word list for the kids and one copy of the answers for me. FAST!

Then I put this right on my *FUNLPLUS!* and was ready to use it whenever I word processed. Very handy. I since have added a few subprograms from Jim Peterson's wonderful *NUTS 'n BOLTS* disk which will not appear in the succinct piece below.

Anyway, I'm not permitted to print the six original hunt programs, but if you have a copy of *WORD SAFARI* and/or some others you might want to try them out if you haven't used them for a while; then print out a copies of the listing.

Next type in a copy of *WORD HUNT* , try it out, and make some comparisons. This will give you a good idea of how I went about the task.

Think about some really good programs you recall from the past, dig them out, look them over, see if you can brighten them up, make them better. Sometimes it'll take drastic changes. Sometimes little. But in either case you've had some fun with some programs you probably would have left forgotten in a box in the closet. Now you can enjoy them all over again.

NOTE: When I first wrote the program I was going to write it in BASIC. After I translated quite a few line from my flowchart notes, I decided to go into XB. I continued with the PRINT and colon lines instead of DISPLAY AT statements until testing. It turned out to be fine and fast as it was, so I left them in. Those of you who'd like to tighten this even more, adding or changing features, send me a copy. If the improvements are really good, I'll print an update

WORD HUNT

```
100 @=1 :: CALL CLEAR :: DIM
 A$(728),A(7),B$(25)
110 C$="0" :: FOR B=@ TO 8 :
: CALL COLOR(B,2,13)
120 NEXT B :: CALL CHAR(96,"
0"):: GOSUB 200 :: PRINT "
WORD HUNT PUZZLE ": : : :
: : : : : : :: PRINT " ^^^s
trike^^^any^^^key^^^" :: GOS
UB 750
130 GOSUB 200 :: PRINT " WOR
D HUNT PUZZLE   ": : :: PRINT
 : :" CHOOSE" :: PRINT :"
1  SETUP (CHOOSE FIRST)" ::
PRINT :"   2  INPUT PUZZLE"
140 PRINT :"   3  OUTPUT LIS
T"
150 PRINT :"   4  OUTPUT ANS
WER" :: PRINT :"   5  QUIT":
 : : : :
160 GOSUB 750 :: IF C<49 THE
N 160
170 IF C>53 THEN 160
180 ON C-48 GOSUB 770,230,97
0,870,190 :: GOTO 130
190 CALL CLEAR :: STOP
200 CALL CLEAR :: CALL SCREE
N(11):: CALL VCHAR(@,@,96,48
):: CALL VCHAR(@,31,96,48)::
 FOR D=@ TO 8
210 CALL SOUND(-999,VAL(SEG$
("262262294330349392440494452
3587659698784",INT(12*RND+@)
*3-2,3)),0,VAL(SEG$("1311751
96",INT(3*RND+@)*3-2,3)),5)
220 NEXT D :: RETURN
230 GOSUB 200 :: PRINT " CHO
OSE " :: PRINT :"   1      10
X10 PUZZLE" :: PRINT :"   2
     20X20 PUZZLE" :: PRINT :
"   3      25X25 PUZZLE": : :
: : : : : : : :
240 GOSUB 750 :: IF C<49 THE
N 240
250 IF C>51 THEN 240
260 E=(C-48)*10-5*INT(C/51):
: GOSUB 200 :: F=@ :: G=@ ::
 H=@ :: IF I=0 THEN 280
270 INPUT " TITLE OF PUZZLE?
 ":D$ :: INPUT " HOW MANY CO
PIES? ":F
280 INPUT " HOW MANY WORDS?
":J :: IF J<26 THEN 300
```

```
290 PRINT "SORRY: 25-WORD MA
XIMUM." :: GOTO 280
300 FOR B=0 TO J-@
310 INPUT " WORD "&STR$(B+@)
&" ? ":B$(B):: IF LEN(B$(B))
>2 THEN 330
320 PRINT "SORRY: 3-LETTER M
INIMUM." :: GOTO 310
330 IF LEN(B$(B))<11 THEN 35
0
340 PRINT "SORRY: 10-LETTER
MAXIMUM." :: GOTO 310
350 NEXT B
360 INPUT "ANY CHANGES? (Y/N
) ":E$ :: IF E$<>"Y" THEN 39
0
370 INPUT "WHICH NUMBER? ":B
380 INPUT "MAKE CORRECTION?"
:B$(B-@):: GOTO 360
390 GOSUB 200 :: PRINT : : :
"         THINKING..." :: A(
0)=@ :: A(4)=-@ :: A(@)=E+@
:: A(5)=-A(@):: A(2)=A(@)+@
:: A(6)=-A(2):: A(3)=A(2)+@
:: A(7)=-A(3):: B=E+3
400 K=(E+2)^2-@-B :: FOR L=B
 TO K :: A$(L)=" "
410 NEXT L :: M=E+2 :: K=M*M
-M :: FOR B=0 TO K STEP M ::
 A$(B)="**" :: A$(B+E+@)="**
" :: A$(B/M)="**" :: A$(K+B/
M)="**"
420 NEXT B :: K=0 :: FOR N=0
 TO J-@ :: D=0
430 D=D+@ :: E$=STR$(D)&" "
:: CALL HCHAR(23,25,ASC(E$))
:: CALL HCHAR(23,26,ASC(SEG$
(E$,2,@))):: IF D<76 THEN 49
0
440 J=N :: GOSUB 200 :: PRIN
T "SORRY: CAN ONLY SQUEEZE I
N";STR$(J);" WORDS.": : : :
: :: PRINT " CHOOSE" :: PRIN
T :"   1     USE ";STR$(J);"P
RESENT LIST." :: PRINT :"
2     BEGIN AGAIN": : : : :
: : : : :
450 GOSUB 750 :: IF C<>49 TH
EN 470
460 GOSUB 200 :: PRINT "
     THINKING...": : : : :
 : : : : : :: GOTO 620
470 IF C=50 THEN 740
480 GOTO 450
490 B=INT(((E+2)^2-E)*RND)+E
 :: IF A$(B)<>"  " THEN 430
500 FOR O=0 TO 7
510 IF K<8 THEN 530
```

```
520 K=0
530 L=B+A(K):: FOR P=2 TO LE
N(B$(N)):: IF L<E+2 THEN 570
540 IF A$(L)<>" " THEN 570
550 L=L+A(K)
560 NEXT P :: GOTO 590
570 K=K+@
580 NEXT O :: GOTO 430
590 L=B :: FOR P=@ TO LEN(B$
(N)):: A$(L)=SEG$(B$(N),P,@)
:: A$(L)=A$(L)&A$(L):: L=L+A
(K)
600 NEXT P :: K=K+@
610 NEXT N
620 FOR B=0 TO (E+2)^2-@ ::
IF A$(B)<>" " THEN 640
630 A$(B)=CHR$(INT(26*RND)+6
5)&" "
640 NEXT B :: GOSUB 200 :: I
F I=0 THEN 660
650 PRINT " P R I N T I N G"
660 FOR M=@ TO F :: IF I=0 T
HEN 680
670 PRINT #I:CHR$(27)&CHR$(8
7)&CHR$(@): : :"      ";D$:"
   ^^^^^^^^^^";
680 FOR B=0 TO E+@ :: PRINT
#I:CHR$(27)&CHR$(87)&CHR$(@)
:"    ";:: FOR K=B*(E+2)TO (B
+@)*(E+2)-@ :: PRINT #I:SEG$
(A$(K),@,@);
690 NEXT K
700 NEXT B
710 NEXT M :: IF I<>0 THEN 7
30
720 PRINT :"        PRESS ANY
 KEY";:: GOSUB 750
730 PRINT #I:CHR$(27)&CHR$(8
7)&CHR$(@): : :
740 RETURN
750 CALL KEY(0,C,Q):: IF Q<=
0 THEN 750
760 RETURN
770 GOSUB 200 :: PRINT " CHO
OSE" :: PRINT :"   1   SCREE
N" :: PRINT :"   2   PARALLE
L PRINTER" :: PRINT :"   3
 OTHER": : : : : : : : : : :
 : : : :
780 GOSUB 750 :: IF C<49 THE
N 780
790 IF C>51 THEN 780
800 I=0 :: IF C=49 THEN 860
810 I=@ :: F$="PIO" :: IF C=
50 THEN 830
820 INPUT " DEVICE ? ":F$
830 IF C$="O" THEN 850
840 CLOSE #@

850 OPEN #@:F$,OUTPUT :: C$=
"1"
860 RETURN
870 GOSUB 200 :: IF I=0 THEN
 890
880 INPUT "HOW MANY COPIES?
":G :: PRINT : : :"PRINTING
ANSWERS."
890 FOR M=@ TO G :: IF I=0 T
HEN 910
900 PRINT #I: : : :"        ";D
$:"   ^^^^^^^^^^";
910 FOR B=0 TO E+@ :: PRINT
#I: :"    ";:: FOR K=B*(E+2)T
O (B+@)*(E+2)-@ :: PRINT #I:
SEG$(A$(K),2,@);
920 NEXT K
930 NEXT B
940 NEXT M :: IF I<>0 THEN 9
60
950 PRINT :"        PRESS ANY
 KEY";:: GOSUB 750
960 PRINT #I: : : : :: RETUR
N
970 GOSUB 200 :: IF I=0 THEN
 990
980 INPUT "HOW MANY COPIES?
":H :: PRINT : : :"PRINTING
LIST."
990 FOR M=@ TO H :: IF I=0 T
HEN 1010
1000 PRINT #I: : : :"       ";
D$:"     ^^^^^^^^^^"; :
1010 FOR B=0 TO J-@ :: PRINT
 #I:"       ";B$(B)
1020 NEXT B :: PRINT #I: : :
:
1030 NEXT M :: IF I<>0 THEN
1050
1040 PRINT "         PRESS ANY
 KEY";:: GOSUB 750
1050 RETURN
```

GO FORTY-NINERS!

```
J L O K S E D I S F F O U C Y O G A L L
Z T C R D C D S G Z O Q X M E C B Z F W
C D M I F V H R R K S E N L G B Y T M G
F I C U G N E Q E L E K O W G N U E L
Q K S V D F S P I W N C S T B E G M O S
B U C U E N N O A N A I G N M B I A U B
H I X R Y W W Y E T G R N H E T O P K P
K O E Q H T P C W G E A C Y R F E K U C
C E J W Q U E B O K A A N E T R E O D Y
Y H I A N S H A C H O L L G R A D W J
G U E T N H N A O R C O F O O L O D X U
S K G E R A B A C K D U H S L P U F Y U
R M F J T E J N U H C E D E C I R S F G
O F P N N F E J Y Q B M S T J G B C U T
O U O I W J J A J W A W N Z D E T R M G
M M L W C L L R A C B M A H K X A K U E
I K Q C O P J S D A P R E D L U O H S Q
Z I R C E U D O U U J W F S N I P Z B U
I R A R U O E Q C B K T I U G S W J H P
U I C B J P A R T S K C O J U X Y W U L
```

CHAINGANG
DEFENSE
ELWAY
ENCROACHMENT
FLAG
FORTYNINERS
JOCKSTRAP
LINEBACKER
MONTANA
OFFENSE
OFFSIDES
OVERTIME
PUNT
REFEREE
REPLAY
RICE
SHOULDERPADS
SUPERDOME
TACKLE
TOUCHDOWN

DIRECTIONS: There are
20 words hidden in the
puzzle. You may find
them horizontally, ver-
tically, or diagonally.
They may also be either
forward or backward.
Circle each word as you
find them. One word
has been done for you.
GOOD LUCK!
(Answers on last page.)

Protect
Proteger
Proteger
Schützen
保護

Never
Nunca
Jamais
Nie
絶対禁止

No
No
Non
Falsch
注意

10°C→52°C
50°F→125°F

Insert Carefully
Insertar
Inserer avec soin
Sorgfältig
 Einsetzen
挿入注意

Never
Nunca
Jamais
Nie
絶対禁止
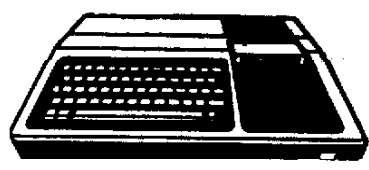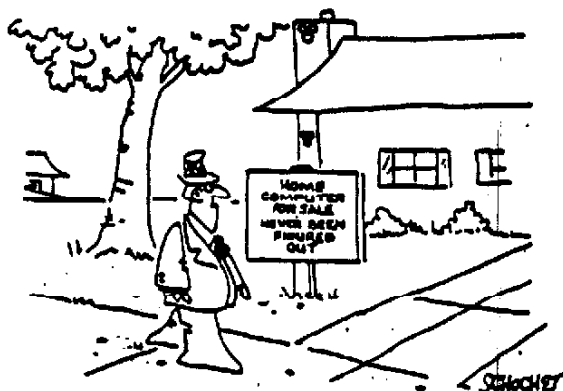
I ♥ MY TI!
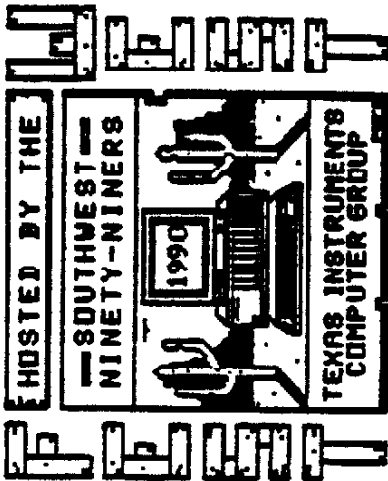
TI FEST WEST 1990

To be held at

Day's Inn Downtown

Formerly Santa Rita Hotel, built in 1904 - recently refurbished

88 East Broadway
Tucson, Arizona 85701
602-791-7581

HOSTED BY THE
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1990
TEXAS INSTRUMENTS COMPUTER GROUP

Room Reservation Request Form

* Reservations MUST be in by January 17, 1990.
* Advance deposit for first night MUST accompany your reservation request.
* For a telephone reservation, call 602-791-7581, ask for Olivia.
* Check in time is by 3:00 P.M., unless reservation is guaranteed.

ROOM RESERVATION REQUEST
Days' Inn, 88 East Broadway, Tucson, Az 85701

	ARRIVAL DATE	DEPARTURE DATE

NAME OF GROUP: Southwest 99'ers User Group, TI Fest West 1990

APPROXIMATE ARRIVAL TIME:

DATES OF TI FEST WEST 1990: February 17 and 18, 1990

YOUR FULL NAME:

TYPE OF ROOM:
NUMBER OF ROLLAWAY BED(S)
Double - 2 Queen beds - $44+tx.
Single - 1 King bed - $44+tx.
Suites - Call for rates

COMPANY NAME:

STREET ADDRESS:

Refrigerator in room........

Coffee maker in room........

CITY:

Non-Smoking room.....

STATE:	ZIP CODE:

TELEPHONE NUMBER: ( ) -

FULL NAME(S) OF ADDITIONAL OCCUPANTS OF ROOM:

TO RESERVE A ROOM, SELECT ONE OF THE FOLLOWING METHODS.

CREDIT CARD NUMBER (Master Card, Visa, American Express, Diners Club:

CREDIT CARD INTERBANK NUMBER:

EXPIRATION DATE:

YOUR SIGNATURE:

ROOM DEPOSIT ENCLOSED: $ _____ or _____
(DO NOT SEND CASH THRU THE MAIL!!!)

South Western Atmosphere - elegant and comfortable
Near Freeway (Interstate highway 1-10)
Restaurant - reasonable prices - indoor and outdoor dining
Arizona Stagecoach from airport $8.25 per person

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  Public Transportation
  Tucson Art Museum
  Tucson Historical Areas
  Other restaurants
  Greyhound Bus Depot
  Amtrak Train Depot

Conference Room:
  Seperate building from hotel
  Easy access to ample parking
  Restrooms in the building
  Plenty of outlets
  Phone line
  Well lit
  Seminar room may be included in same building
    (depending on # of vendors)

Guest rooms - $44 per night double/single (plus taxes)
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Suites available (extra cost)
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No charge for local phone calls
Cocktails 2 free per adult per room - alcoholic or non-alcoholic
Sauna
Hot Therapy Pool
Swimming Pool
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Term of office, 12/88 - 12/90.

** MEMBERSHIP **

To join the Northern Nevada Ninety-Niners, an annual fee of $20.00 ($15.00 for newsletter ONLY subscription) is due and payable on or before the last Tuesday of each January. Membership includes a monthly newsletter, access to the Program and Paper libraries, and S.I.G.'s.

The following color-coded address labels serve as reminders to our subscribers/members regarding their active status with 4N:

GREEN highlight = Renewal fee due.
YELLOW highlight = Fee is 1 month overdue.
RED highlight = Fee is 2 months in arrears.
FINAL NOTICE!

** PROGRAM LIBRARY **

Disk programs are available from our library at the following rates:

> SS/SD = $2.00
> DS/SD = $4.00 (includes FLIPPIES.)
> DS/DD = $6.00

Send disk, self-addressed postage-paid return mailer and check or money order with your specific request to:

> 4N Users' Group
> Attn: Program Librarian
> 5554 Mark Circle
> Sun Valley, NV 89433

** DISKS of the MONTH **

Two software programs on disk are featured each month at the general meeting, announced in advance via the newsletter. These disks are available to active members only at a discount rate of .50 cents each. To qualify for the special rate, they must be picked up in person during the evening of the meeting. No exceptions will be allowed.

** PAPER LIBRARY **

4N participates in an ongoing newsletter exchange program. Presently, we have over 25 Users' Groups on our mailing list. Active members are encouraged to check out these newsletters (maximum 5 issues) for a ONE MONTH period, and on a first-come, first-served, basis. There is no fee charged for this service. However, members are expected to return them to the paper library, in the same shape as they were received, within the alloted period. Failure to do so may jeopardize future membership priviledges. Please, be considerate of others.

** S.I.G.'s (Special Interest Groups) **

As the need arises by the membership for special instruction in order to develop the skills necessary for a particular software program or hardware item, a special interest group may be called upon by the President. This is not a formal meeting and is usually held voluntarily at a member's home, where personal attention is readily available.

** SUPPORT **

4N supports the following vendors:

MICROpendium, P.O. Box 1343, Round Rock, TX 78680
TEXCOMP   1-818-366-6631
TRITON   1-800-227-6900
TEXAMENTS 1-516-475-3480
ASGARD   1-703-255-3085

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** MEETING DATES **

Unless noted in the newsletter, 4N general meetings are held on the last TUESDAY of each month, at 7:00 P.M., at ROUND TABLE PIZZA, West 4th and Vine St., Reno, NV. Visitors are cordially invited to attend.