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NEWSLETTER OF THE DECATUR 99ER USERS' GROUP

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\* \* \* INSIDE THIS ISSUE \* \* \*

- TIPS FROM THE TIGERCUB (#41) by Jim Peterson. (Tigercub Software)
- USING THE 99/4A FOR SOUND ANALYSIS by Rick Kellogg. (CIN-DAY USER GROUP)
- COMPUTER AIDED DESIGN by S. L. Johnston. (Milwaukee Area Users Group)
- PRINTSTRIP by Michael A. Machohis. (Milwaukee Area Users Group)
- T. I. NETWORK NEWS (1.1) by Ron Albright. (I. N. F. O. INC. )
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**PRESIDENT'S NOTES...**by L. R. Livergood

First I'd like to wish everyone a Happy New Year! My schedule has been filled with numerous "get-togethers" between friends and relatives during the last few weeks so my computer time has been limited. Hopefully, at least one of you out there received something during the holidays that was useful for your TI system. By looking at the information received lately in the P. O. Box, I can say there are plenty of new and inovative products now available.

For those of you who were unable to attend the last meeting, we had a very good discussion on the future direction of our group. Contrary to my somewhat pessimistic view of what the new year will bring, I was pleasantly surprised at the interest expressed by the members present to pick up some of the responsibilities and try to increase the membership. We, as you know, are close to the "break-even" point when you match revenue against expenses. Any further loss of members will probably force us to take a different approach to the monthly meetings which we have been offering for several years now.

In the near future I expect the group to be using a more structured approach for the meetings. By that I do not mean a long business meeting but rather a more efficient use of our time. Programs will again be demonstrated in addition to having more subjects being covered. I even forsee the possible revival of special interest groups!

You say you saw this approach in the past and that it didn't work, right? Well, let me just say that the problems of the past are still the same problems which we face today, however, the dust from the "computer wars" has settled and the TI-99/4A is still a quality machine that has solid comercial support. Equipment and software pricing is the best its ever been. Have you seen the latest commercial products developed for the TI? How about the fact that IBM compatability is due to be announced in January and that the new MYARC 9640 computer (TI compatable) is now in production.

If you are one of those people who decided not to upgrade your system, either because it was too expensive or didn't have the support or maybe the necessary compatability, I ask that you dig it out of the closet and look seriously at the possibilities which are available today. Our group continues to accumulate information which can be useful in expanding your knowledge of not only the TI-99/4A, but computers in general. Why don't you give it another try?

THE FOLLOWING THREE PROGRAMS WERE WRITTEN BY BILL GRONOS AND TAKEN FROM THE 'R/D COMPUTING NEWSLETTER'. THE NEWSLETTER IS PUBLISHED MONTHLY BY 'RYTE DATA', AND I WOULD HIGHLY RECOMMEND SIGNING UP FOR A SUBSCRIPTION. THE ONE YEAR SUBSCRIPTION PRICE IS \$14.00 U.S. FUNDS, \$17.00 FOREIGN. THIS INCLUDES FIRST CLASS POSTAGE AND IS WELL WORTH THE MONEY.

THEIR ADDRESS IS: RYTE DATA  
 BOX 210 MOUNTAIN STREET  
 HALIBURTON, ONTARIO K0M 1S0  
 CANADA



A LITTLE ABOUT THE PROGRAMS; YOU MUST TYPE IN THIS SOURCE CODE AND ASSEMBLE THE OBJECT CODE IN ORDER TO BE ABLE TO RUN THE PROGRAMS. THE SOUND INPUT IS THROUGH YOUR CASSETTE PLAYER HOOKED UP WITH ONLY THE EAR SPEAKER WIRE CONNECTED TO THE COMPUTER. NOW ANYTHING THAT IS PLAYED ON THE CASSETTE WILL BE REPRODUCED ON YOUR SCREEN IN A WAVE PATTERN. THE FIRST PROGRAM IS 'SOUND ANALYZER' AND WILL DISPLAY A WAVE PATTERN ON YOUR SCREEN SOMEWHAT LIKE AN OSCILLOSCOPE. DIFFERENT SOUNDS WILL PRODUCE A DIFFERENT WAVE PATTERN. EXPERIMENT A LITTLE! THE SECOND PROGRAM, 'AUDIO SPECTRUM ANALYZER' GOES ONE STEP FURTHER. NOW THE SOUNDS PLAYED WILL BE REPRESENTED BY A GRADUATED BAR CHART. AND THE THIRD PROGRAM IS THE ONE I THINK IS THE MOST FUN! IT IS CALLED 'AUDIO SPECTRUM LIGHT SHOW', AND LIKE THE NAME IMPLIES, IT TURNS YOUR TI-99/4A INTO A 16 COLOR PSYCHEDELIC LIGHT SHOW. IT IS ESPECIALLY DEVASTATING IN COMPLETE DARKNESS. THE MUSIC CHOICES I SHALL LEAVE UP TO YOU AND YOUR EAR PREFERENCE, BUT THE MORE DRAMATIC THE MUSIC, THE MORE THIS PROGRAM WILL PERFORM.

I HAVE ONLY LISTED THE THREE MOST SIGNIFICANT PROGRAMS FROM THE NEWSLETTER, AND NOT REPRINTED ANY OF THE TEXT THAT ORIGINALLY ACCOMPANIED THE PROGRAM LISTINGS. FOR THE COMPLETE STORY, AND HOPEFULLY MORE TO FOLLOW, CONTACT RYTE DATA AND GIVE THEM A TRY FOR A ONE YEAR SUBSCRIPTION. THEY DO HAVE THE BACK ISSUES ON FILE FOR SUBSCRIBERS ONLY.



```

0001 *****
0002 *   SOUND ANALYZER 3   *
0003 *                   *
0004 * R/D COMPUTING NEWSLETTER *
0005 *                   *
0006 * RYTE DATA  Vers. 1.10/11 *
0007 *                   *
0008 *****
0009
0010 * Allows freezing of the
0011 * screen by pressing the
0012 * FUNCTION key
0013
0014
0015     DEF RUN
0016 RUN  LI 2,>40
0017 A    LI 0,>300
0018     MOVB 2,@>8C02
0019     SWPB 2
0020     MOVB 2,@>8C02
0021     SWPB 2
0022 B    LI 1,>1E00
0023     TB 27
0024     JNE C
0025     AI 1,>100
0026 C    MOVB 1,@>8C00
0027     DEC 0
0028     JNE B
0029 D    TB 7
0030     JNE D
0031     JMP A
0032     END
    
```



```

0001 *****
0002 *   AUDIO SPECTRUM ANALYZER   *
0003 *   Bill Gronos July 1986     *
0004 *   (RYTE DATA - SEPT. 1986) *
0005 *                   *
0006 *   Makes a spectrum colored *
0007 *   wedge and modulates it with *
0008 *   sounds from the cassette   *
0009 *   recorder input.           *
0010 *****
0011
0012     DEF RUN
0013     REF VWTR,VSBW,VMBW
0014
0014 RUN
0015     LI 0,>0701
0016     BLWP @VWTR
0017     LI 0,>800+768
0018     CLR 1
0019 BP1  BLWP @VSBW
0020     INC 0
0021     CI 0,>800+768+1280
0022     JL BP1
0023     LI 0,>380+4
0024     LI 1,>1100
0025     BLWP @VSBW
0026     BLWP @BARS
0027     LI 1,COLORS
0028     LI 0,>380+12
0029     LI 2,20
0030     BLWP @VMBW
0031     LI 3,>380+11
0032 IS1  CLR 2
    
```



```

0001 *****
0002 *   AUDIO SPECTRUM LIGHT SHOW   *
0003 *   Bill Gronos July 1986     *
0004 *   (RYTE DATA - SEPT. 1986) *
0005 *                               *
0006 *   Makes a spectrum colored *
0007 *   light show and modulates it *
0008 *   with sounds from the cassette *
0009 *   recorder input.             *
0010 *****
0011
0012     DEF RUN
0013     REF VWTR,VSBW,VMBW
0014 RUN
0015     LI 0,>0701
0016     BLWP @VWTR
0017     LI 0,>800+768
0018     CLR 1
0019 BP1  BLWP @VSBW
0020     INC 0
0021     CI 0,>800+768+1280
0022     JL BP1
0023     LI 0,>380+4
0024     LI 1,>1100
0025     BLWP @VSBW
0026     BLWP @BARS
0027     LI 1,COLORS
0028     LI 0,>380+12
0029     LI 2,20
0030     BLWP @VMBW
0031     LI 3,>380+11
0032 IS1  CLR 2
0033 IS2  TB 27
0034     JEQ IS2
0035 IS3  INC 2
0036     TB 27
0037     JNE IS3
0038     SRL 2,1
0039     MOV 3,0
0040     LI 1,>100
0041     LIM1 2
0042 IS4  CLR @>83D6
0043     TB 2
0044     JNE IS4
0045     INC @ICOUNT
0046     C @ICOUNT,@IMAX
0047     JNE IS4
0048     CLR @ICOUNT
0049     LIM1 0
0050     BLWP @VSBW
0051     MOV @COLORS(2),1
0052     MOV 2,0
0053     AI 0,>380+11
0054     MOV 0,3
0055     BLWP @VSBW
0056     JMP IS1
0057 IMAX DATA 1
0058 ICOUNT DATA 0
0059 COLORS BYTE 6,8,9,11,10,3,2,12,7,5
0060     BYTE 4,13,14,15,6,8,9,11,10,3
0061 BARS DATA BARWS
0062     DATA #+2
0063     LI 0,>200
0064     MOV 0,@IMAX
0065     CLR 1
0066     LI 2,736
0067     LI 3,32
0068     LI 7,>6000
0069 L1   MOV 1,4
0070     BL @L3
0071     MOV 2,4
0072     BL @L3
0073     AI 1,33
0074     CI 1,363 396
0075     JH DV
0076     AI 2,>FFE1 (-31)
0077     DECT 3
0078     AI 7,>800
0079     JMP L1
0080 L3   AI 4,>4000
0081     SWPB 4
0082     MOV 4,@>8C02
0083     SWPB 4
0084     MOV 4,@>8C02
0085     MOV 3,6
0086 L2   MOV 7,@>8C00
0087     DEC 6
0088     JNE L2
0089     B #11
0090 DV   CLR 6
0091     LI 4,32
0092     LI 3,22
0093     LI 1,>6000
0094     LI 5,33
0095     JMP DV2
0096 DV3  CI 6,2
0097     JEQ END
0098     LI 4,63
0099     LI 3,22
0100     LI 1,>6000
0101     LI 5,31
0102 DV2  MOV 4,0
0103     MOV 3,2
0104 DV1  BLWP @VSBW
0105     AI 0,32
0106     DEC 2
0107     JNE DV1
0108     A 5,4
0109     AI 1,>800
0110     DECT 3
0111     JNE DV2
0112     INC 6
0113     JMP DV3
0114 END  RTWP
0115 BARWS BSS 32

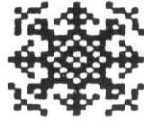
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```

0033 IS2 TB 27 0094 CI 0,>380+12
0034 JEQ IS2 0095 JNE CL1
0035 IS3 INC 2 0096 RTWP
0036 TB 27 0097 BARWS
0037 JNE IS3 0098 DATA 0,>6000,20,9,4
0038 SRL 2,1 0099 BSS 22
0039 MOV 3,0 0100 FREQS TEXT '5000CS1000CS500CSZ'
0040 LI 1,>100 0101 TITLE TEXT 'THE BILL GRONOS SOUND SHOW'
0041 LIM1 2 0102 END
0042 IS4 CLR @>83D6
0043 TB 2
0044 JNE IS4
0045 INC @ICOUNT
0046 C @ICOUNT,@IMAX
0047 JNE IS4
0048 CLR @ICOUNT
0049 LIM1 0
0050 BLWP @VSBW
0051 MOV B @COLORS(2),1
0052 MOV 2,0
0053 AI 0,>380+11
0054 MOV 0,3
0055 BLWP @VSBW
0056 JMP IS1
0057 IMAX DATA 1
0058 ICOUNT DATA 0
0059 COLORS BYTE 6,8,9,11,10,3,2,12,7,5
0060 BYTE 4,13,14,15,6,8,9,11,10,3
0061 BARS
0062 DATA BARWS
0063 DATA $+2
0064 BARS1 MOV 4,5
0065 MOV 3,0
0066 BARS2 BLWP @VSBW
0067 INC 0
0068 DEC 5
0069 JNE BARS2
0070 AI 1,>800
0071 INC 4
0072 AI 3,32
0073 DEC 2
0074 JNE BARS1
0075 LI 0,2
0076 LI 1,FREQS
0077 LI 2,6
0078 BLWP @VMBW
0079 LI 0,290
0080 LI 1,FREQS+6
0081 BLWP @VMBW
0082 LI 0,547
0083 LI 1,FREQS+12
0084 DEC 2
0085 BLWP @VMBW
0086 LI 0,707
0087 LI 1,TITLE
0088 LI 2,26
0089 BLWP @VMBW
0090 LI 0,>380+6
0091 LI 1,>F100
0092 CL1 BLWP @VSBW
0093 INC 0

```



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100 PRINTSTRIP BY:
    MICHAEL A. WACHONIS /
    SEVERNA PARK, MD
110 DELETE LINE #510 IF
    YOUR PRINTER DOES
    NOT SUPPORT SUPER-
    SCRIPT.
120 CALL CLEAR :: CALL SCREE
N(11)
140 CALL CHAR(100,"000000000
000FFF")
150 CALL CHAR(104,"FFFF")
160 CALL CHAR(101,"030303030
3030303")
170 CALL CHAR(102,"303030303
0303030")
180 DISPLAY AT(9,1):RPT$("d
.28):" e PRINT-0-STRIPe
e":RPT$("h".28): :RPT$("d
.28):" eBY MIKE WACHONIS
e":RPT$("h".28)
185 CALL SOUND(150,1397,0)
190 DISPLAY AT(24,3):"PRESS
ANY KEY TO CONTINUE" :: CALL
KEY(O,K,S): : IF S=0 THEN 19
0
200 CALL CHARSET
210 DIM A(11),B$(2,11),B$(2,
11),E$(13),S$(99)
220 P$(2)=CHR$(27)"(")CHR$(
27)"E"CHR$(27)"G"CHR$(27
)"-1" :: Q(2)=80 :: N$(2)="
#####"
230 P$(1)=CHR$(27)"(")CHR$(
CHR$(27)"G"CHR$(27)"-
. :: Q(1)=136 :: N$(1)="###
#####"
235 IN=1 :: P=1 :: S=1 :: CH
=1
240 OPEN #1:"PIO.CR"
250 K=0 :: C$="UPPER (CTRL)"
260 DISPLAY AT(12,1)ERASE AL
L:"1) INPUT FROM KEYBOARD":
:"2) INPUT FROM DISK (DSK1.)
": :YOUR CHOICE: " :IN :: AC
CEPT AT(16,15)BEEP SIZE(-1)V
ALIDATE("12"):IN :: IF IN=1
THEN 290
270 GO SUB 620
280 OPEN #3:"DSK1."F$ :: IN
PUT #3:P :: FOR I=1 TO 2 ::
FOR J=1 TO 11 :: LINPUT #3:A
$(I,J): : NEXT J :: NEXT I ::
CLOSE #3 :: GO TO 370
290 DISPLAY AT(12,1)ERASE AL
L:"1) COMPRESSED PRINT": "2
) NORMAL PRINT": :YOUR CHOI
CE: " :P :: ACCEPT AT(16,15)B
EEP SIZE(-1)VALIDATE("12"):P
300 IF P=1 THEN RESTORE 800
ELSE RESTORE 810
310 FOR I=1 TO 11 :: READ A(
I): : NEXT I
320 K=K+1
330 DISPLAY AT(1,4)ERASE ALL
:"INPUT "C$) ROW"
FOR I=2 TO 18 STEP 2 ::
LAY AT(I+2,1):"OVER KEY"
;1/2 :: NEXT I :: DISPLAY AT
(22,1):"OVER KEY 0": : "OVER
KEY ="
350 FOR I=2 TO 22 STEP 2 ::
J=1/2 :: ACCEPT AT(I+2,12)BEE
P SIZE(A(J)):A$(K,J): : NEXT
I

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355 GO SUB 870 :: IF Y$="N"
OR Y$="n" THEN 330
360 IF K=1 THEN C$="LOWER (F
CTN)" :: GO TO 320
370 DISPLAY AT(12,1)ERASE AL
L:"HOW MANY STRIPS: " :S :: A
CCEPT AT(12,19)BEEP SIZE(-4)
VALIDATE(DIGIT):S
380 IF P=1 THEN RESTORE 800
ELSE RESTORE 810
390 FOR I=1 TO 11 :: READ A(
I): : E$(A(I))="1"RPT$("*",A
(I)): : NEXT I
400 PRINT #1:P$(P)
410 FOR C=1 TO S
420 PRINT #1:RPT$(" ",Q(P));
CHR$(13):CHR$(10)
430 K=1
440 FOR I=1 TO 11
450 IF LEN(A$(K,I))<A(I)THEN
B$(K,I)=RPT$(" ",A(I)-LEN(
A$(K,I))/2)A$(K,I)ELSE B$(
K,I)=A$(K,I)
460 IF I<>1 THEN 470 ELSE PR
INT #1,USING W$(P):B$(K,I):
: GO TO 480
470 PRINT #1,USING E$(A(I)):
B$(K,I):
480 NEXT I
490 PRINT #1:CHR$(13)CHR$(1
0)
500 K=K+1 :: IF K=2 THEN 440
510 PRINT #1:CHR$(27)"-0":C
HR$(27)"3"CHR$(1):CHR$(27
)"SO":RPT$(" ",Q(P)):CHR$(27
)"T":CHR$(27)"-1"
520 PRINT #1:RPT$(CHR$(10),2
)
530 NEXT C
540 PRINT #1:CHR$(27)"("
550 IF IN=2 THEN 600
560 DISPLAY AT(12,1)ERASE AL
L:"SAVE TO DISK? Y/N"
570 CALL KEY(O,K,S): : IF S=0
THEN 570 ELSE IF (K=89)OR(K
=121)THEN 580 ELSE 600
580 DISPLAY AT(12,1)ERASE AL
L:"ENTER FILE NAME": : "DSK
1." :: ACCEPT AT(15,6)BEEP S
IZE(9):F$ :: F$="DSK1."F$)
/"
590 ON ERROR 830 :: OPEN #2:
F$ :: PRINT #2:P :: FOR I=1
TO 2 :: FOR J=1 TO 11 :: PRI
NT #2:A$(I,J): : NEXT J :: NE
XT I :: CLOSE #2
600 DISPLAY AT(12,1)ERASE AL
L:"QUIT PROGRAM? (Y/N)": : "Y
OUR CHOICE: N" :: ACCEPT AT
(14,15)SIZE(-1)BEEP VALIDATE
("YNyn"):Y$
610 IF (Y$="N")OR(Y$="n")THE
N 250 ELSE 320
620 ON ERROR 850 :: OPEN #4:
"DSK1.",INPUT ,RELATIVE,INTE
RNAL
630 FOR L=1 TO 127
640 INPUT #4:FH$ :: IF FH$="
" THEN 670
650 IF SEG$(FH$,LEN(FH$),1)=
"/" THEN F=F+1 :: G$(F)=FH$
660 NEXT L
670 CLOSE #4
680 CALL CLEAR
681 IF F>1 THEN 690
682 DISPLAY AT(12,2):"NO FIL
ES FOUND, TRY AGAIN" :: FOR
C=1 TO 200 :: NEXT C :: GO T
O 250
690 FOR N=1 TO F

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700 DISPLAY AT(I/2+1,N):USIN
G "##) #####":N,SEG$(G$(
N),1,LEN(G$(N))-1)
710 Z=Z+1 :: IF Z=11 THEN Z=
0 :: CK=CK+1
720 IF CK/2=INT(CK/2)THEN N=
1 ELSE N=16
730 IF (INT(N/22)=N/2)THEN 7
40 ELSE 760
740 DISPLAY AT(24,1):"DISPLA
Y MORE FILES? (Y/N)" :: CALL
KEY(O,K,S): : IF S=0 THEN 74
0
750 IF (K=89)OR(K=121)THEN C
ALL CLEAR ELSE 770
760 NEXT N
770 DISPLAY AT(24,1):"YOUR C
HOICE: " :CH :: ACCEPT AT(24,
15)BEEP SIZE(-2)VALIDATE(DIG
IT):CH :: IF (CH=0)OR(CH>F)T
HEN 770
780 F$=G$(CH): : F,CK,Z,N=0
790 RETURN
800 DATA 11,11,12,11,12,12,1
1,12,12,11,11
810 DATA 6,6,7,6,7,6,6,7,7,6
,6
820 CALL INIT :: CALL PEEK(2
,J,K): : CALL LOAD(-31804,J,K
): : STOP
830 CALL SCREEN(7): : DISPLAY
AT(20,1):"NO DISK IN DRIVE"
:"PRESS ANY KEY TO RETRY" ::
GO TO 860
850 CALL SCREEN(7): : DISPLAY
AT(20,1):"NO DISK/FILE IN D
RIVE": "PRESS ANY KEY TO RETR
Y"
860 CALL ERR(E1,E2,E3,E4): :
CALL SOUND(150,1397,0)
865 IF E4=620 OR E4=640 THEN
PRINT : "WHEN DISC IS PLAC
ED IN " : "DRIVE #1, PRESS ANY
KEY": :
866 CALL KEY(O,K,S): : IF S=0
THEN 856 :: CALL CLEAR :: C
ALL SCREEN(11)
867 IF E4=620 OR E4=640 THEN
RUN
869 ON ERROR 830 :: RETURN 6
00
870 DISPLAY AT(2,2):"ENTRIES
CORRECT? (Y/N) Y" :: ACCEPT
AT(2,25)SIZE(-1)VALIDATE("Y
vny")BEEP:Y$ :: RETURN

```

I. I. CAD

FCTN - ARROW KEYS TO MOVE  
 FCTN 7- SAVE TO DISK  
 FCTN 8- PRINT(GEMINI)  
 FCTN 9- SAVE AND PRINT  
 \* Computer will ignore FCTN  
 and you will have  
 printer or disk drive.  
 CTRL- P W E R T Y U I O P  
 CTRL- A S D F G H J K L ; '

```

100 REM ----- CAD ---
- COMPUTER AIDED DESIGN JULY
1, 1985, S. L. JOHNSTON
110 OPEN #1:"PI0"
120 DIM GRAPHIC(160)
130 CALL CLEAR
140 PRINT "SELECT COLORS"
150 PRINT
160 PRINT "CHOOSE COLOR CODE
S FROM 1 TO 16"
170 PRINT
180 INPUT "SCREEN COLOR? ":
S
190 PRINT
200 INPUT "CHARACTER COLOR?
":F
210 REM -----

```

```

----- SET SCR
EEN AND CHARACTER COLORS
220 CALL SCREEN(S)
230 FOR C=1 TO 16
240 CALL COLOR(C,F,S)
250 NEXT C
260 CALL CLEAR
270 REM -----

```

```

----- DETERMIN
E HARDWARE CONFIGURATION
280 PRINT "HARDWARE CONFIGUR
ATION"
290 PRINT
300 PRINT "ENTER YES OR NO"
310 PRINT
320 INPUT "DO YOU HAVE A DIS
K DRIVE? ":DRIVE$
330 PRINT
340 IF DRIVE$="YES" THEN 360
350 IF DRIVE$="NO" THEN 410
360 INPUT "FILENAME? (DISK1.f
name) ":LABEL$
370 OPEN #2:LABEL$,INTERNAL,
FIXED 216
380 PRINT
390 INPUT "LOADING DESIGN FR
OM DISK? ":START$
400 PRINT
410 INPUT "DO YOU HAVE A GEM
INI PRINTER? ":PRINTER$
420 CALL CLEAR
430 REM -----

```

```

----- DEFINE ALPHANUMER
IC SYMBOLS FOR HARD COPY
440 FOR J=1 TO 160
450 GRAPHIC(J)=J
460 NEXT J
470 REM -----

```

```

----- REDEFINE BLOCK GRAP
IC SYMBOLS FOR HARD COPY
480 GRAPHIC(129)=237
490 GRAPHIC(132)=238
500 GRAPHIC(134)=239
510 GRAPHIC(135)=250
520 GRAPHIC(136)=246
530 GRAPHIC(138)=245
540 GRAPHIC(139)=247
550 GRAPHIC(140)=244
560 GRAPHIC(147)=232
570 GRAPHIC(156)=249
580 GRAPHIC(133)=236
590 GRAPHIC(137)=242
600 GRAPHIC(143)=243
610 GRAPHIC(144)=248
620 GRAPHIC(145)=235
630 GRAPHIC(146)=233
640 GRAPHIC(148)=234
650 GRAPHIC(149)=241
660 GRAPHIC(151)=231

```

```

670 GRAPHIC(153)=240
680 REM -----
EFINE GRAPHIC CHARACTERS
690 CALL CHAR(151,"FFFFFFFFO
0000000")
700 CALL CHAR(147,"0000000OF
FFFFFF")
710 CALL CHAR(146,"FOFOFOFOF
OFFOFOFO")
720 CALL CHAR(148,"OFFOFOFOFO
FOFOFOFO")
730 CALL CHAR(145,"FFFFFFFF
OFFOFOFO")
740 CALL CHAR(133,"FFFFFFFFO
FOFOFOFO")
750 CALL CHAR(129,"FOFOFOFOF
FFFFFF")
760 CALL CHAR(132,"OFFOFOFOFF
FFFFFF")
770 CALL CHAR(134,"FFFFFFFFF
FFFFFF")
780 CALL CHAR(153,"0000000FO
8080808")
790 CALL CHAR(149,"000000FFO
0000000")
800 CALL CHAR(137,"000000F80
8080808")
810 CALL CHAR(143,"000000FFO
8080808")
820 CALL CHAR(140,"0808080FO
8080808")
830 CALL CHAR(138,"080808080
8080808")
840 CALL CHAR(136,"0808080FO
0000000")
850 CALL CHAR(139,"080808F80
0000000")
860 CALL CHAR(144,"080808FFO
0000000")
870 CALL CHAR(156,"080808F80
8080808")

```

```

880 CALL CHAR(135,"080808FFO
8080808")
890 REM -----

```

```

----- LOAD PREVIOUSLY DEV
ELOPED DESIGN FROM DISK
900 IF DRIVE$="NO" THEN 1000
910 IF START$="YES" THEN 930
920 IF START$="NO" THEN 1000
930 FOR COL=1 TO 32
940 FOR ROW=1 TO 24
950 INPUT #2:A,
960 CALL HCHAR(ROW,COL,A,1)
970 NEXT ROW
980 NEXT COL
990 REM -----

```

```

----- DISPLAY DESIGN
1000 R=12
1010 C=16
1020 CURSOR=43
1030 CALL KEY(5,KEY,STATUS)
1040 CALL HCHAR(R,C,A)
1050 CALL HCHAR(R,C,CURSOR,1)
1060 CALL HCHAR(R,C,A,1)
1070 IF STATUS=0 THEN 1030
1080 REM -----

```

```

----- CHECK FOR ARROW KEY
1090 IF KEY<>11 THEN 1140
1100 R=R-1
1110 IF R<>0 THEN 1030 ELSE

```

```

1120 R=1
1130 GOTO 1030
1140 IF KEY<>10 THEN 1190
1150 R=R+1
1160 IF R<>25 THEN 1030 ELSE
1170
1170 R=24
1180 GOTO 1030
1190 IF KEY<>8 THEN 1240
1200 C=C-1
1210 IF C<>0 THEN 1030 ELSE
1220
1220 C=1
1230 GOTO 1030
1240 IF KEY<>9 THEN 1300
1250 C=C+1
1260 IF C<>33 THEN 1030 ELSE
1270
1270 C=32
1280 GOTO 1030
1290 REM -----

```

```

----- CHECK
FOR SAVE, PRINT OR BOTH
1300 IF KEY=1 THEN 1370
1310 IF PRINTER$="NO" THEN 1
340
1320 IF KEY=6 THEN 1510
1330 IF KEY=15 THEN 1370
1340 CALL HCHAR(R,C,KEY,1)
1350 GOTO 1030
1360 REM -----

```

```

----- SAVE DESIGN ON DISK
1370 IF DRIVE$="NO" THEN 1340
1380 RESTORE #2
1390 FOR COL=1 TO 32
1400 FOR ROW=1 TO 24
1410 CALL HCHAR(ROW,COL,A)
1420 PRINT #2:A,
1430 NEXT ROW
1440 PRINT #2:
1450 NEXT COL
1460 CLOSE #2
1470 IF KEY=15 THEN 1510
1480 END
1490 REM -----

```

```

----- PRINT DESIGN ON GEMINI
1500 REM -----
12 LINES/INCH, UNIDIRECTIONA
L MODE, EMPHASIZED MODE
1510 PRINT #1:CHR$(27):CHR$(
65):CHR$(6):CHR$(27):CHR$(85
):CHR$(1):CHR$(27):CHR$(69):
1520 FOR ROW=1 TO 24
1530 FOR COL=1 TO 32
1540 CALL HCHAR(ROW,COL,A)
1550 PRINT #1:CHR$(GRAPHIC(R
)):
1560 NEXT COL
1570 PRINT #1
1580 NEXT ROW
1590 REM -----

```

```

----- RESET PRINT
ER TO POWER ON CONDITION
1600 PRINT #1:CHR$(27):CHR$(
64):
1610 REM -----

```

```

----- PRINT FILENAM
E DESIGN IS STORED UNDER
1620 FOR I=1 TO 5
1630 PRINT #1
1640 NEXT I
1650 IF DRIVE$="NO" THEN 167
0 ELSE 1660
1660 PRINT #1:"STORED UNDER
FILENAME ":LABEL$
1670 END

```

T.I. Network News

Volume 1 issue 1

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Ron Albright, Editor and Publisher

In the beginning...

Welcome! Welcome to what I hope will be a new publishing adventure for users of the TI 99/4A Home Computer. This is the first issue of the "T.I. Network News" (affectionately hereafter to be known as "TINN"). I have started this venture to be an exclusive offering of Delphi's T.I. Information Network. It will be a conglomeration of news, product reviews, tips (particularly, on telecommunications) and programming (concentrating on XB and c99). I will be hacking it out alone to start but, right up front, I invite and welcome submission from anyone else on virtually anything of interest to the TI users. If you have some new software to tell us about, visited an interesting TI BBS, have discovered a programming trick, or anything you want to share with others, let me know. I will make the arrangements to get the information in TINN. Since we are new at this, we can go in any direction that the readership desires. And since we are "electronically" published, we can have immediate and up-to-date news. I hope to make this a bi-weekly, but that depends on the interest and readership. You can address "Letters to the Editor" to me on Delphi (Username "INFOINC"). Welcome aboard!

The Dawn of Gen'ev'e...

Doubters have rumbled and jokes bantered about for over a year. Since the Myarc upgrade to the TI 99/4A was announced formally at the Third Annual TI Faire in Chicago (November, 1985), many have waited patiently for what was the only viable upgrade path available for the 99/4A. And now, the waiting appears to be over. The last hurdle, obtaining the mysterious (at least to me) "gate-arrays" (supposedly, devices that speed the chip operations) from the Mitsubishi contractors has been accomplished. The gate-arrays arrived Thanksgiving week and the Gen'ev'e is being assembled, probably even as I write this. The first 500 (that is right, five-zero-zero!) are going to Tenex. So, if you have your order in there, you may be in luck. Else, the smaller dealers, may have to wait for some time. In any case, the computers appear ready for the marketplace. I cannot wait to hear the first non-Beta- tester reports of the production machine. Should be fun. By the way, I hear that "Gen'ev'e" has been dropped by Myarc over the possible conflict with the "Geneva" portable computer produced by Hewlett-Packard. That all seems very unlikely, since the Geneva has been out of production for over a year. There are a couple other products that come close to that name as well (I think there may even be a Geneve-something already),

so the name change is probably a wise move. The name, as I hear it, will "officially" be the "Myarc 9640". Not very glamorous, but might save an undesirable lawsuit.

For those of you interested, here are some specifications on the 9640 computer, just to whet your appetite:

The following are the capabilities of the new Gen'ev'e computer as written in the Myarc literature.

- \* 99/4(A) compatible. Runs over 100 existing TI cartridge programs.
- \* 99/4(A) compatible. Runs over 95% of all assembly language programs and utilities.
- \* Basic 3.0
- \* TI-Writer, Now a full 80 columns
- \* MultiPlan, Also 80 columns
- \* Faster, at least 2-3 times
- \* Larger, Standard 640K RAM, 2 Mega bytes addressable RAM, Myarc memory card compatible with Myarc 512K card, supplies 1.1 Megabytes RAM.
- \* IBM Type keyboard included
- \* Phone type cable, replaces old Hex-Bus cable
- \* Mouse Support
- \* Separated Function keys
- \* Incredible graphics capabilities
- \* Composite video output
- \* RGB Output
- \* 40 column display
- \* 80 column display
- \* Joystick port
- \* Compatible with existing peripheral cards: Disk controllers, Myarc, TI, Corcomp. RS232 Cards, Myarc, TI, Corcomp. Myarc memory expansion cards add directly to RAM (modification required)
- \* Two megabytes addressable memory.
- \* 128K VDP RAM Memory
- \* True hardware utilities, Sprites, Fills, Lines, Data Moves.
- \* TI 9995 Processor Chip - 12 MHz
- \* 256 Bytes ULTRA High Speed on Chip RAM.
- \* Pre-fetch on instructions
- \* Post-store on instructions
- \* Sound compatible and expandable
- \* Speech included

The 9640 may be ordered through Disk Only Software by writing to P.O. Box 4170, Rockville, Md. 20850. For more information call 800-446-4462 + 897335 at the tone. In the Washington D.C. Metro area call 301-369-1339. D.O.S. is on Delphi under the Username: "TELEDATA" (Jeff Guide). Maybe you can get your 9640 before Christmas! I'll risk a little heat from the real 9640 enthusiast by saying that I have to take a "wait-and-see" attitude toward this machine at present. I will have to see what Craig Miller (MG. 1475 W. Cypress Avenue, San Dimas, CA) comes out with this January as he announces the specifics of his MS-DOS upgrade

for the TI. Then I will compare the two, and decide. Hopefully, the inevitable bugs will have been shook out of the 9640 by then (there WILL be some user problems yet to be discovered; there always are). Then I will make a move - for one or the other.

#### Chicago TI Faire...

Thanks to the generosity of Computer Shopper and the editor's (Stan Veit) continued support of the TI community, I was able to attend the Fourth Annual TI Faire sponsored by the Chicago User Group and held at Triton College, Saturday, November 1. It was a great time for all attendees. The crowds were about half the size of times past (about 1000 or so), but the interesting thing was that there were no disappointed vendors, out of the 30 or so with booths. The dollars changed hands like military secrets at the United Nations. We have gone from a tiered users base (novices, serious users, expert users) to, really, one tier - serious, expert users. Users willing to spend some "serious" dollars on some of the great new hardware and software for their machines. No one stays on the sidelines with a 3 year old orphan, You either have to GET serious or get out. Anyway, I was terribly impressed not just with the way the Fair was run (terrifically), or the speakers on the program (Clint Pulley on c99, Chris Bobbitt on the new Asgard products, and Peter Hoddie on the music capacity of the /4A), but also the fanatics that attended. They attended from California, New York, Massachusetts, Ottawa, Tennessee, and Georgia. They bought out the place. And not the \$4 cartridges, but the new, sophisticated hardware and software from all over. It was a mature, grown-up bunch of 99ers who have survived the three year stint in the orphanage. I was encouraged and really enthusiastic after attending Chicago. I was equally encouraged by the fact that Sandy Bartels (Chicago V.P. and probably future president) said there would definitely be a Fifth Fair next year. Probably featuring the 9640. See ya there!

#### New Products Seen...

At the Chicago Fair, Asgard (awarded the "Software Producer of the Year" in the December TI Forum column in Computer Shopper) ran true to form and introduced three exciting new software products for the 99/4A. "Total Filer" (\$24.95 from Asgard, P.O. Box 10306, Rockville, MD 20 850; (301) 345-2492) is the first "text-based", free-form database for the TI. Written by Warren Agee in c99, "Total Filer" doesn't use fields like traditional databases. With "Total Filer" you can enter information in any form or fashion into the record and enter your own keywords. The, "Total Filer" can search on any keyword and even use "wildcards" to pick records. For example, if you had some records with "assembly" and "assembler", you could search for both words by using the wildcard search phrase "assembl\*?". Records with "assembler" and "assembly" as the keywords should be retrieved by that search. You can use "Total Filer" in many ways and I find it a useful tool. I

use it to index text-based information like journal references and abstracts in my medical practice. Another winner from Warren Agee and Asgard.

Also released by Asgard was "High Gravity" (\$14.95 f. Asgard). People always write to Computer Shopper to ask why there are no new games for the TI. I tell them that the users have, generally matured beyond that form of software, and that the market for games is probably small. Well, Asgard has come out with a hybrid - a game that is both fun and educational. "High Gravity", written by Tom Wible (also in c99), is a game in th at you try to fire a food pod to a stranded spaceship through a maze of planets for points. You cannot steer the pod you have to rely on the gravitational pull of the various planets to guide the pod to the spaceship. Thus, you learn in a realistic way about gravity and its effects in space. You can vary the number of planets, and their gravity to add to the learning experience. Really a nice program. Well done and reasonably priced.

The third part of the Asgard Trilogy, "Font Writer" (\$24.95) will be the subject of a full review in a future issue of TINN. Suffice it to say that the author, J. Peter Hoddie has produced an excellent program that accomplished the merging of graphics from TI Artist or Character Set and Graphics Design and text from TI Writer. Printed together, on the same page and formatted as you desire. An excellent productivity tool. A must. Buy it.

Another product seen and to be reviewed is the "Printer's Apprentice" from McCann Software (P.O. Box 34160, Omaha, Nebraska 68134; \$22.50). It is an implementation of "Print Shop" (tm) for the TI (well almost!). Written in Forth and complete with 5 fonts and a program to design your own), "Apprentice" allows you to make customs designed page layouts and handle TI Writer files with proportional spacing, microjustification, and hyphenation. Its a peach from the same guy (Mike McCann) that programmed "Business Graphs 99" (now only \$15.95 from McCann). I hope to spend more time on this program in later issues.

I also have a copy of Monty Schaidt's GPL Assembler and Linker (Ryte Data, 210 Mountain Street, Haliburton, Ontario K0M 1S0; (705) 457-2774) but it will take a little work for my non-assembler mentality to get these beauties running. Keep you posted.

#### Nibbles and bits...

Tom Rhodes, the producer of the most practical product for the TI probably ever, "Flip Strips", has moved but still has some of these spiral bound overlays for the TI available for \$4. These are keyboard strips for the top of your machine already printed for most TI cartridges and several Fairware program and some blanks ones to be filled in for other programs. Very nice. Get them from Tom at 1 Edgewood



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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.

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\*\*\*\*\*

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

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

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

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

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

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

I will greatly miss your

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

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

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

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

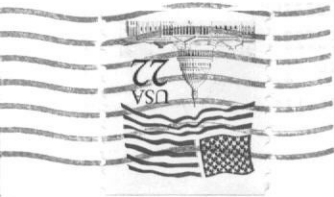
It does not require any use of the Enter key, but each CALL KEY input must be validated and processed, so don't type too fast. It will accept such inputs as M1=7= or M1=7+1= or M2=1-M1= to put a value in a memory, or 6+7= or 6+M2= to calculate and display, or 6+7M1 or M1-.M2M3 to calculate and put into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

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





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 288 Windsor Dr. NE  
 Cedar Rapids, IA 52402



DECATUR 99'ER H. C. U. G.  
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25	26	27	28	29	30	31

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 \* ADD'L FAMILY # 5 \*  
 \* OR NEWSLETTER ONLY #12 \$ \_\_\_\_\_ \*  
 \* (25 MAX) \*  
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