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REACHING FOR IT  
From the North Shore

By: - Paul

STAR PRINT-HEAD REPAIR:-

One of the attractive features of the Star Micronics Gemini series printers (and also some of the later models) is the "user replaceable" print-head. As it turns out, there are a couple of drawbacks to this. One is the price of the print-head, the last one of which I bought was, in 1983, \$56. The other is pretty serious, and that is the unavailability of replacement heads. When my 15X head went out, I requested a replacement from three local suppliers, and one on the mainland, and 11 months later, I have yet to see one. Being in the position of needing to use my printer, and at the same time having to wait for the ordered part, (which at the time I figured would be at worst a week), I decided to attempt a temporary patch-up. That temporary fix has lasted till now & shows every indication of being as good as new. And since the head on my 10X just developed the same problem, I have gone ahead, and repaired in the same way, and I figured that the solution would be of use to other users of Star Micronics Printers.

The problem that has occurred in my print-heads, is that the guide, for the impact-matrix pins (that make the "on-bits") comes loose. This guide is small (1x4x6 mm) piece of red glass or corundum (ruby) that is inset flush with the front of the print-head body. The symptoms when this happens are that the characters printed lose their sharpness, and/or the head tends to drag the ribbon on the paper, making a gray smudge on the paper wherever the head travels, no-matter how you set the head for paper thickness.

However the pin-guide is held in place at manufacture, it can be re-fastened in place by gluing it. It takes a bit of care to do this, because no glue must be allowed to get into the pin slot. I have found the easiest way to deal with the head is to completely remove it from the

printer. Get comfortable at a work table, and with tweezers, a needle (or pin) and some paper towel, lift the pin-guide out of the head. Now wipe the guide clean of ink & dust. It may be necessary to clear the pin slot with the corner of a piece of paper. Then, with the needle, carefully clean out the recess in the head (where the guide goes) to get out all the inky ribbon-lint, taking care to get the corners all clear and taking special care NOT TO BEND ANY OF THE PINS.

Now, GENTLY place the pin-guide over the recess, precisely lining up the pin-slot with the row of impact pins. With a finger-tip press lightly downward, and wiggle the guide until the pins slip into the slot. (The guide will sort of rock on the pins until they line up and then it will "fall" into place in its recess.) The guide is seated properly when its front is flush with the rest of the head and all of the pins are just flush with it. (The pins must not be recessed or protrude.)

Now dip the needle in some glue and apply it to the crack around the outside edge of the guide. (I used a plastic glue, like the kind used for models, but epoxy should also work. (Crazy glue is too fluid and may get on the pins.) Be sure the glue is fluid enough to go into the crack between the guide and the head, but do not allow it to get in the slot area. Let the glue dry, & re-apply until the crack is filled completely after drying. It is OK if the glue builds up a ridge, as long as it doesn't get on the pins.

After thoroughly drying, use a SHARP knife with a gentle sawing motion to slice the excess glue off of the face of the print-head. Be sure that the front surface is flat and flush with the impact-pins. Then reinstall the print-head in head carriage, and the printer is ready to go back on line.

# ARTIST FUNCTIONS

SYMBOL	FUNCTION	TYPE	USE OF ENTER/FIRE	COMMENTS
D	Draw	cmd	start/stop	hold fire down
P	Point	cmd	place	
L	Line	cmd	begin/end	
K	K-Line	cmd	begin/intermediate	D to exit
R	Rays	cmd	center/start/stop	D to exit
F	Fill	cmd	do	SPACE to abort
V	Frame	cmd	1st corner, opp. corner	
X	Box	cmd	1st corner, opp. corner	fills w/ pattern
O	Circle	cmd	center/edge	
Q	Disk	cmd	center/edge	fills w/ pattern
CTRL-A	Clear Image	cmd		leaves color, pattern
H	Hor/ Vert	cmd	begin/end	
N	Swap	cmd	new color/old color	
I	Invert	mode		negative image
E	AlphaNumeric	cmd	Begin lower left/stop	does not use fonts use CTRL x for width, FCTN x for height
CTRL-B	Clear Color	cmd		leaves pattern
S	Store	menu		load/save/index picture
Z	Zoom	mode	select window	move with cursor cmds
M	Mirror	mode		4 reflections
C	Hard Copy	menu		
FCTN-. .	Plot/Erase	mode		
FCTN-,	Foregnd Color	cmd	change to next color	
FCTN-:	Cursor Speed	mode		fast/slow toggle switch
F icon	Foreground/ Background	mode		color chosen will be foreground or background
P icon	Pattern in use	mode	display next pattern	only P is solid
- icon	Color Cursor	mode		use P to clean up color borders

## ENHANCEMENT FUNCTIONS

M	Move w/o Color		select top left/bottom right/place	T to check
N	Move w/ Color		select top left/bottom right/place	T to check
C	Copy w/o Color		select top left/bottom right/place	T to check
D	Copy w/ Color		select top left/bottom right/place	T to check
A	AlphaNumeric	menu	enter text/place text	SPACE to exit, T to check
	Use a Slide		select/place	SPACE to exit
S	Slides	menu		
	Define		pick box/define slide	SPACE to exit
	Erase		pick slide	SPACE to exit
	Rotate		pick slide	SPACE to exit
	Load Slide file			_S added to filename
	Save Slide file			_S added to filename
	Load Instance		enter name/place instance	T to check
	Save Instance		enter name/select top left/ bottom right	_I added to filename

keyboard cursor movement:

Horizontal/vertical--S/E/D/X  
Diagonal--W/R/C/Z

```

+C-0
540 S=S1-(7*INT(S1/7))
550 IF S<>0 THEN 570
560 S=7
570 GOTO 620
580 S=3
590 DATA " 1"," 2"," 3"," 4"
," 5"," 6"," 7"," 8"," 9","1
0","11","12","13","14","15",
"16"
600 DATA "17","18","19","20"
,"21","22","23","24","25","2
6","27","28","29","30","31"
610 !
620 FOR F=1 TO 31 :: READ D$
(F):: NEXT F
630 PRINT #1:CHR$(10);CHR$(1
0);CHR$(10);CHR$(10);CHR$(27
);CHR$(50);
640 I$="  J A N U A R Y
      F E B R U A R Y
      M A R C H"
650 J$="      A P R I L
      M A Y
      J U N E"
660 K$="      J U L Y
      A U G U S T
      S E P T E M B E R"
670 L$="      O C T O B E R
      N O V E M B E R
      D E C E M B E R"
680 M$=" S M T W T F S
      S M T W T F S
      S M T W T F S"
690 PRINT #1:I$;:: A1=S :: D
1,D3=31
700 IF INT(Y/4)<>Y/4 THEN 73
0
710 IF INT(Y/100)<>Y/100 THE
N 740
720 IF INT(Y/400)=Y/400 THEN
740
730 D2=28 :: GOTO 750
740 D2=29
750 GOSUB 810
760 PRINT #1:J$;:: D1,D3=30
:: D2=31 :: GOSUB 810
770 PRINT #1:K$;:: D1,D2=31
:: D3=30 :: GOSUB 810
780 PRINT #1:L$;:: D1,D3=31

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```

:: D2=30 :: GOSUB 810
790 PRINT #1:CHR$(10);CHR$(1
0);
800 GOTO 960
810 FOR J=1 TO 42 :: A$(J),B
$(J),C$(J)=" " :: NEXT J
820 PRINT #1:M$
830 D=1
840 FOR K=A1 TO A1+D1-1 :: A
$(K)=D$(D):: D=D+1 :: NEXT K
850 D=1 :: A2=A1+D1-(7*INT((
A1+D1-1)/7))
860 FOR L=A2 TO A2+D2-1 :: B
$(L)=D$(D):: D=D+1 :: NEXT L
870 D=1 :: A3=A2+D2-(7*INT((
A2+D2-1)/7))
880 FOR M=A3 TO A3+D3-1 :: C
$(M)=D$(D):: D=D+1 :: NEXT M
890 FOR N=1 TO 36 STEP 7
900 PRINT #1:A$(N);TAB(4);A$
(N+1);TAB(7);A$(N+2);TAB(10)
;A$(N+3);TAB(13);A$(N+4);TAB
(16);A$(N+5);TAB(19);A$(N+6)
;TAB(25);
910 PRINT #1:B$(N);TAB(28);B
$(N+1);TAB(31);B$(N+2);TAB(3
4);B$(N+3);TAB(37);B$(N+4);T
AB(40);B$(N+5);TAB(43);B$(N+
6);TAB(49);
920 PRINT #1:C$(N);TAB(52);C
$(N+1);TAB(55);C$(N+2);TAB(5
8);C$(N+3);TAB(61);C$(N+4);T
AB(64);C$(N+5);TAB(67);C$(N+
6)
930 NEXT N
940 PRINT #1:CHR$(10);CHR$(1
0)
950 A1=A3+D3-(7*INT((A3+D3-1
)/7));: RETURN
960 RESTORE
970 DISPLAY AT(10,1)ERASE AL
L:"ANOTHER CALENDAR? Y" :: A
CCEPT AT(10,19)SIZE(-1)BEEP
VALIDATE("YNyn"):P$
980 IF P$="Y" OR P$="y" THEN
150 ELSE 990
990 PRINT #1:CHR$(27);CHR$(6
4):: CLOSE #1 :: CALL CLEAR
:: END
601)/400):: S1=3+(Y-1974)+L-

```

```

100 ! CALENDAR PROGRAM
110 !BY RALPH FIELD
120 DISPLAY AT(1,1)ERASE ALL
BEEP:"WAITING FOR PRINTER"
130 OPEN #1:"PIO"
140 PRINT #1:CHR$(10);CHR$(2
7);CHR$(65);CHR$(5);CHR$(27)
;CHR$(71)
150 DIM A$(50),B$(50),C$(50)
,D$(50)
160 DISPLAY AT(5,1)ERASE ALL
:"THIS PROGRAM PRINTS OUT":
:"A CALENDAR FOR ANY YEAR."
:"": "PLEASE ENTER THE YEAR":
:"": "OF THE DESIRED CALENDAR"
170 DISPLAY AT(15,1):"19" ::
ACCEPT AT(15,3)SIZE(2)BEEP:
Y :: Y=Y+1900
180 !
190 P1=VAL(SEG$(STR$(Y),1,1)
):: Q1=P1 :: P2=VAL(SEG$(STR
$(Y),2,1)):: Q2=P2 :: P3=VAL
(SEG$(STR$(Y),3,1)):: Q3=P3
:: P4=VAL(SEG$(STR$(Y),4,1)
):: Q4=P4
200 V(1)=P1 :: V(2)=P2 :: V(
3)=P3 :: V(4)=P4
210 FOR R7=1 TO 12 :: PRINT
#1:CHR$(27);CHR$(77);CHR$(8)
::: FOR I=1 TO 4
220 ON V(I)+1 GOTO 230,280,3
30,370,390,400,430,440,450,4
60
230 ON R7 GOTO 240,250,270,2
70,270,270,270,270,250,240
240 PRINT #1:" *****
";:: GOTO 470
250 PRINT #1:" *****
";:: GOTO 470
260 PRINT #1:" *** ***
";:: GOTO 470
270 PRINT #1:" ** **
";:: GOTO 470
280 ON R7 GOTO 290,300,310,2
90,290,290,290,290,290,290,3
20,320
290 PRINT #1:" **
";:: GOTO 470
300 PRINT #1:" ****
";:: GOTO 470
310 PRINT #1:" *****
";:: GOTO 470

```

```

320 PRINT #1:" *****
";:: GOTO 470
330 ON R7 GOTO 340,340,350,3
50,350,340,340,360,360,360,3
40,340
340 PRINT #1:" *****
";:: GOTO 470
350 PRINT #1:" **
";:: GOTO 470
360 PRINT #1:" **
";:: GOTO 470
370 ON R7 GOTO 240,250,270,2
70,350,380,380,350,270,270,2
50,240
380 PRINT #1:" *****
";:: GOTO 470
390 ON R7 GOTO 270,270,270,2
70,340,340,350,350,350,350,3
50,350
400 ON R7 GOTO 340,340,360,3
60,360,410,420,350,270,270,2
50,240
410 PRINT #1:" *****
";:: GOTO 470
420 PRINT #1:" *****
";:: GOTO 470
430 ON R7 GOTO 360,360,360,3
60,360,360,340,340,270,270,3
40,340
440 ON R7 GOTO 340,340,350,3
50,350,350,350,350,350,350,3
50,350
450 ON R7 GOTO 240,250,270,2
70,270,250,250,270,270,270,2
50,240
460 ON R7 GOTO 340,340,270,2
70,340,340,350,350,350,350,3
50,350
470 NEXT I
480 PRINT #1:CHR$(10):: NEXT
R7 :: PRINT #1:CHR$(10);CHR
$(27);CHR$(77);CHR$(4)
490 !
500 IF Y=1974 THEN 530
510 IF Y<1974 THEN 530
520 L=INT((Y-1973)/4):: C=IN
T((Y-1901)/100):: Q=INT((Y-1
601)/400):: S1=3+(Y-1974)+L-
C+Q :: GOTO 540
530 L=INT((1976-Y)/4):: C=IN
T((2000-Y)/100):: Q=INT((200
0-Y)/400):: S1=-4-(1974-Y)-L

```

```

90 !3 COLUMN CATALOGER
    EXTENDED BASIC
    BY JACK E. EVANS SR.
100 CALL SCREEN(4):: DISPLAY
AT( 4,3)ERASE ALL:"3-COLUMN
DISK CATALOGER":""," BY JACK
E. EVANS SR."
110 DISPLAY AT(14,1):"PUT DI
SK TO BE CATALOGED IN":"","D
RIVE 1 AND PRESS ANY KEY"
120 CALL KEY(X,Y,Z):: IF Z=0
    THEN 120
130 DIM TYPE$(5)
140 TYPE$(1)="D/F" :: TYPE$(
2)="D/V" :: TYPE$(3)="I/F" :
: TYPE$(4)="I/V" :: TYPE$(5)
="PRG" :: A=1
150 OPEN #1:"DSK"&STR$(A)&".
",INPUT,RELATIVE,INTERNAL
160 DISPLAY AT(12,6)ERASE AL
L:"TURN ON THE PRINTER!"
170 OPEN #2:"PIO" :: PRINT #
2:CHR$(13):: DISPLAY AT(12,6
):"WORKING...."
180 INPUT #1:A$,J,J,K
190 PRINT #2:TAB(4);"DISKNAM
E=";A$;TAB(32);"AVAILABLE=";
K;TAB(59);"USED=";J-(K-2);CH
R$(10)
200 FOR ST=1 TO 80 :: PRINT
#2:"-";:: NEXT ST
210 FOR LOOP=1 TO 127
220 FOR X=1 TO 3 :: INPUT #1
:Q$(X),R(X),S(X),T(X):: NEXT
X
230 A#=Q$(1):: A=R(1):: J=S(

```

```

1):: K=T(1)
240 IF LEN(A$)=0 THEN 430
250 PRINT #2:A$;TAB(12);J;TA
B(17);TYPE$(ABS(A));
260 IF ABS(A)=5 THEN 290
270 B$=" "&STR$(K)
280 PRINT #2:SEG$(B$,LEN(B$)
-2,3);
290 A#=Q$(2):: A=R(2):: J=S(
2):: K=T(2)
300 IF LEN(A$)=0 THEN 430
310 PRINT #2:TAB(28);A$;TAB(
40);J;TAB(45);TYPE$(ABS(A));
320 IF ABS(A)=5 THEN 350
330 B$=" "&STR$(K)
340 PRINT #2:SEG$(B$,LEN(B$)
-2,3);
350 A#=Q$(3):: A=R(3):: J=S(
3):: K=T(3)
360 IF LEN(A$)=0 THEN 430
370 PRINT #2:TAB(56);A$;TAB(
68);J;TAB(73);TYPE$(ABS(A));
380 IF ABS(A)=5 THEN PRINT #
2:" " :: GOTO 410
390 B$=" "&STR$(K)
400 PRINT #2:SEG$(B$,LEN(B$)
-2,3);
410 LOOP=LOOP+2
420 NEXT LOOP
430 CLOSE #1 :: CLOSE #2
440 DISPLAY AT(12,6)ERASE AL
L BEEP:"ANOTHER DISK? Y" ::
ACCEPT AT(12,20)SIZE(-1)VALI
DATE("YNyn");AN$ :: IF AN$="
Y" OR AN$="y" THEN 100
450 DISPLAY AT(12,6):"BYE!"

```

```

*****
*           FOR SALE           *
* * * * * * * * * * * * * * * *
* TRS 80 MODEL 4 W/2 DS/DD *
* DRIVES. 128K. MANY PRGMS *
*           $400.00           *
* * * * * * * * * * * * * * * *
* TRS 80 MODEL 3 W/2 SS/DD *
* DRIVES. 48K MANY PRGMS *
*           $200.00           *
* * * * * * * * * * * * * * * *
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*****

```



ASGARD'S LEGENDS: A REVIEW  
Copyright 1987 by Walter Howe  
Via Hoosier Users Group - Nov 87

I have spent a lot of hours (too many) playing ASGARD Software's new adventure game, LEGENDS. This superb effort by Donn Granros and Ed Johnson rivals Infocom adventure games in the scope of its play, although it is not a text adventure as Infocom games are. In LEGENDS, a party of four adventurers with different abilities explore a land and its dungeons by means of a map which appears on screen and scrolls as the party traverses to different locations. The total map is many times as large as the screen. You spend your time monster bashing, collecting gold, solving puzzles, gathering intelligence, and building up the strength and ability of the party through combat experience and gathering better weapons. Periodically, you must make your way back to the home town of Wizard's Rock for R&R, reprovisions, and training the party members to higher skill levels. If all this sounds like Dungeons & Dragons, that's exactly what it is, of course.

Dungeons & Dragons at its best is exciting, imaginative, and takes some of the role playing skills of actors in improvisational theatre. At its worst, it is a mechanical exercise in dice rolling. In computer simulations of the game, it is much easier to achieve the latter than the former.

Infocom games (the Zork trilogy, Sorcerer, Enchanter, etc.) strive to look like the former through hiding the dice rolling quite successfully and concentrating on text interaction. In an Infocom game, by typing out the things you want to do in fairly free form text, you always have many possibilities for action and can pit your imagination against the creatures. It has always amazed me how many absolutely absurd things you can do that were anticipated by Infocom adventure authors. You are limited to things that they have anticipated, of course, but the limits are broad, and you rarely find the play mechanical. In LEGENDS, like in Tunnels of Doom from TI, you are much closer to the dice rolling. You can almost feel the dice roll as you engage in combat. Your characteristics such as experience points, hit points, magic points, etc., are displayed on screen whenever you fight. Your attacks on monsters are represented in points; your own wounds are represented in points, and so on. In this way, the outcome of combat is always displayed in numerical form. It's very artificial, but it's the way that D&D players have done it for years, and it is accepted as part of this type of game. The challenge to the authors, who have adopted this type of approach is to keep the game interesting through all the dice rolling. It takes a long time to build up sufficient skills and weaponry to survive against the bigger monsters and to explore the more dangerous regions of the large world of LEGENDS. It should take a long time, though! If it is made too easy, the game loses much of its challenge - a flaw that is found in many conventional D&D games as well as computer simulations. The authors have

achieved a very successful balance in juggling these different considerations - keeping it interesting while avoiding making it a giveaway game. Not all will agree with me on this. It does take some patience when you are challenged by a wandering party of Ruffians for the ninth time in the game, and you set out to bash them into submission like all the previous eight parties you met. But you need the gold they carry and the experience in fighting to copy with the challenges ahead of you. There are many opportunities for you to calculate wrong, too, and see your own party wiped out when it is at its weakest after a series of encounters. You have control of enough factors in the game - how you equip yourself, what magic potions you buy and carry with you, what difficulty level you set for the current venture, when you explore, how thorough your intelligence gathering is, what hidden puzzles you have figured out - to keep the game fairly fresh through the long hours of play. It is not nearly as confining as Tunnels of Doom. Patience is a prerequisite, but your patience will eventually be rewarded. Don't expect to finish the game in a day, either.

The game comes on two full disks (full in 4A terms) with a game booklet. If you have double-sided or double density drives, the booklet recommends you copy the unprotected disks to a single disk to preclude a need for disk-swapping during play of the game. Frequent reference to disks are required as the game is many times as large as the memory capacity of the 4A. You can speed play up even more by playing from RAMdisk, as long as you have close to 720 sectors of RAMdisk to use and can redesignate the RAMdisk as drive one. I have been playing the game from the 720k RAMdisk capability built into the 9640 as drive 5, but to do so, I went through the copied disk and changed all references to DSK1 to DSK5 instead. The program autoloads from XBASIC, but since I have altered my XBASIC to look for DSK5 instead of DSK1 anyway, it all works fine in my setup.

I'm not going to try to give any numerical ratings to LEGENDS as many reviews do. The game will be stimulating to some and a bore to others. I think I have told you enough to decide for yourself which category you will find yourself in. The game is superbly conceived and executed. It is by far the best game of the dice rolling D&D type for the 4A. Nothing else comes close. If you have found lesser efforts interesting in the past (Granros' Old Dark Caves, Tunnels of Doom, the Doom of Mondular series, etc.), you will be enthralled by this one. If you were bored by such games in the past, there is a chance that this one is so much better that it will interest you this time, but don't count on it.

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~~5AUG/88~~ CONVERT ~~5~~ DAVID DHEIN, ENHANCED BY PAUL BERG ~~MOBILE, AL~~  
 CONVERTS TI-ARTIST FILES TO TI-WRITER FILES (9 DISK SECTORS)

```

>100 DISPLAY ERASE ALL AT(1,4
  ):"TI-ARTIST TO TI-WRITER":
  ;"  CONVERSION PROGRAM"
>110 DISPLAY AT(5,1):"INSTANC
  E file name:"
>120 ACCEPT AT(5,21)SIZE(8):N
  AMES
>130 DISPLAY AT(7,3):"The fil
  e is on drive 1"
>140 ACCEPT AT(7,24)SIZE(-1)V
  ALIDATE(DIGIT):FD
>150 DISPLAY AT(8,1):"Which, d
  rive for new file? 1"
>160 ACCEPT AT(8,27)SIZE(-1)V
  ALIDATE(DIGIT):SD
>170 DISPLAY AT(10,1):"Select
  printer: 1": ;" 1 Epson":
  ;" 2 Prowriter"
>180 ACCEPT AT(10,17)SIZE(-1)
  VALIDATE(DIGIT):P
>190 A$="DSK"&STR$(SD)&". "&NA
  MES
>200 NAMES$="DSK"&STR$(FD)&". "
  &NAMES&"I"
>210 DISPLAY AT(18,8):"...Wor
  king."
>220 OPEN #1:NAMES$,INPUT
>230 OPEN #2:A$,OUTPUT
>240 INPUT #1:X,Y
>241 DISPLAY ERASE ALL AT(1,1
  ):"OUTPUT CENTERED ? Y" :: A
  CCEPT VALIDATE("YN")SIZE(-1)
  AT(1,19):C$
>250 IF X*Y>25 THEN DISPLAY A
  T(20,4):"This may take awhile
  e." :: DISPLAY AT(21,4):"Ple
  ase be patient..."
>260 PRINT #2:".TL 92:10" ! ~
  -CHR$(10)-LINE FEED
>270 IF P=1 THEN PRINT #2:".T
  L 61:27,65,8" :: PRINT #2:".
  TL 62:27,65,12" :: PRINT #2:
  "-" :: GOTO 290 ! EPSON COM
  MANDS
>275 ! - IS 8/72 LINE SPACE
  > IS 12/72 LINE SPACE
>280 PRINT #2:".TL 62:27,65"
  :: PRINT #2:CHR$(27)&"T16"::
  PRINT #2:"^" ! PROWRITER COM
  MANDS
>285 ! > IS 6 LINES TO INCH
  2nd LINE IS CUSTOM LIN
  E SPACE AT 16/144
>290 FOR K=1 TO Y
>300 FOR L=1 TO X
>310 IF P=1 THEN INPUT #1:C(7
  ),C(6),C(5),C(4),C(3),C(2),C
  (1),C(0):: GOTO 330
>320 INPUT #1:C(0),C(1),C(2),
  C(3),C(4),C(5),C(6),C(7)
>330 FOR I=7 TO 0 STEP -1
>340 A=C(I)
>350 FOR J=7 TO 0 STEP -1
>360 IF 2^J>A THEN 390
>370 A=A-2^J
>380 B(J)=B(J)+2^I
>390 NEXT J
>400 NEXT I
>410 A$=STR$(B(0))
>420 B(0)=0
>430 FOR I=1 TO 7
>440 A$=STR$(B(I))&","&A$
>450 B(I)=0
>460 NEXT I
>470 IF P=1 THEN PRINT #2:".T
  L "&SEG$(STR$(127-L),1,3)&":
  27,75,8,8,"&A$ :: GOTO 490
>480 PRINT #2:".TL "&SEG$(STR
  $(127-L),1,3)&":27,83,48,48,
  48,56,"&A$
>490 NEXT L
>491 IF C$="Y" THEN PRINT #2:
  ".CE"
>500 N$="" :: FOR N=1 TO X ::
  N$=N$&CHR$(127-N):: NEXT N
  :: PRINT #2:N$&"^"
>510 NEXT K
>520 FOR N=1 TO X :: N$=".TL
  " :: N1$=SEG$(STR$(127-N),1,3
  ) :: N$=N$&N1$&":"&SN1 :: PRI
  NT #2:N$ :: NEXT N
>530 PRINT #2:".TL 92:92
>540 IF P=1 THEN PRINT #2:".T
  L 61:61
>550 PRINT #2:">"
>560 PRINT #2:".TL 62:62
>570 CLOSE #1
>580 CLOSE #2
>590 END

```

K\*3 TI USERS GROUP  
 BOARD MINUTES  
 December, 1987  
 by George Lempeotis  
 SECRETARY

Happy New Year everybody. I hope 1988 turns out as well for the TI and our K\*3 TI Users Group as 1987 has. A lot of new things are happening for the TI 99/4A right now, a new computer, 80 column cards, new keyboards, and many new programs. Hopefully we will see more advances and improvements for our TI thru 1988 and beyond.

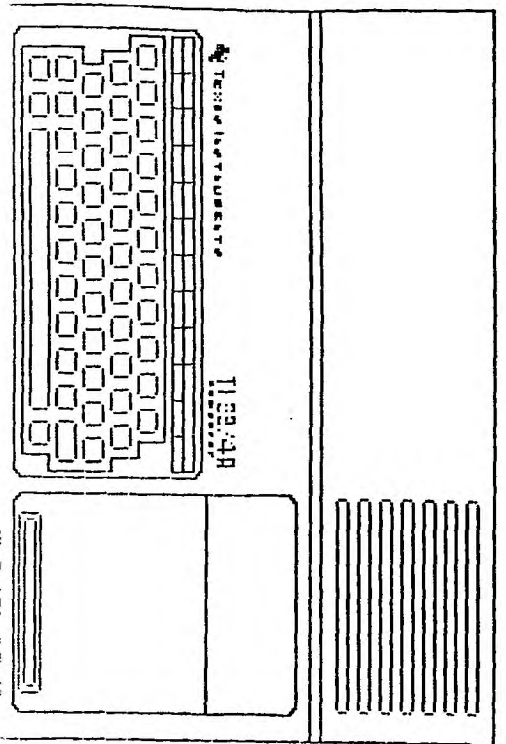
Our K\*3 TI Users Group is doing fairly well, still holding at about 23 members but the treasury is a little low on funds. If we do not sell some disks, or we lose some renewing members, we might not be able to put out the next newsletter in March, 1988. If we miss a newsletter remember we will still have the meeting at the same time and place, third saturday of the month at 1:00pm to 4:00pm in the Bourbonnais Municipal Center. Members should try to come to upcoming meeting to find out what is happening with the group and the next meeting.

The January 16, 1988 meeting will feature a demo of the Spad XIII Mark II flight simulator from Not Polyoptics by George Lempeotis. The Feburary 20, 1988 meeting will feature a demo for the Basic Compiler from Ryte Data by Mark Harms.

Please come to the next meeting and buy some disks ( \$5.00 per 10 ) and/or renew your membership ( \$5.00 a year ), support your Users Group and keep our fine newsletter going. Hope to see you at the next meeting.

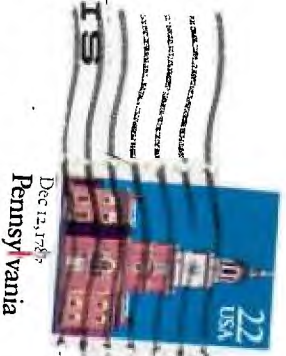
K\*3 TI USERS GROUP  
 P.O. BOX 1945  
 KANKAKEE, IL 60901

JANUARY							FEBRUARY						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
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3	4	5	6	7	8	9	7	8	9	10	11	12	13
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24	25	26	27	28	29	30	28	29					
31													



BOURBONNAIS  
 MUNICIPAL  
 CENTER

1 pm - till 4 pm



EDMONTON 99'ER USERS  
 P.O. BOX 11983  
 EDMONTON ALBERTA CANADA T5J-3L1

EXPENSE