

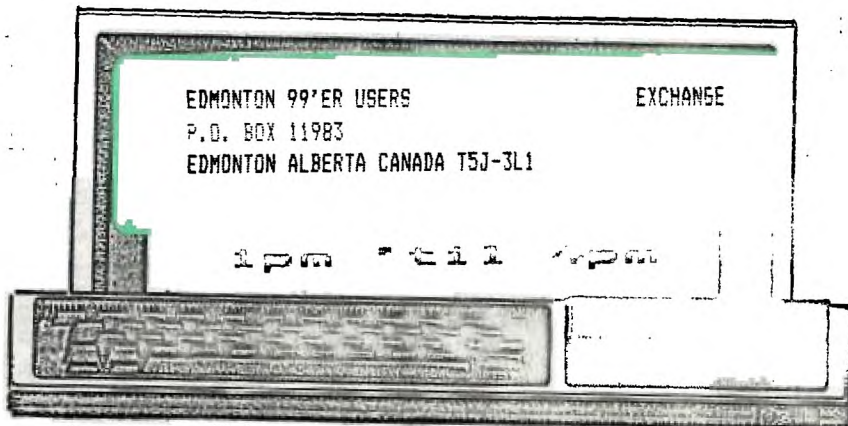
K3 USERS GROUP
PO BOX 1941
KANKAKEE, IL.
60901



KANKAKEE TI USERS GROUP

NEXT MEETING

JUNE 15, 1985



BOURBONNAIS MUNICIPAL CENTER



EDITORS PAGE



BY MARK HARMS

WELL HERE IT IS THE CES SHOW COME AND GONE!! RYTE DATA
WHAT HAPPENED??

I really had high hopes this time, (but then this HAS
happened before) for the new computer. After recieving all
those FACTS about the new system I was sure this was not just
another mean trick to play on us.

First I heard the on that "T1" would not leave the
market! (ha)

Later there was on about TOMY making a compatible.

Still later there rumor that a company in California had
come up with a 99/8.

Then a Japenese firm was to by the rights.
etc,etc,etc....!

ALL these unfounded incompleted rumors of a false hope
were soundly thrashed and really have left me quite
bewildered. If not angry.

Now more resently comes the report of two different
firms one in California with the 99/64 and a place in Canada
that covered the country's PBS with the hope of a 99/128 to
be seen a the CES SHOW IN JUNE well it came and went and
noting was there, representatives of our group asked for you,
response was confused looks, ask about a vendor that may have
this new system, more confused looks, and a snicker or two.

Well there's a song in the musical "MY FAIR LADY" the
start out:

WORDS WORDS WORDS I'M SO SICK OF WORDS!!! I GET WORDS
ALL DAY LONG, FIRST FROM HIM, NOW FROM YOU, IS THAT ALL YOU
BLIGHTERS CAN DO???

It goes on to the point : "ODN'T TALK TO ME SHOW, ME
SHOW ME NOW!!"

DON'T TALK OF SPEED DOUBLE OR TRIPPLE,
DON'T TALK OF COMPATIBLES TO MAKE MY HEART RIPPLE,
DON'T TALK OF FACTS OF WHERE AND OF HOW!!!!

S H O W M E N O W !!!

I feel much better now.

MINUTES

Minutes K3 TI Users Group Board Meeting
May 26, 1985
by George Lempeotis Secretary

There were 6 board members in attendance at the May board meeting.

The library sales were still slow at the May general meeting. Hopefully the garage sale of May 31 and June 1 will generate funds for some new library purchases. Thanks, to everyone who donated, for the items that were brought to the garage sale.

The election for board members will be conducted in June. You can bring in your ballot (received in the May newsletter or pick up ballots at the meeting) to the June general meeting, or you can mail your ballot in before the June meeting (June 15, 1985, and mail to P. O. Box 1945 Kankakee, IL 60901). In order to speed up processing of the mailed in ballots, it would be helpful to put your membership number on the front of the envelope. Have a say in the actions of this club, please vote.

The June general meeting will feature demos of two basic compiling programs again. This will be a repeat of the May general meeting, due to bad conditions at an outdoor meeting (windy and cold), the board decided to repeat the demos. Hopefully the June general meeting will be held under better conditions. One demo will be of the SST Basic Compiler by Al Johnson, the second demo will be of the Advance Software Basic Compiler by George Lempeotis.

That is all we covered at the May board meeting. Hope to see you at the June 15 meeting.

HINTE FOR OUTTHSOAT

BT 001 100 001

Well hello again, its been over 100 months since we last had a chance to talk about our adventure through Zork II. Well since then I have tried my hand at several new adventures, such as Outthsoat, Enchanted, and of course Zork III. It has been a real "TRIF" if you know what I mean. In the next few months to come I will be giving special tips on all 4 of these adventures. Again, if you have a question about any of these adventures or you need more information on them just call.

This seems to be a difficult adventure for I keep getting myself killed by McGinty. No matter where I turn he always seems to be there. Well I finally figured out that he is money hungry. Once I get my passbook from my hotel room I noticed that he does a doubletake and from there on he's always there. I also noticed that if I drop the passbook at the bank after I withdraw the money. He loses my trail for a while so that I can get to the lookout. If McGinty follows you to the meeting place, give it up cause your ready to get killed. DON'T buy anything in front of McGinty, wait till he leaves (it will take time but he does get tired). If you do buy something in front of him again he will start following you and he will make it very difficult to buy anything.

Now I know for a fact that there are drinkers out there. Try not to make the the same mistake that I made when I went to the shanty, try drinking water with your dinner. If by chance you do find yourself drunk don't worry like all drinks you will sober up with time. Unless of course you drank too fast. Well then your finished.....Now then if you are playing this adventure without cheating, then you will need to know, Johnny will want to know if the treasure is deeper then 200 feet. Now this depends on what he showed you at the lighthouse. If he showed you a coin then that means you'll be salvaging the SAO-VERA. If he showed you a plate, then you'll be salvaging the Leviathan. Just tell Johnny that it's deeper then 200 feet. Also if you get the money before you go to the lookout, bring it with you and show it to Johnny when he asks you for it. If you don't have it with you, don't fret, he'll kill you.

Well fellow adventures, this is about all the help that I can offer at this time cause it has taken me this long to get this far. I kept on getting killed by the gang that I was suppose to meet on B. McGinty. I will do my best at trying to solve this little mystery and hopefully next month I will know a little more.

BT 001 100 001

5

MUSICAL MOMENTS

100 REM BY RICHARD DE ROOS

110 REM EX-BASIC

120 REM YOUR CHEATIN' HEART

130 FOR R=1 TO 2

140 CALL CLEAR

150 Z=400 :: Y=1600 :: X=200 :: W=600 :: V=1200 :: Q=0 :: P=10

160 A=440 :: B=493 :: C=523 :: D=587 :: E=329 :: F=349 :: G=391 :: H=240 :: J=36
9 :: K=256

170 CALL SOUND(Z,G,Q):: CALL SOUND(Z,C,Q):: CALL SOUND(X,A,Q):: CALL SOUND(X,G,Q
)

180 CALL SOUND(Y,E,Q,C,P,G,P):: CALL SOUND(Z,E,Q,C,P,G,P):: CALL SOUND(Z,G,Q,C,P
,E,P):: CALL SOUND(Z,A,Q,C,P,E,P)

190 CALL SOUND(Z,G,Q,C,P,E,P):: CALL SOUND(Y,F,Q,A,P,C,P):: CALL SOUND(Z,F,Q,A,P
,C,P):: CALL SOUND(Z,C,Q,F,P,A,P)

200 CALL SOUND(Z,C,Q,F,P,A,P):: CALL SOUND(X,D,Q,F,P,A,P):: CALL SOUND(X,C,Q,F,P
,A,P):: CALL SOUND(Y,B,Q,G,P,D,P):: CALL SOUND(Z,B,Q,G,P,D,P)

210 CALL SOUND(Z,G,Q,B,P,D,P):: CALL SOUND(Z,A,Q,B,P,D,P):: CALL SOUND(Z,F,Q,B,P
,D,P):: CALL SOUND(Y,E,Q,C,P,G,P):: CALL SOUND(Z,E,Q,C,P,G,P)

220 CALL SOUND(Z,G,Q):: CALL SOUND(Z,C,Q):: CALL SOUND(X,A,Q):: CALL SOUND(X,G,Q

230 CALL SOUND(Y,E,Q,C,P,G,P):: CALL SOUND(Z,E,Q,C,P,G,P):: CALL SOUND(Z,G,Q,C,P
,E,P):: CALL SOUND(Z,A,Q,C,P,E,P):: CALL SOUND(Z,G,Q,C,P,E,P)

240 CALL SOUND(Y,F,Q,A,P,C,P):: CALL SOUND(Z,F,Q,A,P,C,P):: CALL SOUND(Z,C,Q,F,P
,A,P):: CALL SOUND(Z,C,Q,F,P,A,P):: CALL SOUND(X,D,Q,F,P,A,P):: CALL SOUND(X,C,Q

,F,P,A,P)

250 CALL SOUND(Y,B,Q,G,P,D,P):: CALL SOUND(Z,B,Q,G,P,D,P):: CALL SOUND(Z,E,Q,G,P
,D,P):: CALL SOUND(Z,F,Q,G,P,D,P):: CALL SOUND(X,H,Q,G,P,D,P)

260 CALL SOUND(Y,K,Q,E,P,G,P):: CALL SOUND(Z,K,Q,E,P,G,P):: CALL SOUND(Z,C,Q,E,P
,G,P):: CALL SOUND(Z,C,Q,E,P,G,P):: CALL SOUND(Z,C,Q,E,P,G,P)

270 CALL SOUND(Y,C,Q,F,P,A,P):: CALL SOUND(Z,C,Q,F,P,A,P):: CALL SOUND(Z,C,Q,F,P
,A,P):: CALL SOUND(W,C,Q,F,P,A,P):: CALL SOUND(Z,C,Q,F,P,A,P)

280 CALL SOUND(X,A,Q,C,P,E,P):: CALL SOUND(X,G,Q,C,P,E,P):: CALL SOUND(Y,G,Q,C,P
,E,P):: CALL SOUND(Z,G,Q,C,P,E,P):: CALL SOUND(Z,C,Q,E,P,G,P)

290 CALL SOUND(Z,C,Q,E,P,G,P):: CALL SOUND(Z,C,Q,E,P,G,P):: CALL SOUND(Y,C,Q,J,P
,A,P):: CALL SOUND(Z,C,Q,J,P,A,P):: CALL SOUND(Z,A,Q,J,P,D,P)

300 CALL SOUND(Z,B,Q,J,P,D,P):: CALL SOUND(Z,C,Q,J,P,D,P):: CALL SOUND(Y,B,Q,G,P
,D,P):: CALL SOUND(Z,B,Q,G,P,D,P):: CALL SOUND(Z,G,Q)

310 CALL SOUND(Z,C,Q):: CALL SOUND(X,A,Q):: CALL SOUND(X,G,Q):: CALL SOUND(Y,E,Q
,C,P,G,P):: CALL SOUND(Z,E,Q,C,P,G,P)

320 CALL SOUND(Z,G,Q,C,P,E,P):: CALL SOUND(Z,A,Q,C,P,E,P):: CALL SOUND(Z,G,Q,C,P
,E,P):: CALL SOUND(Y,F,Q,A,P,C,P):: CALL SOUND(Z,F,Q,A,P,C,P):: CALL SOUND(Z,C,Q

,F,P,A,P)

330 CALL SOUND(Z,C,Q,F,P,A,P):: CALL SOUND(X,D,Q,F,P,A,P):: CALL SOUND(X,C,Q,F,P
,A,P):: CALL SOUND(Y,B,Q,G,P,D,P):: CALL SOUND(Z,B,Q,G,P,D,P)

340 CALL SOUND(Z,G,Q,B,P,D,P):: CALL SOUND(Z,A,Q,B,P,D,P):: CALL SOUND(Z,B,Q,G,P
,D,P):: CALL SOUND(Y,C,Q,E,P,G,P):: CALL SOUND(Z,C,Q,E,P,G,P)

350 CALL SOUND(Z,G,Q):: CALL SOUND(Z,G,Q):: CALL SOUND(X,A,Q):: CALL SOUND(X,G,Q
)

360 NEXT R :: CALL SOUND(Y,C,Q,E,P,G,P):: CALL SOUND(Z,C,Q,E,P,G,P)

Thankyou one & all. The response to date is quite overwhelming. News about a TI compatible computer has reached a great number of people all over the US and Canada. In this issue we are covering more of the features of the 99/128. Our understanding at this point is that beta test units will be available in the first week of March.

MICROpendium magazine this month had an editorial which deserves comment. The 'two approaches' mentioned regarding a replacement console OR some sort of dual processor peripheral card to bridge the gap with say IBM will no longer be a concern. I had looked at the Morning Star and Foundation cards when they were introduced. I must admit CP/M is not really my favorite operating system. MS-DOS has become the defacto standard but it also has it's drawbacks. None the less this new computer will also have an option to add an 8088 card to the PEB!

This means that 'todays' operating system -MS-DOS- can be used with the new computer. The current range of software being written for the IBM type compatibles can be tapped. WE believe that this factor just about covers it. Currently VERY few computers run at 10 megahertz. THIS WILL BLOW 'EM OUT OF THE WATER! The best of all three worlds is at your doorstep. TI compatibility - MS-DOS and SPEED.

| There WILL be new software. Already we |
| have been contacted by expert 9900 |
| assembly code programmers. With more |
| memory and new high tech advances |
| programs can be developed that rival |
| THE BEST on the market. Several |
| programs will be introduced at the CES |
| show in June. |

| Don't get me wrong. I use MS-DOS right |
| now. I am familiar with 8 bit software |
| machines. Still CP/M does not do |
| justice to 16 bit technology. 8 bit |
| programs on a "16" bit machine are |
| SLOW...PLUS being cumbersome to use. |
| Like I said before- this monster will |
| outperform ANYTHING in its class - |
| perhaps many computers considered to |
| be beyond it. Couple THAT with an |
| existing software base - with new |
| packages coming out WITH the machine |
| (Atari and Commodore eat your hearts |
| out) we foresee new frontiers being |
| forged. Even the MAC has had real |
| problems with many software packages |
| coming out in the estimated time |
| frames this past year. |

| Look to see extensive third party |
| support in terms of hardware and |
| programming. Keeping the creative and |
| enthusiastic "third party" out of a |
| machine has killed more than one |
| computer manufacturer. Many people |
| believe this to be true with the |
| 99/4A. Looks as if IBM is going to try |
| the same. It will eat them alive |
| impartially. Market forces are not |
| entirely kind. |

Before I forget. MICROpendium can be obtained by writing PO Box 1343 Round Rock Texas 78680. Information about the TI is covered in depth. Mr. Koloen the publisher contacted us about the new machine. We will be trading data over the next few months. I recommend this reading for all TI owners.

99/128 Computer Facts #3

MORE SYSTEM FEATURES

To retain hardware compatibility the DSR routines have been kept. In the 99/4A the CRU bits were never fully decoded. Several areas were set aside as 'reserved' for future expansion - new console design ect. A programmable systems interface chip is used to access the 32 I/O lines available to move data from the console to the PEB drives ect. CRU (communications register unit) bits are set to address these lines individually. This feature has allowed the new design to keep the interface connections virtually identical. At the same time many new features have been designed in so the full power of the 9995 chip can be used. The design in the new computer has been done somewhat differantly as the programmable systems interface unit was the ONLY chip that actually interfaced to the 9900 chip from the CRU.

Thus magic features like
:multitasking interrupts were frozen in!
:the console ROM. This approach
:provided the limitations of the 4/A -
:regardless of what the CPU is capable!
:of. Now we should see software capable!
:of recalculating a large spreadsheet
:in short order while printing out
:another file - background mode tasks
:that can go directly to disk without
:stopping everything - letter printing
:and telecommunication functions all at
:once. The list goes on!

:
:Add that to the 128-512k-1 Mb of
:memory and dual processors! THIS is
:the computer that TI 'SHOULD' have
:developed & introduced in 1983.

:
:This information was obtained from

:
: Ryte Data
: Box 210 Mountain Street
: Haliburton Ontario K0M 1S0
: Canada
:

CLASSIFIED

FOR SALE: PE box with SS-SD drive, controller and 32K memory expansion. Wood computer desk. Contact Dan Morrisette at 815-436-4397.

DO NOT FORGET TO NOTE!!

```

100 REM REPRINTED FROM THE HUG NEWSLETTER
110 REM THIS PROGRAM PLAYS TREMOLO NOTES. CHANGE VALUE IN LINE 150 TO 1.01 OR
    1.03 FOR MORE OR LESS TREMOLO
120 REM ST. JAMES INFIRMARY BLUES-JIM PETERSON
130 FOR J=1 TO 60 STEP 2
140 READ A,B
150 FOR L=1 TO A
160 CALL SOUND(-99,B,0)
170 CALL SOUND(-99,B*1.01,0)
180 NEXT L
190 NEXT J
200 DATA 2,330,2,294,4,330,4,294,4,330,4,294,1,262,8,220
210 DATA 2,330,2,294,6,330,2,294,4,330,4,262,12,247
220 DATA 2,294,2,262,4,294,4,262,4,294,2,330,
    2,294,4,262,8,220
230 DATA 4,262,4,262,4,220,4,262,4,247,16,220

```

```

100 REM BY ROB WILLIAMS T.I.U.P.
110 REM
120 REM PROGRAM TO PLAY LOWEST CHROMATIC OCTAVE AND A NEW SUB OCTAVE
130 CALL CLEAR
140 X=110
150 K=2 (1/12)
160 PRINT "LOWEST OLD OCTAVE"
170 FOR N=12 TO 1 STEP -1
180 Y=X*K N
190 CALL SOUND(500,22000,30,22000,30,Y,30,-4,0)
200 NEXT N
210 CALL SOUND(500,22000,30,22000,30,825,30,-4,0)

```

```

100 REM THIS PROGRAM WILL PLAY AND PRINT THE FREQUENCIES FOR 2 ADDITIONAL
    OCTAVES OF BASS NOTES
105 REM USE THEM AS SHOWN IN LINE 160
107 REM BY JIM PETERSON
110 DEF R(X)=INT(X+.5)
120 F=1652
130 FOR J=1 TO 25
140 READ N#
150 PRINT N#;" =";R(F)
160 CALL SOUND(500,22000,30,22000,30,F,30,-4,0)
170 F=F/1.059463094
180 IF J<>12 THEN 200
190 RESTORE
200 NEXT J
210 DATA A,B FLAT,B,C,C#,D,E FLAT,E,F,F#,G,A FLAT,A

```

THESE MUSIC PROGRAMS WILL ENHANCE YOUR MUSIC PROGRAMS. GIVE THEM A TRY AND LET US KNOW WHAT YOU THINK OF THEM.

```

70 DIM T$(160)
100 CALL CLEAR
110 PRINT TAB(13);"LOVE": : : : :TAB(10);"created by": : : "   ** ROBERT INDIA
NE **": : : : : : :
120 PRINT "after screen display press      any key to continue"
130 FOR D=1 TO 1000
140 NEXT D
150 CALL CLEAR
160 A$="LOVE"
170 L=4
180 D=25
190 F=28
200 B=0
210 RESTORE 1250
220 CALL COLOR(1,7,7)
230 CALL COLOR(5,12,7)
240 CALL COLOR(6,12,7)
250 CALL COLOR(7,12,7)
260 CALL COLOR(8,12,7)
270 CALL SCREEN(7)
280 GOSUB 1000
290 GOTO 2000
450 REM PRINT TO PAPER
455 FOR I=1 TO 14
456 CALL COLOR(I,2,8)
457 NEXT I
460 CALL CLEAR
490 CALL SCREEN(8)
500 PRINT TAB(12);"LOVE": :
510 PRINT "  A TRIBUTE TO THE GREAT      AMERICAN ARTIST,"
520 PRINT : :TAB(7);"ROBERT INDIANA.": : : "HIS WORK WILL BE REPRODUCED   WITH A
  MESSAGE OF YOUR"
530 PRINT "CHOICE UP TO 80 CHARACTERS LONG. IF YOU CAN'T THINK OF A MESSAGE SI
MPLY TYPE THE"
540 PRINT TAB(8);"WORD 'LOVE'.": : : "  YOUR MESSAGE, PLEASE"
550 INPUT "":A$
560 L=LEN(A$)
570 D=49
580 F=80
590 B=1
600 RESTORE 1400
610 OPEN #1:"PI0"
620 GOSUB 1000
625 PRINT #1:CHR$(110)
630 CALL CLEAR
640 PRINT "DO YOU WISH TO PRINT ANOTHER"
650 INPUT "(Y/N)? ":C$
660 IF ASC(C$)=89 THEN 500
670 IF ASC(C$)=78 THEN 3000
680 PRINT "PLEASE PRINT YES OR NO "
690 GO TO 640
700 REM FORMAT APPAR

```

```

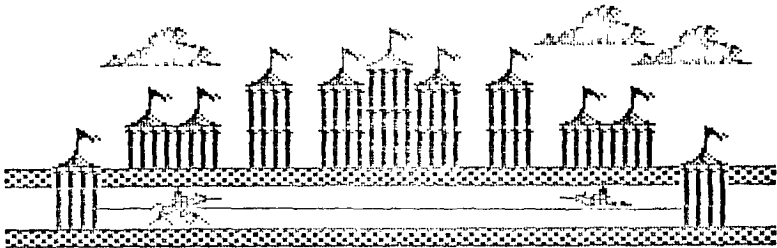
1020 FOR J=1 TO L
1030 T*(1+L+J)=SEG$(A$,J,1)
1040 NEXT J
1050 NEXT I
1060 C=0
1070 A1=1
1080 P=1
1090 C=C+1
1100 IF C=D THEN 1260
1110 READ A
1120 A1=A1+A
1130 IF P=1 THEN 1200
1140 FOR K=1 TO A
1150 PRINT #B:" ";
1160 NEXT K
1170 P=1
1180 GOTO 1240
1190 REM
1200 FOR I=A1-A TO A1-1
1210 PRINT #B:T$(I);
1220 NEXT I
1230 P=0
1240 IF A1>F THEN 1070
1250 GOTO 1110
1260 RETURN
1300 DATA 28,1,5,12,4,6,2,3,11,8,4,2,3,10,5,3,2,3,2,3,10,4,5,2,2
1310 DATA 2,3,10,3,6,2,2,2,3,10,2,6,3,2,2,3,8,1,1,2,5,4,2,2,3,7,2,1,3,3,5,2
1320 DATA 2,3,6,3,1,3,2,5,3,1,13,3,7,4,1,13,4,4,6,1,5,5,16,1,1,5,5,16,1
1330 DATA 2,3,7,1,3,3,5,3,1,3,3,5,1,4,3,7,1,1,3,3,5,1,4,3,2,1,6,4,3,3,1,5,6,6
1340 DATA 4,3,3,1,5,3,2,1,6,5,3,1,2,5,3,7,1,1,5,3,1,1,6,3,6,2,1,7,3,4,13,1,7,3,4
,13
1350 DATA 1,28
1400 DATA 80,1,15,36,12,16,2,12,33,22,11,3,10,33,25,9,4,8,32,28,8
1410 DATA 4,8,31,31,6,4,8,29,18,7,9,5,4,8,29,15,11,8,5,4,8,29,14,14,6,5
1420 DATA 4,8,29,13,15,6,5,4,8,29,12,16,6,5,4,8,29,11,16,7,5,4,8,29,10,16,8,5
1430 DATA 4,8,29,9,16,9,5,4,8,29,8,16,10,5,4,8,27,1,1,7,16,11,5
1440 DATA 4,8,26,2,1,7,15,12,5,4,8,25,3,1,7,14,13,5,4,8,24,4,1,9,11,14,5
1450 DATA 4,8,23,5,1,10,7,17,5,4,8,22,6,2,32,6,1,39,4,28,8,1,39,7,22,11
1460 DATA 1,39,12,12,16,1,16,9,53,1,1,16,9,53,1,1,16,10,52,1
1470 DATA 4,8,20,4,12,8,18,5,1,5,8,18,4,13,8,19,4,1,6,8,16,4,14,8,20,3,1
1480 DATA 6,8,16,4,14,8,21,2,1,7,8,14,4,15,8,22,1,1,7,8,14,4,15,8,9,1,14
1490 DATA 8,8,12,4,16,8,8,2,14,8,8,12,4,16,18,14,9,8,10,4,17,18,14
1500 DATA 10,8,8,4,18,8,8,2,14,10,8,8,4,18,8,9,1,14,11,8,6,4,19,8,24
1510 DATA 11,8,6,4,19,8,22,1,1,12,8,4,4,20,8,21,2,1,12,8,4,4,20,8,20,3,1
1520 DATA 13,8,2,4,21,8,19,4,1,13,14,21,8,18,5,1,14,12,17,36,1,15,10,19,36,1
1530 DATA 15,10,18,36,1,80
2000 CALL KEY(0,K,S)
2010 IF S=0 THEN 2000
2020 GOTO 450
3000 END

```

9900
DISK CONTROLLER

PRESS FOR
1 DISK MANAGER
2 TI BASIC
3
4
SPACE BAR FOR COLOR BAR

CHALLENGE OF CAMELOT



YOU



CHOOSE

L H S



SIR 99



MEMBERSHIP

MEMBERSHIP NOTES

By Bev Cook

Membership renewals have been doing quite well. We have picked up a few new members recently, also. Do you know anyone with a 99/4A that doesn't know about us? Invite them to a meeting. We can all benefit from the increased interest.

The following people are due for renewal. If you renew by mail, please make your check payable to the K3 USERS GROUP and send it to us. Thanks.

DOUG LIEB 4-85
PHILIP AND JUDITH WESTIN 5-85
MARILYN BRUSHERD 6-85
MARGE SMITH 6-85
VERA ELLIOTT 6-85
AL JOHNSON 6-85
BRUCE SHEARER 6-85
BEVERLY COOK 6-85
JIM JOHNSTON 6-85
DAN HESSLING 6-85
GEORGE LEMPEOTIS 6-85
RAY GUTTENDORF 7-85
DAN MORRISSETTE 7-85
RICHARD DE ROOS 7-85
GREG FEIGE 7-85
HARLYN SCHMIDT 7-85

MANAGER
HOWDY
PAPER
BECAUSE
WORKING
MANUAL
LOGO
TYPE
KEYBOARD
C
O
P
Y
M
O
D
E
M
P
L
A
N
T
H
O
R
I
T
Y
B
E
C
A
U
S
E
B
A
S
I
C
Y
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L
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LINE

- | | |
|------------------------------------|-------------------------------------|
| 1 - 29sp 4X | 17 - 4X 6sp 37X |
| 2 - 28sp 9X | 18 - 3X 8sp 35X |
| 3 - 27sp 5X | 19 - 2X 10sp 10X 2sp 22X |
| 4 - 26sp 5X | 20 - 1X 10sp 10X 9sp 17X |
| 5 - 25sp 8X | 21 - 9sp 5X 3sp 4X 15sp 5X 2sp 5X |
| 6 - 24sp 9X | 22 - 8sp 4X 5sp 4X 16sp 3X 5sp 4X |
| 7 - 24sp 8X 30sp 1X | 23 - 7sp 3X 8sp 2X 17sp 3X 7sp 3X |
| 8 - 24sp 8X 5sp 3X 10sp 7X 3sp 3X | 24 - 7sp 3X 8sp 2X 17sp 2X 10sp 2X |
| 9 - 25sp 13X 2sp 1X 6sp 15X | 25 - 6sp 2X 9sp 2X 18sp 2X 10sp 2X |
| 10 - 25sp 10X 6sp 1X 1sp 18X | 26 - 5sp 2X 11sp 2X 17sp 2X 11sp 2X |
| 11 - 23sp 9X 8sp 21X | 27 - 5sp 2X 12sp 2X 16sp 2X 12sp 2X |
| 12 - 4sp 6X 2sp 23X 2sp 15X 2sp 7X | 28 - 4sp 2X 13sp 2X 16sp 2X 12sp 2X |
| 13 - 2sp 48X 4sp 6X | 29 - 4sp 2X 14sp 2X 16sp 2X 11sp 2X |
| 14 - 1sp 8X 2sp 38X 1sp 2X 4sp 4X | 30 - 5sp 2X 13sp 2X 16sp 2X 12sp 2X |
| 15 - 8X 2sp 37X 5sp 2X 2sp 4X | 31 - 5sp 3X 12sp 3X 15sp 3X 11sp 3X |
| 16 - 6X 3sp 38X 7sp 2X 1sp 3X | |

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