

CPU NEWSLETTER



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Volume 8 Number 12 99er December, 1989
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Mini-Minutes

Nov. 20, 1989

The November meeting was probably the most informal meeting so far this year. Most of the 30 + members and guests were more interested in demonstrating/selling their extra TI equipment than talking about business.

Dave opened with a greeting to all of our guests and thanked the members who participated in October EXPO.

Barry indicated the treasury was still stable, but could use a good "shot in the arm", especially if we want to plan for another show next year.

Plans were discussed about the 1990 EXPO. Tony DeDonatis is trying to arrange a location in Hershey for us. If this comes thru, it could be bigger and better than anything on the East Coast! More details will follow as they materialize. (Secry note: We can have the Hershey Community Grounds? the last two weekends in September, or any weekend in October) The EXPO committee will be meeting, hopefully prior to the December meeting to discuss and vote on this. We must let C-CARS know our decision before Jan 1st.

Plans were made for the annual Christmas Party to be held on Monday nite, December 18, in lieu of our regular meeting. Everyone is asked to contribute something to the food table, if they can. The Group will provide the sodas, punch, etc.

Barry announced an update for PagePro99. He is gathering all of the original disks from the members and sending them back to Asgard in bulk. In return, will be the latest version. He asked that all members who purchased PagePro99 please take advantage of this offer. The savings on the update will be passed on the purchasers.

The 'flea market' was a great success for the group. Several new people signed up as members, several members purchased much wanted equipment and everyone had a good time. The meeting adjourned at 9pm.

Till next Time.

Barry Long, Secretary

! NOTICE ! NOTICE ! NOTICE ! NOTICE !
Next meeting will be Mon. Feb. 5, 1989
! NOTICE ! NOTICE ! NOTICE ! NOTICE !

The Executive Washroom
by
Da Prez
Dave Ratcliffe, C.P.U.G.
Harrisburg, Pa.

10 Dec. 1989

Well whattayaknow.... We made it through another year semi-intact and with most parts in the right place! The temptation at this time of the year is to do a 'year-end-review' but for some reason they always give me hives. I'd LOVE to be able to look back and remember the successes but those darned failures (few in number of course) keep intruding. Better to look ahead to the future. Less painful as well. So, you say.... What's IN the future? Who do I look like? Madame Natasha? <grin> Well, we look forward to PRESS! for one thing. It's GOTTA come out in 1990, right? I personally look forward to a new version of TELCO with full Geneve/HFDC support. If I were to ask around for New Year 'wish-lists', I'll wager the selection would be pretty diverse. In the Geneve community, it would probably include FINISHED Advanced Basic (probably available by the time you read this), MDOS that works with EVERYTHING Myarc makes (meaning HFDC support for floppy AND hard drives), PASCAL!!!!!! (WHY is this still being advertised as being included with the Geneve WHEN IT'S NOT!), MY-WORD Pro (maybe I better quit whilst I am ahead).

In the TI world, probably a GIF viewer

Letter from the Editor or
In the dumper, again...
by Richard Lindway.

Well, this month will be in the dumper. With the past Thanksgiving and the up coming Christmas I have fallen somewhat behind and I won't have an article this month.

If anyone has a suggestion for and article, let me know.

I do wish everyone a Merry Christmas and a Happy New Year.

NOW LETS PARTY

TIPS and TECHNIQUES or
How did you do that?

Sorry, nothing this month.

Letters to the Editor.
Sorry, nothing here either.

for the 40 column TI (without the AVPC) is a biggie. Unfortunately, it is probably gonna be real hard to do. I must admit that since I got my Geneve, I've been a little lax in the 99 area and have not been paying attention to what is and is not 'out there'. Maybe in this new year, I'll start paying more attention.

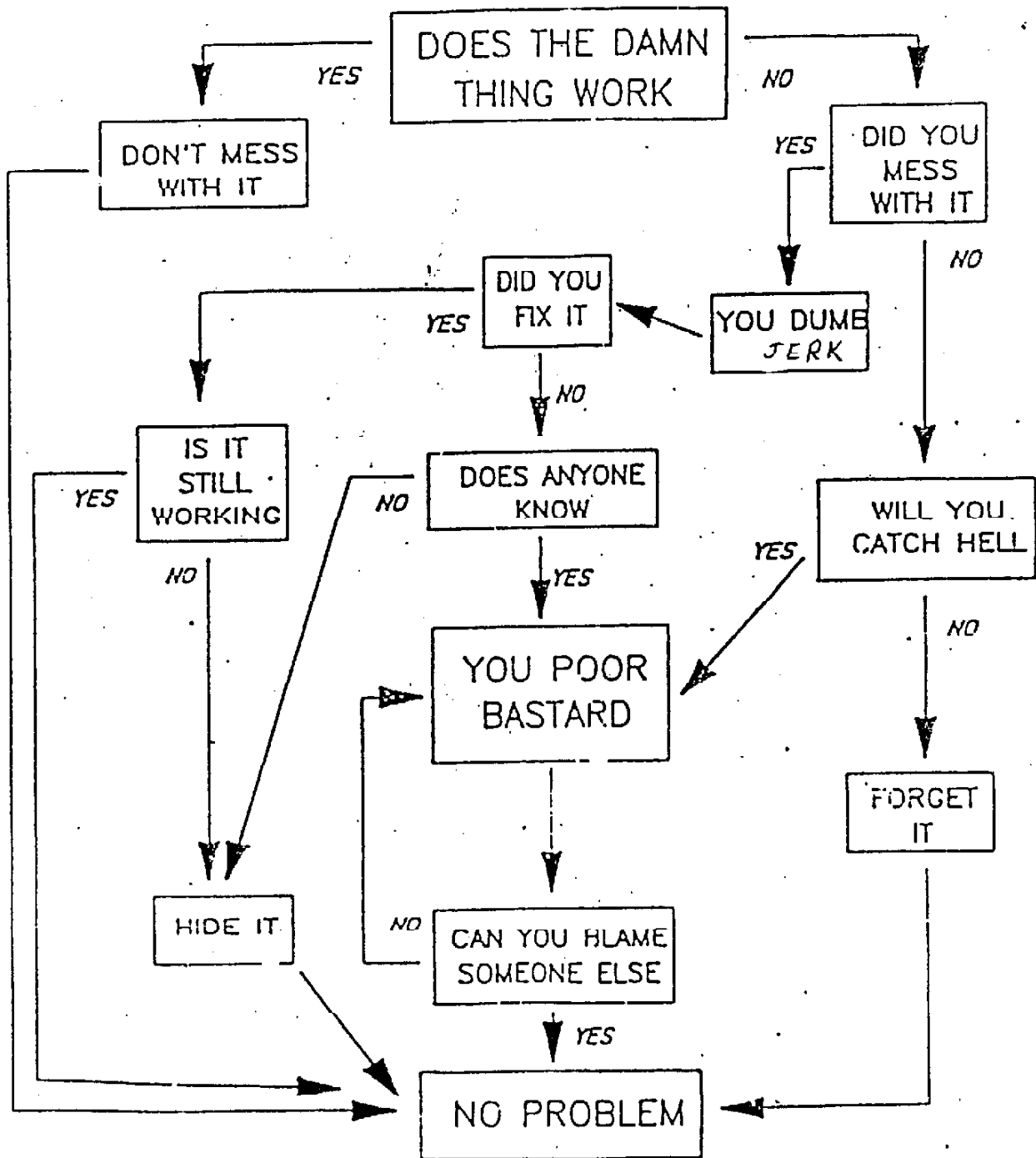
For CPUG? I look forward to the next EXPO, hopefully to be in Hershey this year instead of Carlisle. Better facilities, better location, better EVERYTHING! I look forward to sitting in the back of the room for awhile at meetings instead of standing up front. That's right. In the words of a former U.S. Prez, "I shall not seek, nor will I accept...." so start looking around folks. Elections are only a few short months away. I will still be around though 'cause I've kinda gotten used to everyone. Besides, the food is good <grin>.

Parting shot this month.... A friend (?) of mine at work said he finally figured out how I did my job and sent the adjacent chart to prove it. And I thought I was keeping it a deep dark secret! Enjoy.....

And from Bonnie and myself, Happy Holidays to everyone!

>> Dave <<

PROBLEM SOLVING FLOWCHART



GETTING THE MOST FROM YOUR CASSETTE SYSTEM
 BY MICKEY SCHMITT
 NUMBER 16
 UNDERSTANDING - CREATING - AND USING - CASSETTE FILES
 PART V

THIS MONTH I AM CONTINUING WITH THE TOPIC OF UNDERSTANDING - CREATING - AND USING - CASSETTE FILES. MORE SPECIFICALLY, I WILL BE CONTINUING WITH THE TOPIC OF "HOW TO "OPEN" UP A CASSETTE FILE"... WHICH I FIRST BEGAN DISCUSSING THREE MONTHS AGO... IN PART II OF THIS PARTICULAR SERIES.

THE "FILE-TYPE" ENTRY SPECIFICATION DESIGNATES THE FORMAT OF HOW THE DATA IS GOING TO BE STORED ON THE FILE. THIS WILL BE EITHER A "DISPLAY" FORMAT OR AN "INTERNAL" FORMAT. THE "DISPLAY" FORMAT REFERS TO PRINTABLE ASCII CHARACTERS AND IS USUALLY USED WHEN THE OUTPUT WILL BE READ BY PEOPLE, RATHER THAN BY THE COMPUTER. THE "INTERNAL" FORMAT REFERS TO DATA WHICH IS RECORDED INTERNALLY IN MACHINE LANGUAGE. YOU WILL FIND THAT DATA IN THIS FORMAT IS FAR MORE EFFICIENT FOR RECORDING DATA ON A CASSETTE RECORDER AS IT REQUIRES LESS SPACE... THUS A PROGRAM WILL RUN MUCH FASTER THAN WHEN YOUR FILES ARE RECORDED IN THE "DISPLAY" FORMAT.

AS A WORD OF WARNING: IF THE "FILE-TYPE" SPECIFICATION IS OMITTED... THE T.I. COMPUTER WILL ASSUME A STANDARD DEFAULT OF A "DISPLAY" FORMAT... WHICH IS NOT AS EFFICIENT AS THE "INTERNAL" FORMAT.

THE "RECORD-TYPE" ENTRY SPECIFIES THAT THE RECORDS ON THE FILE ARE ALL THE SAME FIXED LENGTH. THE KEYWORD "FIXED" MAY BE FOLLOWED BY A NUMERIC EXPRESSION SPECIFYING THE MAXIMUM LENGTH OF A RECORD. FOR CASSETTE TAPE RECORDS, YOU MAY SPECIFY ANY LENGTH UP TO 192 POSITIONS. HOWEVER, THE CASSETTE TAPE DEVICE USES RECORDS WITH LENGTHS OF 64, 128, OR 192 POSITIONS AND WILL PAD THE RECORD THAT YOU SPECIFY TO THE APPROPRIATE LENGTH.

AS A WORD OF WARNING: IF THE "RECORD LENGTH" IS NOT SPECIFIED... THE T.I. COMPUTER WILL ASSUME THE STANDARD DEFAULT OF 64 RECORD POSITIONS FOR A CASSETTE RECORDER.

THE "FILE-LIFE" ENTRY INFORMS THE COMPUTER THAT THE FILES THAT YOU ARE ABOUT TO CREATE ARE TO BE CONSIDERED "PERMANENT" FILES AND NOT "TEMPORARY". YOU MAY OMIT THIS ENTRY ENTIRELY SINCE THE T.I. COMPUTER ALREADY ASSUMES ALL FILES TO HAVE A "PERMANENT" "FILE-LIFE".

IF ALL OF THIS SOUNDS WAY TOO CONFUSING FOR YOU... FEAR NOT... I FELT THE SAME WAY MYSELF! WITH THAT PARTICULAR THOUGHT IN MIND... I HAVE DECIDED TO CREATE A "REFERENCE CHART"... IN ORDER TO GET A BETTER UNDERSTANDING OF ALL THE "NEW MATERIAL" THAT I HAVE EXAMINED SO FAR. (PLEASE KEEP IN MIND... THAT THIS PARTICULAR "REFERENCE CHART" IS A CONTINUATION OF THE "REFERENCE CHART" WHICH FIRST APPEARED TWO MONTHS AGO... IN PART III OF THIS PARTICULAR SERIES.

```

*****
*
*           TO "OPEN" UP A CASSETTE FILE... FOLLOW THESE STEPS...
*
*****
*
*           1 5           * 1 6 *           1 7           * 1 8 *           1 9
*
*****
*
*           FILE TYPE FORMATS           * N *           RECORD TYPE           * N *           FILE LIFE
* ===== * E * ===== * E * ===== *
* DISPLAY.....PRINTABLE ASCII * D * FIXED LENGTH * D * PERMANENT
* INTERNAL....MACHINE LANGUAGE * * 1-192 POSITIONS * *
*
*           C *           C *
*****
*           O ***** O *****
*
*           M *           M *
* INTERNAL ( PREFERRED OPTION ) * M *           FIXED * M * PERMANENT
*
*           A *           A *
*****

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NEXT MONTH I WILL CONTINUE WITH THE TOPIC OF UNDERSTANDING - CREATING - AND USING - CASSETTE FILES. MORE SPECIFICALLY, I WILL BE COMBINING ALL THREE OF MY "CASSETTE FILE REFERENCE CHARTS" THAT I HAVE CREATED OVER THE LAST THREE MONTHS INTO ONE COMPLETE CHART - SO THAT YOU MAY HAVE ALL OF THE NECESSARY INFORMATION AVAILABLE AT YOUR FINGERTIPS FOR FASTER REFERENCE.

IN THE MEAN TIME... IF YOU NEED ANY HELP OR HAVE ANY QUESTIONS CONCERNING YOUR CASSETTE SYSTEM - JUST GIVE ME A CALL (412-335-0163) AND I'LL TRY TO HELP.

CHILDREN

Tired of being
Harrassed by your
Stupid Parents?

ACT NOW!

Move out, Get-A-Job
Pay Your Own Bills,
While You Still
Know Everything.

TIPS FROM THE TIGERCUB

#53

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156 Collingwood Ave.
Columbus, OH 43213

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Over 120 original programs in Basic and Extended Basic, available on cassette or disk NOW REDUCED TO JUST \$1.00 EACH!, plus \$1.50 per order for cassette or disk and PP&M. Minimum order of \$10.00. Cassette programs will not be available after my present stock of blanks is exhausted. The Handy Dandy series, and Color Programming Tutor, are no longer available on cassette. Descriptive catalogs, while they last, \$1.00 which is deductible from your first order.

Tigercub Full Disk Collections, reduced to \$5 postpaid. Each of these contains either 5 or 6 of my regular catalog programs, and the remaining disk space has been filled with some of the best public domain programs of the same category. I am NOT selling public domain programs - they are a free bonus!
TIGERCUB'S BEST, PROGRAMMING TUTOR, PROGRAMMER'S UTILITIES, BRAIN GAMES, BRAIN TEASERS, BRAIN BUSTERS!, MANEUVERING GAMES, ACTION GAMES, REFLEX AND CONCENTRATION, TWO-PLAYER GAMES, KID GAMES, MORE GAMES, WORD GAMES, ELEMENTARY MATH, MIDDLE/HIGH SCHOOL MATH, VOCABULARY AND READING, MUSICAL EDUCATION. KALEIDOSCOPIES AND DISPLAYS

NUTS & BOLTS DISKS

These are full disks of 100 or more utility subprograms in MERGE format, which you can merge into your own programs and use, almost like having another hundred CALLs available in Extended Basic. Each is accompanied by printed documentation giving an example of the use of each. NUTS & BOLTS (No. 1) has 100 subprograms, a tutorial on using them, and 5 pp. documentation. NUTS & BOLTS No. 2 has 108 subprograms, 10 pp

of documentation. NUTS & BOLTS #3 has 140 subprograms and 11 pp. of documentation. NOW JUST \$15 EACH, POSTPAID.

TIPS FROM THE TIGERCUB

These are full disks which contain the programs and routines from the Tips from the Tigercub newsletters, in ready-to-run program format, plus text files of tips and instructions.

TIPS (Vol. 1) contains 50 original programs and files from Tips newsletters No. 1 through No. 14. TIPS VOL. 2 contains over 60 programs and files from Nos. 15 thru 24. TIPS VOL. 3 has another 62 from Nos. 25 through 32. TIPS VOL. 4 has 48 more from issues No. 33 through 41. NOW JUST \$10 EACH, POSTPAID.

* NOW READY *
* TIPS FROM TIGERCUB VOL.5 *
* Another 49 programs and *
* files from issues No. 42 *
* through 50. Also \$10 ppd *

TIGERCUB CARE DISKS #1,#2,#3 and #4. Full disks of text files (printer required). No. 1 contains the Tips newsletters #42 thru #45, etc. Nos. 2 and 3 have articles mostly on Extended Basic programming. No. 4 contains Tips newsletters Nos. 46-52. These were prepared for user group newsletter editors but are available to anyone else for \$5 each postpaid.

Someone wanted a program to teach how to make change.
100 CALL CLEAR
110 DEF I\$(X)="&\$&SEG\$(STR\$(X),1,POS(STR\$(X)," ")+2)
120 CALL COLOR(1,2,8,2,2,8,3,2,8,4,2,8,5,2,8,6,2,8,7,2,8,8,2,8,9,2,8,10,2,8,11,2,8,12,2,8)
130 CALL SCREEN(5):: D\$=RPT\$(" ",112)!programmed by Jim Peterson Apr. 1988 for the public domain
140 GOTO 180
150 CALL KEY :: CALL CLEAR :: CALL SOUND
160 A,P,C,G,T,F,O,Q,D,N,S,TT,X,B\$,Q,K,M\$,J
170 !@P-
180 DISPLAY AT(2,8)ERASE ALL
:"MAKING CHANGE"::" by Jim Peterson" :: RANDOMIZE :: CALL KEY(3,K,S)
190 DISPLAY AT(6,1):"Do you want to":;:" (1) Input amounts":;:" (2) Use random amounts" :: ACCEPT AT(6,16)SIZE(1)VALIDATE("12")BEEP:A :: CALL CLEAR
200 IF A=2 THEN 240 :: DISPLAY AT(2,1):"Price of item? \$" ::;::: :: ACCEPT AT(2,17)VALIDATE(NUMERIC)BEEP:P :: IF

P<0 THEN 200
210 DISPLAY AT(4,1):"Amount offered by customer?":;"\$" :: ACCEPT AT(5,2)VALIDATE(NUMERIC)BEEP:C
220 IF C<>INT(C)AND P-INT(P)<>C-INT(C)THEN DISPLAY AT(23,1):"Even dollars please!" :: GOTO 210
230 IF C<P THEN DISPLAY AT(23,1):"Not enough!" :: GOTO 210 ELSE IF C=P THEN DISPLAY AT(23,1):"No change needed!" :: GOTO 200 ELSE GOTO 260
240 RANDOMIZE :: P=20*RND+.01 :: P=INT(P*100)/100 :: DISPLAY AT(2,1):"Price of item" :: DISPLAY AT(2,16):I\$(P+.001)
250 C=INT(4*RND+1)*5 :: IF C<=P OR C=15 THEN 250 :: DISPLAY AT(4,1):"Customer offers \$" :: DISPLAY AT(4,18):STR\$(C)
260 G=C :: C=C-P :: T=INT(C/10):: C=C-T*10 :: F=INT(C/5) :: C=C-F*5 :: O=INT(C):: C=C-O :: Q=INT(C/.25):: C=C-Q*.25 :: D=INT(C/.1):: C=C-D*.1 :: N=INT(C/.05)
270 C=C-N*.05 :: X=C*100 :: TT=0
280 DISPLAY AT(7,1):"OK, start adding change from the price until you reach the customer's amount." :: TT=P+.001
290 IF X=0 THEN 330 :: GOSUB 640 :: IF B\$<>"P" THEN M\$="No, give pennies to reach "&I\$(TT+X*.01):: GOSUB 670
300 DISPLAY AT(11,1):"How many pennies?" :: ACCEPT AT(11,19)VALIDATE(NUMERIC)BEEP:Q
310 IF Q=X THEN 320 ELSE IF TT+Q*.01>G THEN GOSUB 680 :: GOTO 300 ELSE GOSUB 690 :: GOTO 300
320 DISPLAY AT(7,1):"You have reached "&I\$(TT+X*.01)::;::: :: TT=TT+X*.01
330 IF N=0 THEN 380 :: GOSUB 640
340 IF B\$<>"N" THEN M\$="No, if the cents portion is .10 or .20 or .35 or .45 or .60 or .70 or .85, add a nickel" :: GOSUB 670
350 DISPLAY AT(11,1):"How many nickels?" :: ACCEPT AT(11,19)VALIDATE(NUMERIC)BEEP:Q
360 IF Q=N THEN 370 ELSE IF TT+Q*.05>G THEN GOSUB 680 :: GOTO 350 ELSE GOSUB 690 :: GOTO 350
370 DISPLAY AT(7,1):"You have reached "&I\$(TT+N*.05)::;::: :: TT=TT+N*.05
380 IF D=0 THEN 430 :: GOSUB 640
390 IF B\$<>"D" THEN M\$="No, add dimes to reach .25 or .50 or .75 or .00" :: GOSUB 670
400 DISPLAY AT(11,1):"How many dimes?" :: ACCEPT AT(11,19)VALIDATE(NUMERIC)BEEP:Q
410 IF Q=D THEN 420 ELSE IF TT+Q*.1>G THEN GOSUB 680 :: GOTO 400 ELSE GOSUB 690 ::

```

GOTO 400
420 DISPLAY AT(7,1):"You hav
e reached "&I$(TT+D*.1):;;;
:: TT=TT+D*.1
430 IF Q=0 THEN 480 :: GOSUB
640
440 IF B$<>"Q" THEN M$="No,
add quarters to reach an eve
n dollar." :: GOSUB 670
450 DISPLAY AT(11,1):"How ma
ny quarters?" :: ACCEPT AT(1
1,20)VALIDATE(NUMERIC)BEEP:Q
Q
460 IF QQ=Q THEN 470 ELSE IF
TT+QQ*.25>G THEN GOSUB 680
:: GOTO 450 ELSE GOSUB 690 :
: GOTO 450
470 DISPLAY AT(7,1):"You hav
e reached "&I$(TT+Q*.25):;;;
:: TT=TT+Q*.25
480 IF O=0 THEN 530 :: GOSUB
640
490 IF B$<>"O" THEN M$="No,
add dollars to reach a mult
iple of five dollars." :: GO
SUB 670
500 DISPLAY AT(11,1):"How ma
ny dollars?" :: ACCEPT AT(11
,19)VALIDATE(NUMERIC)BEEP:QQ
510 IF OO=O THEN 520 ELSE IF
TT+QQ>G THEN GOSUB 680 :: G
OTO 500 ELSE GOSUB 690 :: GO
TO 500
520 DISPLAY AT(7,1):"You hav
e reached "&I$(TT+O):;;;
:: TT=TT+O
530 IF F=0 THEN 580 :: GOSUB
640
540 IF B$<>"F" THEN M$="No,
add a five dollar bill to r
each a multiple of ten." ::
GOSUB 670
550 DISPLAY AT(11,1):"How ma
ny fives?" :: ACCEPT AT(11,1
7)VALIDATE(NUMERIC)BEEP:QQ
560 IF QQ=F THEN 570 ELSE IF
TT+QQ*5>G THEN GOSUB 680 ::
GOTO 550 ELSE GOSUB 690 ::
GOTO 550
570 DISPLAY AT(7,1):"You hav
e reached "&I$(TT+F*5):: TT=
TT+F*5
580 IF T=0 THEN 620 :: GOSUB
640
590 IF B$<>"T" THEN M$="No,
add ten dollar bills to reac
h"&I$(G):: GOSUB 670
600 DISPLAY AT(11,1):"How ma
ny tens?" :: ACCEPT AT(11,16
)VALIDATE(NUMERIC)BEEP:QQ ::
IF QQ=T THEN 620
610 IF QQ>T THEN GOSUB 680 :
: GOTO 600 ELSE DISPLAY AT(1
4,1)BEEP:"That's not enough!
" :: GOTO 600
620 DISPLAY AT(7,1)BEEP:"You
gave the correct change!":":
"::"::"
630 DISPLAY AT(14,1):"
PRESS ANY KEY" :: DISPLAY A
T(14,1):" press any ke
y" :: CALL KEY(3,K,S):: IF S
=0 THEN 630 ELSE 200
640 DISPLAY AT(11,1):"Will y
ou now give":" (P)ennies":"
(N)ickels":" (D)imes":" (Q)u
arters":" (O)ne dollar bills
":" (F)ive dollar bills":" (
T)en dollar bills"
650 DISPLAY AT(19,1):"::"::"

```

```

"::"::"::"
660 ACCEPT AT(11,19)SIZE(1)V
ALIDATE("PNDQOFT")BEEP:B$ ::
DISPLAY AT(11,1):"::"::"::"
"::"::"::"::"::"::" :: RETURN
670 FOR J=1 TO 5 :: DISPLAY
AT(20,1):D$ :: DISPLAY AT(20
,1)BEEP:M$ :: NEXT J :: RETU
RN
680 CALL SCREEN(7):: FOR J=1
TO 15 :: CALL SOUND(-99,110
,0,-4,0):: DISPLAY AT(14,1):
"::" :: DISPLAY AT(14,1):"You
gave too much change!" :: NE
XT J :: CALL SCREEN(5):: RET
URN
690 DISPLAY AT(14,1):"No, th
at's wrong!" :: RETURN

```

And here's a one-screen tinygram - you could convert this to speech and it would do a better job of making change than most clerks do nowadays!

```

1 !*****
!* CHANGEMAKER *
!* TINYGRAM *
!* by Jim Peterson *
!*****
100 CALL CLEAR :: S$(1)="S"
110 DEF P$(X)=" $"&SEG$(STR$(X),1,LEN(STR$(X))-1)
120 DATA 10,5,1,.25,.1,.05,.01,CENT,NICKEL,DIME,QUARTER,DOLLAR BILL,FIVE DOLLAR BILL,TEN DOLLAR BILL
130 PRINT TAB(8);"CHANGEMAKER":;: INPUT "PRICE? ":P : INPUT "AMOUNT OFFERED? ":B : IF B<P THEN 130
140 PRINT :: C=B-P :: FOR J=1 TO 7 :: READ X(J) :: A(J)=INT(C/X(J)) :: C=C-A(J)*X(J) :: NEXT J :: Z=P+.001
150 PRINT P$(P+.001);" OUT 0 F ":P$(B+.001):;: FOR J=7 TO 1 STEP -1 :: READ A(J) :: Z=Z+A(J)*X(J) :: IF A(J)>0 THEN PRINT "AND":A(J);A$&S$(-(A(J)>1))&" IS ":P$(Z):;: 160 NEXT J :: PRINT :: RESTORE 120 :: GOTO 130

```

The Extended Basic Manual did a very poor job of showing us how to use USING. My thanks to Karl Romstedt for telling me how to do it with DISPLAY AT - put a semicolon directly before USING -

```

100 CALL CLEAR :: DISPLAY AT(12,5):USING "$##.##":1.23

```

Other commands can go either before the AT or after the parameters -

```

110 DISPLAY ERASE ALL BEEP A T(12,5):USING "$##.##":1.23
120 DISPLAY AT(12,5)ERASE ALL BEEP:USING "$##.##":1.23

```

However, to output to a printer, put a comma before USING -

```

120 OPEN #1:"PIO" :: PRINT # 1,USING "$##.##":1.23

```

The trouble with PRINT USING "\$##.##" is that it will print nothing but asterisks if the integer con-

tains more digits than the number of # left of the decimal, and will leave blanks between the \$ and the first digit if the integer contains less digits than the number of ## left of the decimal. This algorithm will correctly print dollars and cents values of ANY size, rounded off to the nearest cent and with the dollar sign directly before the first digit or decimal.

```

100 INPUT A :: PRINT USING "$"&SEG$(RPT$("#",LEN(STR$(INT(A))),1-(INT(A)=0),255))&"::A :: GOTO 100

```

Thanks to Ed Machonis for some of these improvements to the Printall program which was published in Tips #45 -

```

171 DISPLAY AT(8,12):"v.1.2"
190 DISPLAY AT(18,7):"TURN P RINTER ON!":;:"SET TOP OF FORM HALF INCH BELOW PERFS"
200 DISPLAY AT(23,8):"PRESS ANY KEY" :: DISPLAY AT(23,8):"press any key" :: CALL KEY (O,K,S):: IF S=0 THEN 200 ELSE CALL CLEAR
330 IF P=1 AND SS$<>"Y" THEN DISPLAY AT(12,1):"EMPHASIZE D? (Y/N) Y" :: ACCEPT AT(12,19)VALIDATE("YN")SIZE(-1)BEEP:E$ :: IF E$="Y" THEN PRINT #1:CHR$(27);"E";
390 IF NC=1 THEN 410 :: AV=INT(TA/(NC-1)):: DISPLAY AT(12,1)ERASE ALL:"COLUMN SEPARATION?":"MINIMUM 2":"MAXIMUM "&STR$(AV)&" AVAILABLE ":"2"
400 ACCEPT AT(15,1)VALIDATE(DIGIT)SIZE(-2)BEEP:CS :: IF CS<2 OR CS>AV THEN 400 ELSE S$=RPT$(" ",CS)
450 LSP=12 :: DISPLAY AT(10,1):" ":" ":" ":"LINES PER PAGE?"
60:" ":" ":" ":" :: ACCEP T AT(12,17)VALIDATE(DIGIT)SI ZE(-3):LP :: IF LP<61 THEN 490
460 !DELETE
470 !DELETE
480 LSP=72/(LP/10):: PRINT # 1:CHR$(27);"A";CHR$(LSP)
510 DISPLAY AT(15,1):STR$(LP)&" lines per page":"with "&STR$(INT(LSP))&"72 line spacing"
640 ! DELETE!
650 IF LEN(M$(IP))<=CW THEN 670 :: T$=SEG$(M$(IP),1,CW) : CALL SOUND(1000,110,0,-4,0) : DISPLAY AT(12,1):M$(IP); " OVER";CW;"CHARACTERS":"TRUNCATED TO ".T$:"OK?"
660 CALL KEY(3,K,S):: IF S=0 THEN 660 ELSE IF K<>89 THEN STOP ELSE M$(IP)=T$

```

MEMORY FULL!

WE'LL LOOK FOR
YOU
AT THESE MEETINGS

Circle your Calendar with these meeting dates

JANUARY
FEBRUARY { 5 }
MARCH
APRIL
MAY
JUNE

JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

All meetings begin at 7PM but the Group equipment will be up and ready for use at approximately 6PM.
All meetings are held at the CAMP HILL SHOPPING MALL COMMUNITY ROOM.

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Dave Ratcliffe
President
2832 Croyden Road
Harrisburg, PA 17104
(717) 238-5414

Amos Meyers
Co-Vice President
383 No. 26th Street
Camp Hill, PA 17011
(717)763-4189

David Hultberg
Co-Vice President
1407 Concord Road
Mech., PA 17055
(717)766-0051

Barry Long
Secretary/Treasurer
2550 Brookwood Street
Harrisburg, PA 17104
(717) 564-2975

Richard Lindway
Newsletter Editor
904 N. 21st Street
Harrisburg, Pa. 17103
(717) 232-5697

Data Factory 717-657-4992 or 717-657-4997 24hrs 7 Days-- SYSOP Dave Ratcliffe

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CENTRAL PA 99/4A USERS GROUP
P.O. BOX 14126
HARRISBURG, PA 17104-0126

