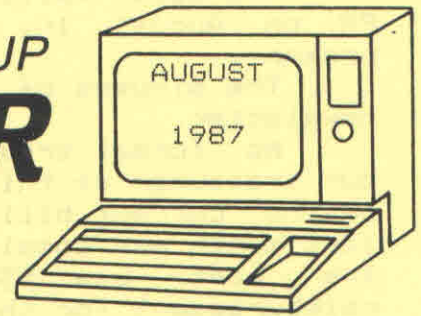


CEDAR VALLEY 99'ER USER GROUP **NEWSLETTER**



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****NEWSLETTER TOPICS****

1. Future Meeting Dates
2. Next Meeting Notes
3. Minutes From August Meeting
4. Library Corner
5. Unrunnable Basic (again)
6. Tips from the Tigercub #43
7. For Sale/Wanted
8. Automatic Video Changeover

****FUTURE MEETING DATES****

Please mark the following dates on your calendar for future meetings:
SEPTEMBER 8, OCTOBER 13, NOVEMBER 10.

*****NEXT MEETING*****

Tuesday, September 8, 7:00 PM at the JA building, 330 Collins Rd. NE. Please note the day change, due to room schedule conflicts. Ed Edwards will demo Myarc's Extended Basic II, along with his 512K card. John Johnson will continue his class of assembly language instruction.

****MINUTES FROM THE AUGUST MEETING****

The Cedar Valley 99er User Group meeting was called to order at 7:08 PM on August 10, 1987 by President Jerry Canady. Fourteen members were present.

The minutes of the July meeting were approved as printed in the newsletter.

No formal treasurers report was given, due to the vacation absence of our treasurer at this meeting. However, Jerry had the checkbook to use in paying current bills. He reported that the disk drive purchase authorized last month was completed and that the drive is working in our club system. The cost was \$35.00. It was also noted that Gary Bishop needs reimbursement for the U.G. tickets to the Hamfest/Computerfest.

OLD BUSINESS--SummerFest '87 is history. The club sold 18 tickets which will give our treasury a boost. As a result of contacts made, the club enrolled two new members. Those who manned our tables also noted that several out-of-town members stopped by to chat. It was nice to see you all. Gary reported that the highlight of his ham rig display (interfaced to the TI) was the chat between a Japanese ham and a Russian ham picked up about 2 PM Saturday. They were conversing in English about half way around the world from the Five Seasons Center. The club would like to thank the Dheins of Waterloo for bringing down the new Myarc 9640 on Sunday. The one they brought did not have fully completed software yet. They should have it more complete in 2 to 3 months so that they can show it to us at the User Group meeting. More on that later.

Newsletter Editor Graphics--Jerry reported on a review of Font Writer and The Printer's Apprentice. Editor Jim Green has sent letters to other U.G.s about their use of graphics, but has not yet received any response. After discussion, it was moved, seconded, and approved that the club purchase The Printer's Apprentice for \$19.95 plus shipping for use by the club's newsletter editor.

CORRESPONDENCE--Thanks to the User Group for their support, especially to Bruce Winter, Jim Green, and Gary Bishop, were received from Sister Pat Taylor. Also included was a picture of her with her system and a software listing she received from the Boston Computer Society TI Sig.

NEW BUSINESS--None.

OPEN DISCUSSION--Be aware that the Chicago U.G. will have another TI Faire on the first Saturday in November. The next day will be one in Milwaukee. Any interest in forming a car pool?

Gary Bishop informed the group that MICROpendium has contacted him as a possible contributor on technical subjects for their magazine. They are serious about getting someone to "pick up where Mack (McCormack) left off" as published in Vol. 4, No. 6, page 6.

Funny business--Yes, the Unrunnable Basic program as corrected in the July newsletter is still unrunnable. This is due to a quirk of TI Writer. Jerry will explain this in the August newsletter, and the correct listing will be published.

The meeting was adjourned to our program for the evening. Ed Edwards demonstrated his Myarc 512K memory expansion card.

Following the demonstration, John Johnson started the class on Assembly Language. Covered was Chapter 1 of the text; assignment for next month will be Chapter 2.

Submitted by Bill Faeth, Secretary

* * * THE LIBRARY CORNER * * *

I only had time to review one of the club's new programs this past month. It is a shareware program called STAR. It is on disk 162. STAR is a package of 53 assembly language routines to be used with Extended Basic via the Call Link statement. Routines are provided for character sets, sounds, cassette control, color, screen access, VDP memory access, disk access, string handling, etc.

Bruce Winter

* * * UNRUNNABLE BASIC (Revisited Again) * * *

Once again we will try to fix the problem line in IMPROVED UNRUNNABLE BASIC and offer an explanation for the error. First the correct line 32700:

```
32700 SUB COLOR(A,B,C)::CALL LOAD(9492,8,15+A,(B-1)*16+C-1)
```

If you will modify your line 32700 to match this one you should have a neat program to run a BASIC program in XB. Just insert the *16.

The cause of this error was not in the listed program that was run in the newsletter but in my forgetting to watch for * followed by a number. If you remember TI writer uses a form *n* to look for and use a word in a value or mail list that has been coded to equate with number "n". In the program line 32700 when the formatter encountered *16, most likely if you multiply in a program, it looked for a value or mail list file. When it doesn't find one it ignores the * and numbers up to the next non numeric character. There are a couple of ways to stop this occurrence when you wish to follow an asterisk with a number. One is to add a space after the * ie. * 16 or to transliterate (.TL) some unused character to an *. I normally transliterate and the use the replace string (RS) to replace the * where I need. My text file would then appear like this.

```
.TL 92:42 (Changes the backslash to an asterisk)
```

THE PROGRAM LISTING

```
.TL 92:92 (Returns the backslash)
```

The program line would have looked like this when I was finished.

```
32700 SUB COLOR(A,B,C)::CALL LOAD(9492,8,15+A,(B-1)\16+C-1)
```

I hope this may be of help to you both as a correct program and a method for fixing this enigma if it ever plagues you.

Now if anyone knows of a change to the formatter that would cure this please let me know.

Jerry Canady

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Over 130 original programs in Basic and Extended Basic, available on cassette or disk, now reduced to just \$2.00 each, plus \$1.50 per order for cassette or disk and PP&M. Cassette programs will not be available after my present stock of blanks is exhausted.

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If you have as much trouble as I do, trying to get the strip labels lined up in the printer, you'll like this one -

```
100 DISPLAY AT(4,7)ERASE ALL
:"TIGERCUB LABELER": : : :
This label maker will allow
:"you to specify different":
```

```
"printer codes for each line
"
```

```
110 DISPLAY AT(11,1):"of a 5
-line label.": : : " You may
stop the program": "while lab
els are printing": "by pressi
ng any key, turn"
```

```
120 DISPLAY AT(17,1):"off th
e printer to adjust": "the la
bels, turn it back on,": "and
press any key to con-": "tin
ue printing."
```

```
130 DISPLAY AT(23,1):"Printe
r designation?": "PID" : : ACC
EPT AT(24,1)SIZE(-28)BEEP:PR
$ : : OPEN #1:PR$ : : P$,E$,DS
$,CEN$="Y" : : DW$,I$,SS$,U$=
"N" : : P=1
```

```
140 CALL CHAR(95,"FF")
150 FOR J=1 TO 5 : : CALL KEY
(3,K,S)
```

```
160 DISPLAY AT(2,1)ERASE ALL
:"Line #":J; " - PRINT? "&P$
: : CALL QUERY(2,20,P$): : IF
P$="N" THEN L$(J)=" " : : GOTO
360
```

```
170 IF J>1 THEN DISPLAY AT(4
,1):"Change codes? N" : : CAL
L QUERY(4,15,Q$): : IF Q$="N"
THEN 300
```

```
180 DISPLAY AT(4,1):"Print p
itch? ";P; " (1)pica": " (2)el
ite": " (3)condensed" : : ACCE
PT AT(4,15)SIZE(-1)VALIDATE(
"123"):P
```

```
190 CI=(P=1)*-10+(P=2)*-12+(
P=3)*-17 : : L$(J)=CHR$(27)&"
B"&CHR$(P): : DISPLAY AT(5,1)
: : "" : : ""
```

```
200 DISPLAY AT(6,1):"Double
width? "&DW$ : : CALL QUERY(6
,15,DW$): : IF DW$="Y" THEN C
I=CI/2 : : L$(J)=L$(J)&CHR$(1
4)ELSE L$(J)=L$(J)&CHR$(20)
```

```
210 DISPLAY AT(8,1):"Italics
? "&I$ : : CALL QUERY(8,10,I$
): : IF I$="Y" THEN L$(J)=L$(
J)&CHR$(27)&"4" ELSE L$(J)=L
$(J)&CHR$(27)&"5"
```

```
220 DISPLAY AT(10,1):"Supers
cript? "&SS$ : : CALL QUERY(1
0,14,SS$): : IF SS$="Y" THEN
L$(J)=L$(J)&CHR$(27)&CHR$(83
)&CHR$(0)ELSE L$(J)=L$(J)&CH
R$(27)&CHR$(84)
```

```
230 IF SS$="Y" THEN 250
240 DISPLAY AT(12,1):"Double
-strike? "&DS$ : : CALL QUERY
(12,16,DS$): : IF DS$="Y" THE
N L$(J)=L$(J)&CHR$(27)&"6" E
```

```
LSE L$(J)=L$(J)&CHR$(27)&"H"
250 IF P<>1 OR SS$="Y" THEN
270 : : DISPLAY AT(14,1):"Emp
hasized? "&E$ : : CALL QUERY(
14,13,E$)
```

```
260 IF E$="Y" THEN L$(J)=L$(
J)&CHR$(27)&"E" ELSE L$(J)=L
$(J)&CHR$(27)&"F"
```

```
270 DISPLAY AT(16,1):"Underl
ine? "&U$ : : CALL QUERY(16,1
2,U$)
```

```
280 IF U$="N" THEN L$(J)=L$(
J)&CHR$(27)&CHR$(45)&CHR$(0)
290 DISPLAY AT(18,1):"Center
text? Y" : : CALL QUERY(18,1
4,CEN$)
```

```
300 DISPLAY AT(18,1):"Type 1
ine";J; ". Enter each": "scree
n line, enter again": "when d
one." : : DISPLAY AT(22,1):RP
T$(" ",INT(CI*3.5)): : R=21 :
: CALL KEY(5,K,S)
```

```
310 ACCEPT AT(R,1):M$ : : IF
M$="" THEN 320 : : A$=A$&M$ :
: R=R+1 : : GOTO 310
```

```
320 IF LEN(A$)>INT(CI*3.5)TH
EN DISPLAY AT(16,1):"LINE TO
O LONG!" : : CALL SOUND(300,1
10,0,-4,0): : A$="" : : R=21 :
: GOTO 310
```

```
330 L=LEN(A$): : IF U$="Y" TH
EN A$=CHR$(27)&CHR$(45)&CHR$(
1)&A$&CHR$(27)&CHR$(45)&CHR
$(0)
```

```
340 IF CEN$="Y" THEN A$=RPT$(
" ",(INT(CI*3.5)-L)/2)&A$
350 L$(J)=L$(J)&A$ : : A$=""
```

```
360 NEXT J
370 DISPLAY AT(12,1)ERASE AL
L:"Print how many?" : : ACCEP
T AT(12,17):N
```

```
380 FOR J=1 TO N : : FOR K=1
TO 6 : : PRINT #1:L$(K): : NEX
T K
```

```
390 CALL KEY(0,K,S): : IF S=0
THEN 410 ELSE CLOSE #1
```

```
400 CALL KEY(0,K1,S1): : IF S
1<1 THEN 400 ELSE OPEN #1:PR
$
```

```
410 NEXT J
```

```
420 DISPLAY AT(12,8)ERASE AL
L:"Another?" : : CALL QUERY(1
2,17,Q$): : IF Q$="N" THEN ST
OP ELSE 150
```

```
430 SUB QUERY(R,C,Q$): : ACCE
PT AT(R,C)SIZE(-1)VALIDATE("
YN")BEEP:Q$ : : SUBEND
```

More peculiarities of the TI computer -

```

90 CALL CLEAR :: PRINT TAB(7
);"SPRITE PUZZLE #1":
from Tigercub"
100 PRINT "A non-existent spr
rite can be": "created by CAL
L MOTION.": "It apparently
starts in"
110 PRINT "dot-row 1, dot-co
lumn 1, and": "has color 1, b
ut its pattern": "is not that
of any ASCII!"
120 !by Jim Peterson
130 FOR CH=0 TO 255 :: PRINT
CHR$(CH):: NEXT CH
135 PRINT "CALL MOTION(#1,5,
5):: CALL COLOR(#1,16):: CAL
L MAGNIFY(4)"
140 CALL MOTION(#1,5,5):: CA
LL COLOR(#1,16):: CALL MAGNI
FY(4)
150 GOTO 150

```

And another -

```

100 DISPLAY AT(3,5)ERASE ALL
:"SPRITE PUZZLE #2": "
from Tigercub"
110 DISPLAY AT(7,1): "Non-exi
stent sprites can be": "creat
ed by CALL COLOR.": "Their
existence can be con-"
120 DISPLAY AT(11,1): "firmed
by CALL COINC, but": "CALL P
OSITION reports that": "they
have no position!"
130 CALL COLOR(#1,16):: CALL
COLOR(#2,16)
140 CALL COINC(#1,#2,1,X)::
DISPLAY AT(15,1): "COINC #1,#
2=";X :: CALL POSITION(#1,X,
Y)
150 CALL POSITION(#1,X,Y)::
DISPLAY AT(17,1): "POSITION #
1=";X;Y
160 CALL POSITION(#2,X,Y)::
DISPLAY AT(19,1): "POSITION #
2=";X;Y
170 IF FLAG=1 THEN 140 :: FL
AG=1
180 DISPLAY AT(21,1): "PRESS
ANY KEY"
190 CALL KEY(0,K,S):: IF S=0.
THEN DISPLAY AT(21,1): "pres
s any key" :: GOTO 180
200 DISPLAY AT(21,1): "Until
they're set in motion!"
210 CALL MOTION(#1,5,5):: CA
LL MOTION(#2,-5,-5):: GOTO 1
50

```

If you have the Terminal Emulator II, Speech Synthesizer, and a pre-schooler in the house, this will help him to grasp the idea of spelling as well as letter recognition and keyboard familiarization-

```

100 REM PRE-PELLER BY JIM
PETERSON
110 REM TI BASIC WITH TERMI
NAL EMULATOR II AND SPEECH S
YNTHESIZER
120 CALL CLEAR
130 DIM M$(100),S$(100)
140 OPEN #1:"SPEECH",OUTPUT
150 PRINT " PRE-SPELL
ER":::::
160 PRINT "TYPE WORDS TO PRA
CTICE": "TYPE 'END' WHEN FIN
ISHED"
170 X=X+1
180 INPUT M$(X)
190 IF M$(X)="END" THEN 380
200 PRINT #1:M$(X)
210 PRINT "PRONUNCIATION OK?
(Y/N)"
220 CALL KEY(3,K,S)
230 IF S<1 THEN 220
240 IF K=78 THEN 280
250 IF K>89 THEN 220
260 S$(X)=M$(X)
270 GOTO 170
280 PRINT "TRY SPELLING PHON
ETICALLY"
290 INPUT S$(X)
300 PRINT #1:S$(X)
310 PRINT "PRONUNCIATION OK?
(Y/N)"
320 CALL KEY(3,K,S)
330 IF S<1 THEN 320
340 IF K=89 THEN 170
350 IF K>78 THEN 320
360 PRINT "TRY AGAIN"
370 GOTO 290
380 CALL CLEAR
390 FOR J=1 TO X-1
400 PRINT #1:"CAN YOU SPELL
THIS?"
410 FOR A=1 TO LEN(M$(J))
420 CALL HCHAR(12,B+A,ASC(SE
G$(M$(J),A,1)))
430 NEXT A
440 FOR B=1 TO LEN(M$(J))
450 CALL KEY(3,K,S)
460 IF (S<1)+(K=32)THEN 450
470 IF K=ASC(SEG$(M$(J),B,1)
)THEN 500

```

```

480 GOSUB 640
490 GOTO 450
500 C%=C%&CHR$(K)
510 CALL HCHAR(14,B+B,K)
520 NEXT B
530 IF C%<M$(J)THEN 640
540 PRINT #1:S$(J)
550 FOR D=1 TO 500
560 NEXT D
570 PRINT #1:"VEREE GOOD"
580 FOR D=1 TO 500
590 NEXT D
600 C%=""
610 CALL HCHAR(12,1,32,100)
620 NEXT J
630 GOTO 390
640 PRINT #1:"NO THAT IS NOT
RIGHT"
650 PRINT #1:"TRY AGAIN"
660 RETURN

```

And, a simple little game that is a bit different than any I've seen -

```

100 !FORMATION by Jim Peters
on - use the S and D keys
110 CALL CLEAR :: CALL CHAR(
100,"381010FEFE383810103838F
EFE10103838"):: CALL SCREEN(
5):: CALL MAGNIFY(2):: RANDO
MIZE
120 V,W,P=0 :: FOR J=1 TO 7
:: CALL SPRITE(#J,100,7,1,25
0*RND+1,10,4):: FOR D=1 TO 1
00 :: NEXT D :: NEXT J :: CA
LL SPRITE(#11,101,16,160,128
)
130 CALL KEY(3,K,S):: W=W+1
:: IF W=150 THEN 170 ELSE IF
W=300 THEN 180 ELSE IF K=68
THEN V=V+2+(V>125)*2 ELSE I
F K=83 THEN V=V-2-(V<-125)*2
140 IF P=0 THEN CALL MOTION(
#11,0,V)ELSE IF P=1 THEN CAL
L MOTION(#11,0,V,#12,0,V)ELS
E CALL MOTION(#11,0,V,#12,0,
V,#13,0,V)
150 CALL COINC(ALL,A):: IF A
=0 THEN 130
160 CALL SOUND(1000,-4,0)::
H=MAX(H,W):: DISPLAY AT(23,1
): "SCORE";W: "HIGH SCORE";H
: CALL DELSPRITE(ALL):: GOTO
120
170 P=1 :: CALL POSITION(#11
,R,C):: CALL SPRITE(#12,101,
16,160,C-40-(C<40)*256):: 60
TO 140
180 P=2 :: CALL POSITION(#11

```

```

,R,C):: CALL SPRITE(#13,101,
16,160,C+40+(C>216)*256):: 6
OTO 140

```

If you can't figure out where all the money goes, this may be an eye-opener -

```

100 DISPLAY ERASE ALL AT(3,5
): "THE COST OF CREDIT" ! by
Jim Peterson
110 S,T,X=0 :: DISPLAY AT(8,
1): "AMOUNT OF PURCHASE?" ::
ACCEPT AT(8,21):A :: B,T=A
: DISPLAY AT(10,1): "CREDIT C
ARD INTEREST RATE?" :: ACCEP
T AT(11,1):R
120 DISPLAY AT(13,1): "SAVING
S ACCOUNT INT. RATE?" :: ACC
EPT AT(14,1):SR
130 X=X+1 :: I=B*R/100/12 ::
B=B+I :: T=T+I :: P=B/10 ::
B=B-P :: S=S+P+S*SR/100/12
:: IF S<A THEN 130
140 D$=" $"&STR$(INT((T-A+S-A
+.5)*100)/100)
150 DISPLAY AT(17,1): "If you
had saved the amount": "of y
our minimum 10% of the": "bal
ance credit card payment": "e
ach month for";X;"months,"
160 DISPLAY AT(21,1): "and us
ed it to pay cash, you": "wou
ld have saved ";D$ :: GOTO 1
10

```

And this is one of the handiest routines I've seen in a long time -

```

10 !TURNS ALL NUMERALS AND P
UNCTUATION WHITE! BY HARRY W
ILHELM IN TWIN TIERS UG NEWS
LETTER
20 !TURN IT OFF BY CALL LOAD
(-31804,0)::TURN IT ON BY CA
LL LOAD(-31804,63)
100 CALL INIT
110 CALL LOAD(16128,2,224,38
,0,2,0,8,17,2,1,63,36,2,2,0,
3,4,32,32,36,2,224,131,192,3
,128)
120 CALL LOAD(16164,240,240,
240)
130 CALL LOAD(-31804,63)

```

Memory full

Jim Peterson

* * * FOR SALE / WANTED * * *

FOR SALE: TI computer, joysticks, cables, speech synthesizer, and Extended Basic. Asking \$75 for all. Gary Kristiansen, 393-2558.

FOR SALE: The following items are available from Dave Reinhart, 377-0661. 169 Chatham Rd NE, Cedar Rapids 52402. Prices are negotiable.

Speech synthesizer	\$25	Disk storage case	\$ 2
CorComp RS-232/parallel	70	Doom of Modular	5
Old Dark Caves	10	Doom char. generator	5
Cassette cable (single)	3	Super Sketch	20
Terminal Emulator II	7	Return to Pirates Isle	3
TI Invaders	2	Star Trek	7
Adventure/Pirates Adven.	3	Savage Island I II	3
Super Demon Attack	2	Teach Yourself XB (Cs)	2
Blank disks 45 @ \$20 or .50		16 utility pgm disks	16
4 adventure disks	4	8 game disks	8

FOR SALE: 5 1/4" IBM disk drives, double sided, full height, will support double density. Used, but not for very long. \$40 each. Gary Bishop, 377-9574.

* * * AUTOMATIC VIDEO CHANGEOVER * * *

My computer is located in the "entertainment console". You know the area--that shelf unit that tends to collect everything electronic. TV, record player, VCR, tape player, telephone, and last but not least, the TI computer. This makes the rack holding all this equipment rather heavy. Also, it results in the classic rats nest of wires and cables. To use the TI computer, one must carefully reach behind this mess and throw the computer/TV switch on the video modulator. Due to its location, this is very inconvenient for my family. The shelf unit can't be moved to gain access to this switch.

I have a solution for this. I removed the change over switch in the modulator and replaced it with a DPDT relay. The power portion of this switch was wired direct. The relay was connected to the +12V used to run the modulator.

This means any time the computer is turned on, the input video is disconnected and the computer is on the screen. This works great when used with a VCR.

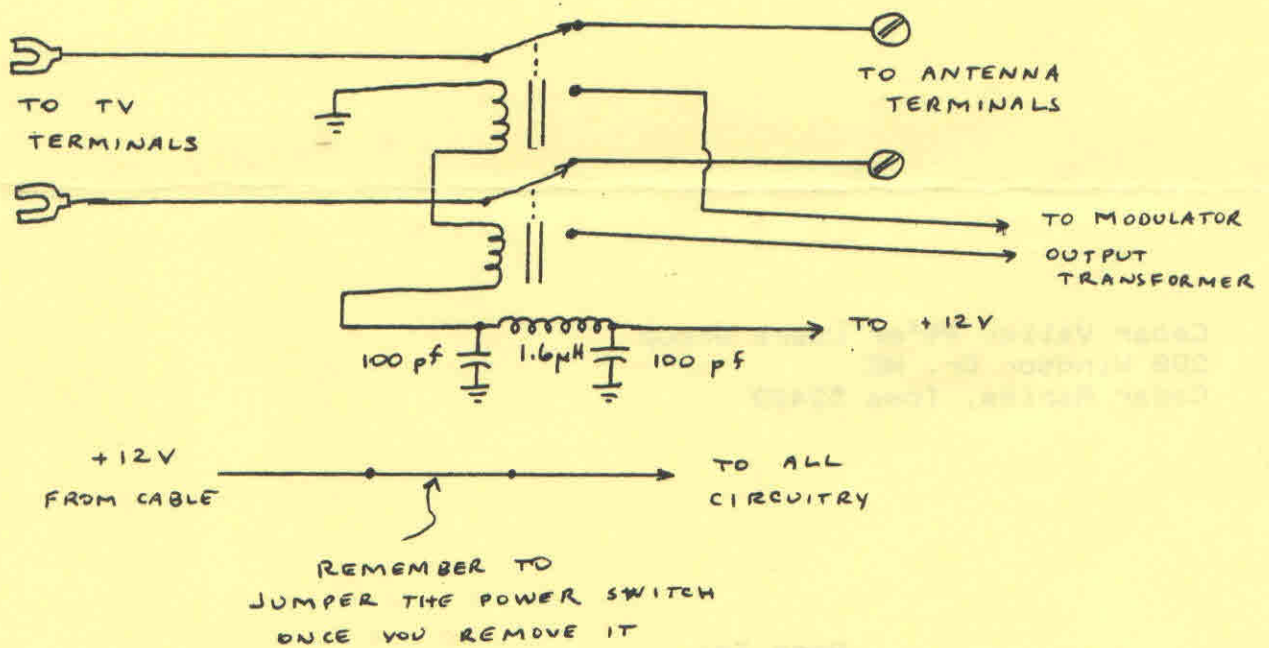
Usually the VCR output is on CH 3. If the TI modulator is also set to CH 3, you don't even have to change the TV channel! This is done by running the VCR output (thru a 75 to 300 ohm matching transformer) to the ANT terminals on the modulator. The modulator output is connected to the VHF terminals on the TV, as is normally done.

A second enhancement is what I call the "break from the computer" switch. A lot of my usage entails waiting for the computer to complete a lengthy calculation or series of calculations. Now, instead of reading the newspaper, or getting up to change the TV channel to watch something else, I just throw this switch, and can scan thru all the TV channels with the VCR remote control. When I think it's about time, I throw the switch back, and the computer is on the screen again. Pretty neat (or lazy)! Where is this switch?

It is mounted on the back side of the console, in series with the +12 volts that goes to the modulator jack. It has the same effect as unplugging the modulator, and de-energizes the relay to let the TV operate normally. However, I have found that the plug on the modulator is the single most fragile item in the TI system. I have performed countless repairs on the center conductor of the video wire. The continued plugging and unplugging is harmful to this connection. Turning the modulator on and off has no effect on the operation of the computer, other than the fact that you can't see what is going on.

I have found another interesting use for this modulator. I connect the input of the VCR to the output of the modulator, and the normal signal source to the modulator ANT terminals. When the VCR is set to tape from CH 3, I can use the computer to provide graphics and opening/closing notations on the show I am about to tape. A simple program is all I use to read a line of text and display it on the screen, then yet another line of text. This works super when taping things from the cable, because the cable box output is also on CH 3. The only drawback with this arrangement is the VCR breaks sync when switching from computer to video source. I think there is a way to fix this by changing the VDP chip in the console, and running video directly into it. Oh well, that is for another article.

NOTES on installation: The relays used were two Radio Shack #275-004. These are low power relays. The power to the modulator is +12V, and the console and its power supply have little power to spare. I tried RS 275-213, but it consumes 100 ma--the whole console only draws 150 ma from this line. There is little reserve capacity on this power supply. The relays specified use only 12 ma, a safe value. OR, a single low power DPDT relay could be used if you have one.



The antenna switch and power switch inside the modulator were removed. Remember to jumper across the power connections, so the modulator is always on. Also, small RF decoupling is needed to prevent radiating interference when using this scheme. Finally, a small hole was drilled in the back of the console, and a Radio Shack #275-603 switch was installed in series with pin 1 on the modulator jack. The 12 volts can be interrupted by cutting the trace on the board, or removing the bar from the board going to pin 1 and soldering to it.

Gary Bishop

NEXT MEETING

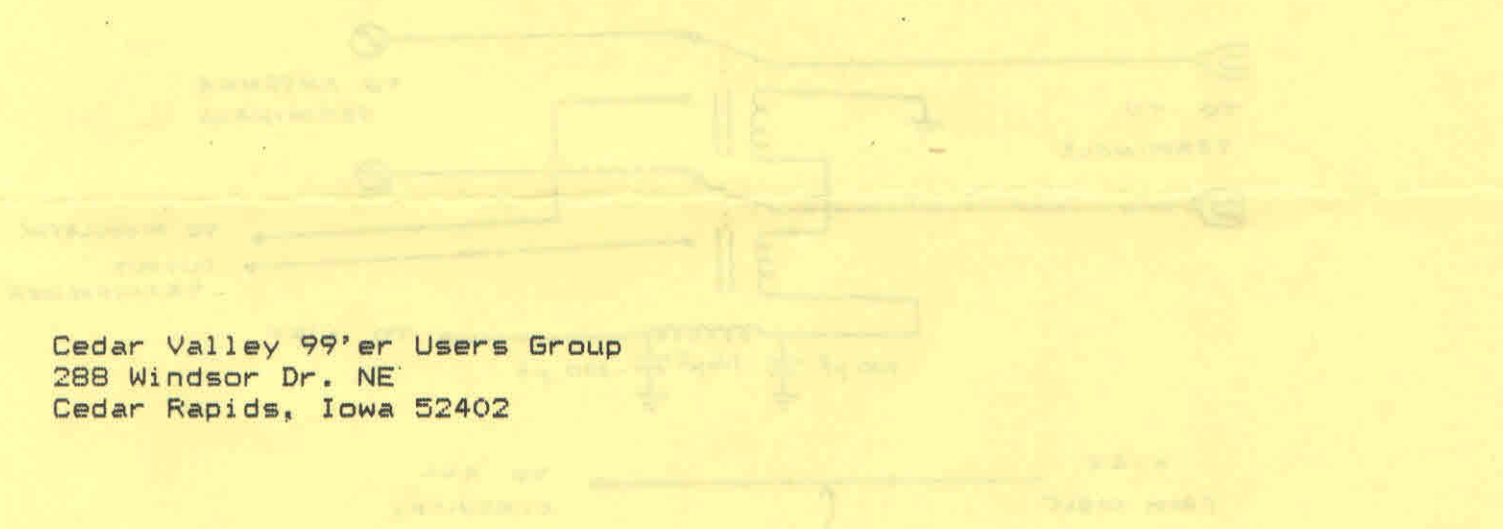
TUESDAY, SEPTEMBER 8

7:00 PM --- JA BUILDING

ASSEMBLY LANGUAGE CLASS AND

MYARC EXTENDED BASIC II!!

NOTE THE CHANGE IN DATE!



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