

August daydreams...

As the summer sun lights up the office (to the point where the video screen is hard to read), I find myself reminiscing about visiting the wineries of the Napa valley, rafting down the American River, and breathing the clean air of Lake Tahoe. But, alas, here I am back at the shop with a hangover, a sunburn, and an empty wallet (thanks to the Tahoe casinos) to remember my short vacation by. And Robin wants the editorial yesterday....



*					*
*	Level	Title	Turns Count		*
*					*
*			CTR-41	CTR-80	*
*					*
*	*****	Changing Patterns Cover	15 & 259	8 & 152	*
*	**	Moons Introduction	45 & 281	25 & 165	*
*	**	Moons	99 & 321	57 & 188	*
*	**	Startrek Instructions	161 & 368	97 & 216	*
*	*****	Startrek	201 & 400	117 & 235	*
*					*
*					*
*	*****	Changing Patterns Cover	11 & 255	5 & 149	*
*	** **	Moons	32 & 269	17 & 158	*
*	** **	Reversi	110 & 327	64 & 192	*
*	** **	Base Conversion	216 & 411	126 & 242	*
*	*****				*
*					*
*	DOS BASIC	Level2 (see notes)	243 & 433	141 & 254	*
*		(Mem 48000 Sys /49000)			*
*					*
*					*

The Changing Patterns cover is just that.

Have you ever wanted to see just how many natural objects orbit Jupiter, but NASA wouldn't sponsor your trip? At least now you can learn a little about Jupiter's moons, as well as the other planets' moons. Run Moons, and after you have scored 100% on the test section, try NASA again.

Startrek pits you against the Klingons in 9 separate quadrants. "Captain, we need more power, sir..."

Reversi is Othello under a different name. In September, 1978 we published a version of Othello that came back to haunt us. Without going into details, this is a new, updated version by the same original author. There are four levels of play (including one that cheats!) and you can play a partner, play the computer, or have the computer play itself.

Base Conversion allows you to change a number in any base (from 2 to 16) into a number in another base (from 2 to 16). Finally a decimal-to-hex conversion program!!

And now (drum roll please), CLOAD Magazine's first program especially for 48K disk users. As promised last month, Level2 is a program that allows you to Save, Load and Run a program with disks that will only run in Level II BASIC. There are two sequences of operation depending on whether

you are running TRSDOS or NEWDOS.

TRSDOS

```
Dump Level2 to disk using
  Tapedisk (Begin add. BC09
  End add. BFFD Entry BC09)
  (Add /CMD extension)
Type 'BASIC',<ENTER>,MEM '48000'
Load or Cload BASIC program
Save BASIC program
Back to Command Level (CMD"S")
Type 'LEVEL2'
Type <ENTER>,MEM '32767',
  'SYSTEM','/49000'
Program auto-executes
To go back to DOS - type 'CMD'
Type 'BASIC',<ENTER>,MEM '48000'
Type 'SYSTEM','/49000'
  Program auto-lists
```

NEWDOS

```
Dump Level2 to disk using
  LMOFFSET (Add /CMD
  extension)
Type 'BASIC,48000'
Load or Cload BASIC program
Save BASIC program
Type 'CMD"LEVEL2"'
Type <ENTER>,MEM '32767',
  'SYSTEM','/49000'
Program auto-executes
To go back to DOS - type 'CMD'
Type 'BASIC,48000'
Type 'SYSTEM','/49000'
  Program auto-lists
```

Try using it a few times. You'll get the hang of it. Note: Occasionally, the end-of-file marker gets lost and a listing of your program shows a lot of garbage tacked on to the end of the program. To get rid of this garbage, just enter a line number with a REM statement that is one number larger than the last line in the real program, enter line '65534 REM', and type 'DELETE [first line after the real program]-65534'. For more information on the Level2 program, see the author's (Bryan Mumford of Mumford Micro Systems, Box 435, Summerland, CA 93067) article in an upcoming Microcomputing 80.

News Flash -- Radio Shack has changed its Level II ROMs in mid-stream. All of the new Level II machines will have this new ROM. Those of you familiar with the micro-computing scene realize that this is not an unusual occurrence. And there are a few differences:

- 1) It asks for "MEM SIZE?" (not "MEMORY SIZE?").
- 2) Says hello with "R/S L2 BASIC".
- 3) Free memory is reduced by 2 bytes (I'm told that this is due to an extra 'push' done on a stack somewhere), but the positioning of BASIC is not affected.
- 4) CLOAD and CLOAD? can only be done from the primary tape drive, tape drive #1.
- 5) By holding down the <shift> key, the <down-arrow> key, and another key, the control code for that other key is output.
- 6) The KBFIX keyboard driver and the cassette load modification for the keyboard are not needed.
- 7) Multiple PRINT@s can be chained in a single PRINT statement.
- 8) A DOS user can now specify a filename when CLOADing under Disk BASIC.
- 9) Finally, if you have any old canned Radio Shack programs, they may not load due to a timing problem. If that is the case, you can have your handy Radio Shack replace it or have someone with an old ROM TRS-80 make a copy for you to use (this corrects the problem).

What is unusual is that it appears that 99.99% of the software already out there will run on the new ROM with no problem. I would say that 100% of the software will run, but as soon as I say that, someone will let me know that they have an esoteric program that crashes on the new machines. So I won't.

Another News Flash -- Have you heard that the the R/S computer fambly

(sic) is growing? There's the Model III - a repackaged Model I for those that like their computer in a nice, neat unit (the 16K version has a new BASIC, lower case, real-time clock, and is internally expandable to include up to 4 double-density disk drives, RS-232C interface, and 48K of RAM). There's a pocket sized calculator(?) with 1.9K RAM programmable in BASIC. And there's the Color Computer that will plug right into your TV. The Color Computer will allow assembly language programming, will be supported by plug-in instant-load software, and give the buyer a choice of BASICs (as in the Models I and III).

Radio Shack says that all of these devices are supposed to be available in the next couple months...? The rule-of-thumb on due dates for computer related products is: take the given time, double it, and use the next largest scale. For instance, if they say that your software will be ready in two days, allow four weeks before you get real worried. Unfortunately, Radio Shack sets a bad example for us bit-bustin' types - they tend to be close to their announced schedule. Now if we could just get this issue out close to our desired schedule...

Helpful Hint -- Ever want to keep a program running, only to have a roving appendage stroke the Break key? Have you wanted to use the Break key for some other purpose? Willie Burk of Kneeland, California has an idea - by Poking a certain value into location 16396 you Level II'ers can CONTROL the Break key (you Disk users probably can't use this):

Value	Result
23	Disables Break, Inkey\$ returns an ASCII 2
49	Machine locks up when Break is hit (hit Reset to unlock)
51	Goes to 'Memory Size' when Break is hit
201	Reset Break key to normal
207	Gives 'SN Error' when Break is hit
213	Gives 'L3 Error' when Break is hit
245	Gives 'FC Error' when Break is hit

Now the wheels start turning. What if I 'Poke 16396,213' and use an 'On Error Goto' statement early on in the program? Then I could branch to a certain routine by hitting Break! Hmmm...

```

1      POKE 16396,213
10     ON ERROR GOTO 100
.
.      (Main Program)
.
100    IF ERR=23 THEN GOTO 200 :REM  BREAK KEY HIT?
                                   (DISK COMMAND ERROR)
110    POKE 16396,201 : ON ERROR GOTO 0 :REM  NO --
                                   BREAK ENABLED -  NORMAL OPERATION
200    PRINT "HANDS OFF THE <BREAK> KEY!!!" :REM  YES --
                                   DO THIS ROUTINE, THEN
210    RESUME 10 :REM  GO BACK TO WHAT YOU WERE DOING

```

See the possibilities? A word of caution, though. The Break key is a useful key and should not be played with unless there is a definite purpose. Also, if it is not returned to normal in the program, it remains disabled until the computer is turned off. There is nothing more frustrating than having the Break key disabled while you are listing a program to find that certain line you would like to Edit, only to have the program scroll on by when you try to break out of listing the program at the right point.

In the Political Arena -- Before you get all up-in-arms, I'm not going to campaign for my favorite candidate (please write in Miss Piggy for the

Oval Office spot). But I am going to pass on a comment from the author of Election (February, 1980), Scott Richmond. As many of you remember, he seemed a bit premature in choosing Ronald Reagan and Edward Kennedy as the two main candidates. Well, it turns out that the reason Scott chose those two was not totally based on the press' whims, but that Ron and Ted represent "two ends of the political yardstick." If you would rather see your candidate win (remember, Mickey Mouse is friends with a duck, while Miss Piggy has chosen an excellent running mate in Kermit the Frog), just throw a few other candidates in the race with completely opposing views.

Bugs, Nit-Pickings, and Other Multi-Legged Creatures -- Speaking of Election, we got a few notes on the misspelling of Reagan's last name in the program. It just so happened that the line (line 80) could not be edited and the end of the line could not be seen. This is because the Reserved words in BASIC are stored as one byte in RAM, so a line that lists as 255 characters long (the maximum line length), might only take up 230 characters in RAM. The edit buffer is also 255 characters long, but the Reserved words are not stored as one byte. So, if you had a way to create a line that was 255 characters long in RAM, but 275 characters long if listed, you would not be able to: A) list the entire line or B) edit the line. I guess Scott Richmond has a way to create an extra long line.

Now, how do we edit such a line? We could Poke an 'a' in place of the 'o' (changing Reagon to Reagan) if we knew the location of the offending letter. The routine below walks through your BASIC program until it finds the correct string, then Pokes in the right value. I could just give you the Poke location, but I prefer brute force methods when I'm changing values in memory directly (just in case...) especially since this only took 67 seconds to run in Level II.

- 1) Load 'Election'.
- 2) Type in this routine:


```

5000 I=17129 : 'START OF BASIC PROGRAM IN RAM
5010 A$="XXXX" : 'START WITH A NULL STRING
5020 A$=A$ + CHR$(PEEK(I)) : 'ADD THE NEXT CHAR. IN RAM TO A$
5030 IF A$="REAGO" THEN GOTO 5070 : 'OFFENDING STRING FOUND?
5040 I=I+1 : 'NO --
5050 A$=RIGHT$(A$,4) : 'TRIM OFF THE LAST 4 LETTERS -
5060 GOTO 5020 : 'AND GO CHECK THE NEXT CHARACTER IN RAM
5070 POKE I,65 : 'YES -- PUT AN 'A' IN PLACE OF AN 'O'
5080 PRINT"REAGON IS NOW REAGAN"
5090 DELETE 5000-5090 : 'THE SPACE IS NEEDED BY THE PROGRAM
      
```
- 3) Now type 'GOTO 5000' and wait for a minute.
- 4) Check to see that the routine worked, then CSAVE 'ELECTION'.

Speaking of misspellings, something funny happened with our word processor last month. Not only did it spell 'calendar' with an 'e' (4 times), it also misspelled 11 other words. I found out about it after (naturally) the yellow sheets were printed, so I had no chance to correct them. This month I believe the problem is fixed, and Robin has warned me, I mean 'it', that if there are any words spelled wrong in this month's editorial, she'll send me, oops, I mean 'it', back to first grade. Sic, sic, sic, sic, sic (just covering all the bases).

Sincerely (sic),

Dave

P.S. Remember - Prices are going up and Level I is being dropped as of October 1st.

Ah, yes. The fix for the bug. Actually there are two. If you are running the game and get the error 'NF IN 980', Immediately type:

5

GOTO 910<enter>

and the program will run correctly (the stack is cleared and other funny things happen). To fix the bug permanently retype lines 460 and 470 and add line 465:

```
460 FOR Z=1 TO 100 : X=PEEK(15100) : R# = R#+1
465 IF X=0 THEN NEXT : RETURN
470 IF X=1 THEN GOTO 800
```

Splitting the line up like this lets the interpreter concentrate on what it is doing - no confusion! End of lesson.

Time for a holiday! And in keeping with the Halloween spirit, our tapes are now toad-colored. The new look signifies our new Level II only format and our boredom with the color yellow (150,000 labels later...). To those who liked the yellow labels; take heart! Our journalism shows no signs of being anything but yellow for a long time.

Trick or Treat,

Dave

Editor

FASTER THAN A SPEEDING TYPIST...

Is it safe to walk the keyboard of your TRS-80 at night? Do you look for Syntax Errors down every dark subroutine? Well, look in your mailbox—It's a bill, it's an ad, it's **CLOAD MAN!** Faster than keying in hardcopy, more fun than an accounts-receivable package, ready to run in a single load...

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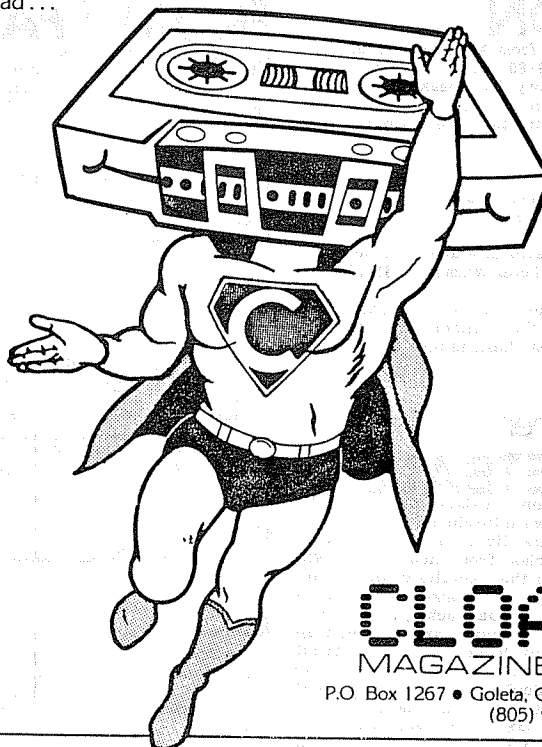
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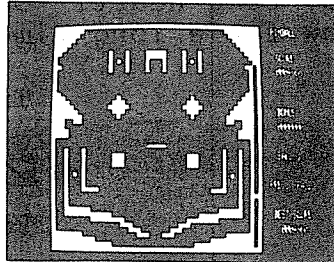
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The program is intended to be a guide to indications and not as a sole recommendation.

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by Carl Miller from Acorn

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SUPERSCRIPT

by Richard Wilkes from Acorn

"Scriptit" from Radio Shack is a great program. but it lacks some features. SuperScript adds features to your disk version of "Scriptit." Some of these features are:

You can get a directory or kill files from within SuperScript. TRSDOS or NEWDOS can read SuperScript files. You can insert text into unjustified lines during printout. For example, inserting a name after "Dear" and before the colon. For this purpose a lowercase driver is included.

On printers that can backspace, underlining and slashed zeroes (0) are options. On Diablo and NEC printers one can superscript, subscript, underline, boldface and select 10/12 pitch.

The keyboard driver is changed to allow a correct key repeat which is faster than tapping on a key and which does not destroy the video display. The initial character sent to the printer is changed from a linefeed to a carriage return to empty the buffer. A required space may be specified when it is undesirable to place spaces between parts of text when justifying. From the keyboard you can also enter special characters such as brackets, braces and carets.

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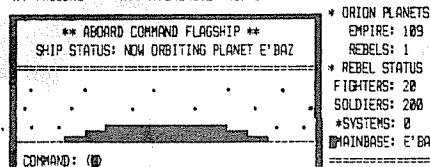
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