

We are infatuated...

We love to talk about our problems, even when they don't mean that much to you. Such hedonists! Which brings me to the topic of cassette labels - AGAIN! Oh, boy! You hopefully have noticed the extra label included with this month's issue. It says Oct. 1981 on it. Doesn't it look nice? You can put it on last month's cassette to replace the #@%\* yellow one. Thanks. Now we can rest easy knowing that your cassette is well dressed...



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*****
*
*   Filename      English Translation      PMODE PCLEAR  Locations  *
*
*   TURKCOV      Turkey Cover                3       4       8 & 130   *
*   STAREATR     Star Eater                    4       4       31 & 148  *
*   UFOMATH      UFO Math                      3      (4)     51 & 164  *
*   MORSINST     Morse Instructions           (2)    (4)     71 & 179  *
*   MORSQUIZ     Morse Quiz                   0       1       85 & 191  *
*   REVERSI      Reversi                       (2)    (4)    113 & 214 *
*
*   Locations are for the R/S CTR-80.  If the first copy of a program
*   won't load, try the second.  If neither copy loads, return the tape
*   for disciplining and a prompt replacement.  PMODE and PCLEAR values
*   in parentheses are not explicitly set in the programs and may have
*   to be entered before loading or running the programs.  Otherwise,
*   an OM, FC, or SN error may occur.  * These programs may use high
*   speed.  Be sure the computer is slowed down again before doing I/O
*   to tape (POKE 65494,0).
*
*****

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What a Turkey Cover! It just goes to show what a lack of imagination coupled with the responsibility of putting together an issue can do.

Does the sky seem a bit too cluttered on a moonless night? Those of you living in metropolitan areas will just have to take my word that it is. Get rid of those extraneous stars! And get a better score for doing it fast with Star Eater.

Undocumented feature - when Star Eater asks you to press your joystick button to play (there is nothing suggestive about that, is there?), press 'X' on the keyboard instead (I'll resist the X-Rated pun) and a copy of the high scores will be dumped to a waiting printer.

Undocumented Extended BASIC feature - if you take a look at lines 440 and 446 in Star Eater, you will see a statement that says:

```
PAINT(X1,Y1),N0
```

But, isn't the format for PAINT something like 'PAINT(x,y),c,b'? What happened to the border color (b)? It turns out that the PAINT command is forgiving when it comes to the paint color (c) and border color (b). If either one or both are left off the end of the command, they default to the foreground color. Give a point to R/S.

Who says education can't be fun? Just give me a little incentive and I'll learn anything (ie: you keep sending us money, and I'll learn to write). When you answer a math problem correctly in UFO Math, you get to shoot at the UFO. Such a deal! That little prize can make learning or relearning addition addicting for anyone (but it will never replace calculators).

Boy, is communication becoming sophisticated! Electronic mail, satellite transmissions, two-way cable TV, etc. So what do Morse Instructions and Morse Quiz do? They teach you Morse code. What???!!!! Well, Morse code is still being used (get out your shortwave radio and you will probably hear someone dit-dotting away), and you are required to know it to get some broadcasting licenses. Besides, Morse code is interesting! Note - this teaches the international (or continental) code, which is commonly used today, rather than the original American Morse code. Also, be sure to 'PMODE 0 : PCLEAR l'<enter> before loading in Morse Quiz or you may get an OM error.

There are many games that have been embraced by micro users/programmers to the extent that there are 1,789,361 versions of each floating around. This month we contribute another version of Reversi to the pile. For those of you unfamiliar with the game (is it possible?), the object is to have more of your pieces on the board when neither you nor your opponent can move.

The board is a grid similar to a chess board. You each start with two pieces in the center of the board. You then place another piece in line (up, down, left, right, or diagonally) with one of your pieces already on the board. ALL of the spaces between the two pieces MUST be occupied by your opponent's pieces. Then all of those spaces between your two pieces are taken from your opponent and given to you.

And who is your opponent? Why, CoCo, of course! As an extra crutch favoring CoCo, you have a time limit in which to make your move. You gotta be good to beat it.

The last program this month... what's that? Reversi is the last program? But there was supposed to be one more... oh. There it is, on the wrong side of the shelf. Darn! And the tapes are all duplicated already? Ok, one extra program coming up next month. Murphy strikes (and connects) again...

Auto-reverse...

Last month I told about a method of disabling the auto-execute on the R/S cartridges. I also mentioned that executing them afterward might cause problems. Well, several solutions were presented to me by various people (Mike Smith of Manteca, CA, Phil Donahue of Natick, MA, and Scott Shaffer of Bellevue, WA, to name a few):

1) Instead of doing a 'POKE 65315,184' and then a 'POKE 65314,6', you can just 'POKE 65315,182'. Then an 'EXEC 49152' will execute the cartridge right.

2) Better yet, if you 'POKE 65315,54', CoCo won't even know that a ROM pack is there, and a simple 'POKE 65315,55' will auto-execute it.

3) If you would rather do the POKES that I mentioned last month, don't 'EXEC 49152' to start, but rather 'EXEC 271', which starts the FIRQ routine and causes the cartridge to execute properly.

If you want to move the cartridge code into RAM and try to execute it there, it appears that these ROM packs will run: Personal Finance, Color

File, Bingo Math, Typing Tutor, and Space Assault.

Mike Smith also mentioned a couple of other goodies. If you want to 'CLOADM' a machine language program with a negative offset, CoCo won't let you. But you can specify an offset that goes over the top of memory and it will wrap around. So if you want to have an offset of -1000, then specify an offset of 65535-1000 to accomplish what you wanted. Also, when you get an I/O error during a CLOAD, there are actually two possible errors that can occur. If PRINT PEEK(129) returns a 1, then the error was a checksum error. If a 2 is returned, it was a memory error (so the tape is probably not at fault).

I need UFO MATH...

Bob Dahl of Reading, PA teaches math, and his powers of observation are good. I said that 2/17 repeats in 48 digits (Sept. 1981). But he pointed out that if you look at the digits and ignore the grouping by threes, it actually repeats in 16 digits. Can I take the test next week?

Business is business...

If you get a bad tape (heaven forbid), there is no need to put stamps on it to return it for replacement. Just stuff a little note in the coin envelope along with the tape and mark it 'REFUSED - RETURN TO SENDER'. That's one good thing about First Class Mail.

Also, if you write us about a loading problem or a bug in a program, please tell us about your computer (amount of memory, disk or non-disk, etc.), the procedure used to load or run the program, and what error messages you got (if any). This will help us both!

Finally, I'd like to thank you for all the submissions. There were some good ones that should be appearing in future issues. And more are needed! But please don't use the Starwars theme or logo, or anything else that is copyrighted, in your program. We will have to take it out or send the program back (waaaa...).

There's a new kid in town...

Wow! Another magazine just for CoCo owners! Rainbow Magazine has been around for a few months now, but people are just starting to discover it (and editor/publisher Lonnie Faulk will soon find himself swamped with orders). Matter of fact, I just saw it last month about 10 minutes before the October issue went out, so I'll comment on it now.

Looking at the ads on the last page of these sheets, there seems to be two magazines that each claim to be the only one for the Color Computer. Well, Rainbow is the only monthly one, and Color Computer News (a bi-monthly) was the only one when their ad was done. And they are both worth it.

Rainbow is a newsletter-type magazine packed with tips, programs, software reviews, and news for the Color Computer. Past articles included a line justifier program (for word processing), a talk on software theft, a school grading program, how to get hardcopy from VIDEOTEX, a tutorial on PRINT USING, and lots of software reviews. Below you will see a screen printer subroutine that I lifted from the pages of Volume I, Number 2 (with Lonnie's blessing). Note - this routine will not print graphics:

```
10000 FOR X=0 TO 15 : REM DO THE ROWS
10010 FOR Y=0 TO 31 : REM DO THE COLUMNS
```

```

10030 Q=PEEK((X*32)+Y)+1024) : REM GET A CHAR FROM THE SCREEN
10040 IF Q=>96 AND Q<=127 THEN Q=Q-64 : REM UPPER CASE JUSTIFICATION
10050 IF Q=>0 AND Q<=31 THEN Q=Q+96 : REM LOWER CASE JUSTIFICATION
10060 PRINT#-2, CHR$(Q); : REM PRINT THE LETTER
10070 NEXT Y : REM FINISH A ROW
10080 PRINT#-2 : REM GO TO NEXT LINE
10090 NEXT X : REM FINISH ALL ROWS
10100 RETURN : REM BACK TO WHERE IT WAS CALLED FROM YOUR PROGRAM

```

Line 10050 is compliments of Howard Culbreth of Tabb, VA.

First impressions of a disk system...

The new Color Computer disk system from Radio Shack is out. I have not bought one (I'd like to keep our system as compatible with most of your systems as possible for a while yet), but I did run over to play with the one at our local R/S computer center.

First, I picked up the manual. It is written in the style of their other CoCo manuals. That is, it takes the novice by the hand through the operation of a disk system with a tongue in cheek dialogue. And it is not too simple for the experienced programmer, either (especially since the whole system is designed for ease-of-use).

One thing that I noticed right off (the perceptive person that I am), is the absence of a DOS (disk operating system) that the user can get to. The computer comes up in and stays in Disk BASIC. All of the disk operations are done from BASIC. This makes the system almost invisible to the user (a feature!). There are a couple of commands that allow the advanced programmer to diddle directly with the info on the disk, so the computer freaks won't be too disappointed. And, of course, the one BIG feature of a disk system over tape is being able to access a file randomly, so little CoCo would be better equipped to do more serious tasks (what could be more serious than protecting the earth from invading aliens, though?).

No bed of roses...

Darn, darn, darn, darn!!!! Just when I thought that R/S deserved applause for its implementation of the disk system, their true colors show through. This system was supposed to be INVISIBLE to the user. Bull Puckey!! In the interest of being consistent with their past performances and the saving a few bucks (NOT WORTH IT, TANDY), you lose 2K (at least) of RAM when you add disks to your system. Not only do you lose the RAM, but the graphics pages that used to start at 0600 hex are now pushed up that 2K+! Normally, this would be an acceptable solution (DOS systems take more room) except that the space between E000 to FEFF hex is unused (that is 8K of addressable memory WASTED). That space is 1/2 of the memory reserved for the ROM packs. If R/S had added 8K of RAM (yes, it would have made the disk system maybe \$50 more - a small price to pay) to the DOS cartridge, the Disk BASIC scratch pad area, the Random File Buffer Area, and the File Control Blocks could all have resided INVISIBLY out of harms way.

As it stands now, though, unless you get 32K with your disk system, large programs (like Blockade, Drawer, How Far, Jerusalem Adventure, Morse Quiz, etc.) will not fit in RAM. Also, programs that used machine language routines that assumed that the graphics pages started at 0600 hex will not work without modification. Below you will find the disk system fixes (hopefully) for our past cover programs and Jerusalem Adventure (for those of you with 32K):

For all the covers from July 1981 to October 1981 -

Look at lines 10 to 40. If the 'PCLEAR 4' statement is not at the beginning of line 10, then take out the statement 'PCLEAR 4', wherever it is. Now insert 'PCLEAR 4:' at the beginning of line 10.

Next, edit line 85 and add line 38 as follows:

```
85 Q=PEEK(VP+2)*256 + PEEK(VP+3): DEFUSR=Q
88 POKE Q+7,PEEK(188)-1
```

For First Cover, a couple of other modifications need to be made:

Delete lines 20000-20230 and add line 145 as follows:

```
145 POKE Q+4,PEEK(188)+10: POKE Q+10,PEEK(188)+5:
      POKE Q+36,PEEK(188)+10: POKE Q+42,PEEK(188)+5
```

To fix Jerusalem Adventure (32K only), you must edit lines 45000 and 45050 and add line 45010 as follows:

```
45000 AD=PEEK(188)*256+1264: FOR X=AD TO AD+52:
      READ Q: POKE X,Q: NEXT
45010 POKE AD+4,PEEK(188): POKE AD+31,PEEK(188)
45050 DEFUSR=AD: DEFUSR1=AD+26: RETURN
```

Just a few pointers...

Just what is this 'PEEK(188)'? At memory locations 188 and 189 you can get the starting location of the PCLEARED graphics pages, which is different for disk systems. The starting point for the current graphic start page is at 186 and 187. The starting point for your BASIC program is at memory locations 25 and 26. And the ending point for a BASIC program is at locations 27 and 28.

Just a few feathers...

It's turkey time again, and all of us here want to thank all of you there for your support and our paychecks. Actually, many of you have told us that you like what we are doing, and we are naturally happy. Thankee again.

Could I have more dressing, please?

*Dave*  
ed

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