Let's call it artistic license...

The label on your cassette might look a bit funny this month. We decided that a two color label would look nifty. Our printer said, 'No problem'. Labels were done, but the ink didn't dry. The printer-ink battle grew. And when the ink and stickum cleared, the printer was sitting on the floor amid tufts of his own hair - with the ink on the labels still not drying. Label Leprosy had set in! Next month we will have all the bugs out. Ya, right...

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SEPTEMBER 1981

Filename	English Translation	PMODE	PCLEAR	Locations
SEEKCOVR	Seekers Cover	3	4	11 & 122
NERVES	*Nerves	2	2	30 & 138
SPELLIT	Spell It	(2)	(4)	48 & 153
BASEGUES	*Base Guess	(2)	(4)	70 & 170
HICALC	High Calculator	0	1	89 & 185
MUSICPAT	Music Pattern	(2)	(4)	108 & 201

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). FIXES ETC NERVES 904P2 BASEGUES 904P3 COVER 905 P5

Take an old CLOAD cover program and a current arcade hit (I think it's called PUCMAN, or something similar), mix them together, and you get a cover that resembles neither of them. But Seekers Cover is quite addicting to watch in its own right. But then, I'm easily amused...

Are you ready for a challenge? Have you not been frustrated lately? Nerves is for you! Don't be discouraged by a negative score the first dozen or so times you play it. It takes a while to get the hang of the arrow keys and how they affect the block's movement. The top possible score is 300. 30 is a good score.

Neat things are happening in line 5 of Nerves! Your Color Computer gets a big shot of Vitamin E (kudos to the Color Computer News for the name)! When you 'POKE 65495,0', the computer runs at warp 7 (I believe it has something to do with stepping up the clock rate, but don't hold me to that). Everything you now do on the computer runs faster - that includes the sound and cassette I/O. So that song you so carefully typed in will sound like the Chipmunks played it. And that data you saved to tape probably won't load back in.

It doesn't sound like Vitamin E is all that good for your machine, does it? Well, there is a remedy - just 'POKE 65494,0' and your machine goes back to normal speed. Ok, if you have a program that you would like to run in high speed, but you also want to save some data to tape, give it a shot of Vitamin E while the program is doing internal work. When the program gets to the point where it wants to save some data to tape, give the program the remedy to

slow the computer down. After the tape stuff is finished, you can feed it Vitamin E again to speed it on its way.

Warning! Warning! Warning! Warning! Warning! Warning! Warning!

Both Nerves and Base Guess run in high speed. If you <break> out of the middle of either one of these programs, the computer may still be in high speed. So before saving the program off to tape or loading in another program, be sure the computer is in low speed or 'POKE 65494,0' first. Also, the older machines (before serial number 22000?) may not allow keyboard input, joystick input, or sound output when in high speed due to a different chip used (see below).

Note! Oops! Note! Oops! Note! Oops! Note! Oops! Note! Oops!

Our Color Computer is one of the early ones. When I give it Vitamin E, the joysticks won't work properly and it chokes on sound. But the keyboard input worked okay. So I assumed that all the old Color Computers were the same. Then I talked to Bill Sias at Color Computer News. It seems that there are a few 6821 chips in the old models (these chips act as sort of an external, memory controlled port for I/O) that have been replaced by 68B21 chips in the later models. The 68B21s are faster and there is no problem with Vitamin E. However, if you have 6821s in your ol' CoCo running within their normal specifications, Vitamin E will not work with any of the I/O, including the keyboard. I guess the 6821 associated with the keyboard on our machine was running above specs. Darn! Our tapes were already being duplicated when I found this out. So, if the the arrow keys are ignored when you play Nerves, you may have to delete line 5 before running the game and play it in slow speed.

If you ever have trouble with your speling (sic), Spell It can help. You get a list of five words with one of them possibly misspelled. You then choose which one is wrong, and attempt to spell it right. You can also add your own 'most commonly misspelled' words to the list for practice. Note - this program can be skipped by those of us who have the luxury of good proofreading (thanks Robin and Donna).

0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZ - The number symbols in base 36. With Base Guess, the computer chooses a number in the base of your choice. Then you and your opponent(s) attempt to guess the number. The computer will then tell who is closest or congratulate the person who guessed the number correctly. Sounds simple? Try it in some off-the-wall base like 29. Or use it to practice your base 16s (CoCo's native tongue).

For some reason you want to find out if 2/17 is a repeating decimal (you should be locked up out of harms way). On your computer you get .117647059. Sure doesn't look as though it repeats. Now get out Hi Calculator. Set the precision to 900 places. Divide two by seventeen. Although this not conclusive (I lost my interest in the formula to prove repetition after the math exam was over), it appears that 2/17 repeats after 48 places (.117 647 058 823 529 411 764 705 882 352 941 176 470 588 235 249 ...). Yes, Hi Calculator is a four-function high precision calculator. Note - if you have more than 16K of RAM, you can get more than 900 places of precision by changing the value of PR in line 200 (your maximum precision is PR * 3).

Music Pattern is one of those "repeat-the-musical-pattern" games.

From across the back fence...

Boy, those people at Color Computer News are all right! Talking to them (specifically Bill Sias) and reading their magazine fills my mind with all of

the latest Tandy gossip as well as helpful tidbits on the Color Computer. Here are a few of the juiciest things (remember, these are rumors and have not been verified on this end):

There is a new ROM for the Color Computer. It supposedly contains BASIC 1.1 and costs $99 from Radio Shack. Now try and get one. Our local shop doesn't have any info on it. But if the serial number on your system is greater than 47000, you may already have it. There are a few differences: 1) If your printer can handle graphics, you can print them without the old song and dance you used to have to do (whatever it was). 2) When you press the button on the joystick, the '@ABCDEFG' or 'HIJKLMOP' are not displayed on the screen (note - INKEY$ will not pick them up either!). 3) The problem with saving data to tape (it just doesn't always work right with the old ROMs) is fixed. 4) There are a bunch of disk commands added (so if you get disks, you get this new ROM).

Speaking of disks, CC News has heard that the drives are TEACs with the DOS in ROM. The disks will connect where the cartridges go and, you guessed it, your cartridges won't be able to be used while you use the disk system. The DOS is similar to TRS-DOS (do you need two drives to do a backup?).

The 32K modification that Radio Shack will use will not be piggy-backed chips. They will be (get this) reject Motorola 64K bit chips where 32K is good. Now the wheels start turning. What if you test the new 64K chips and they test good all the way (or buy verified ones from Motorola)? Then it seems that it would be possible to have a Color Computer with 64K of virgin RAM (no BASIC in ROM). See future issues of the Color Computer News for more details.

If you ever want to 'PCLEAR Ø' to get the extra 1.5K of RAM that Extended Color BASIC won't let you have, there are a couple of tacky (but better than nothing) methods below:

1) Type this in and hit <enter> before CLOADing in a program:
POKE 25,6: POKE 27,6: POKE 29,6: POKE 31,6: NEW

2) The 'Bootstrap' method. Put the following short program on a tape just before a program that needs the extra 1.5K. Then load and RUN this program. The extra memory will be allocated and your big program will automatically be loaded in.

```
10 POKE 25,6
20 CLEAR
30 CLOAD
```

If you use one of the above methods, you will have about 14.5K of available RAM. But be sure that your program does not use any graphics requiring the PMODE to be set or you will have trouble.

I just saw a copy of the Radio Shack Microcomputer News. They also give a couple hints on getting that extra memory. And they give an algorithm for dimensioning the arrays that the GET and PUT commands use that saves a whole bucketful of memory:

$$\text{array size} = \frac{(\text{length} \times \text{width}) - 1}{N} \quad \text{rounded down}$$

where N = 40 for PMODE 3 and 4
N = 80 for PMODE 1 and 2
N = 160 for PMODE 0

Also, the 'G' option must be used with GET and one of the PSET, PRESET, AND, OR, or NOT options must be used with PUT.

An example - in Nerves, the GET and PUT commands are used to display your score as you play. Each array holding a number (0-9) is dimensioned 5 by 8 in line 6. Since the length of each number is 10, the width is 6, and the PMODE is 1, each array could have been dimensioned:

$$\frac{(10 \times 6) - 1}{80} \quad \text{or} \quad .7375 \quad \text{or} \quad 0 \text{ rounded down}$$

They could have been dimensioned zero (they still must be dimensioned, however)! There is no need for a two dimensional array! A savings of about 200 bytes per number! I wish I had seen this hint earlier! Note - All of the above hints are not given as gospel by CC News or R/S, so be sure to completely test any programs using the above methods.

Trouble in the Holy Land...

Last month's Jerusalem Adventure gave a lot of people a very rough time, especially those who had never seen an adventure game before. No more 'Hee hee hee' from me. The 'Street in Jerusalem' and 'Shore of the Dead Sea' areas are tricky in that you don't seem to make any progress in them and if you turn the wrong way once, you can't go back. Also, there are no clues in these areas to tell you whether you are moving right or not. So I'd like to explain a little more about adventure games and give a few clues to Jerusalem Adventure. If you understand how an adventure game works and you don't want any hints, skip down to the 'Bugs in the Holy Land...' heading.

Adventure games are kinda like trying to discover 'who done it' in a murder mystery. You start with almost nothing except a goal and your wits. First you take a look at where you are. In Jerusalem Adventure, you are in the Holy Land. Your first clue! What kind of things can help you in a holy place? Maybe tithings? How about prayer? If these things don't work where you are now, they may work later. Next, check yourself out. Are you carrying anything (try typing 'INV' for an inventory of the stuff you are carrying)? Now check out your current location. In Jerusalem Adventure, you are on some street. Look at the street. We know it doesn't do any good in this particular adventure, but it may give you a clue in another one. Ok, now it is time to move. You notice that you can go North, South, East, or West (did you know that you can type just 'N', 'S', 'E', 'W', 'U', and 'D' instead of 'GO NORTH', 'GO SOUTH', ..., GO UP, GO DOWN?).

As you discover new rooms and areas, check them out fully. If you come to a wall, look at it. It may have a hidden door or a message written on it. If you come to an object, look at it too. Can you carry the object? It may come to good use later! Let's say that you found a t-shirt. You might look at it to see if there is any writing on it. Then you should get it. Now what do you do with a shirt? Sometimes you wash it (hopefully). But usually you WEAR it. So give the adventure the command 'WEAR SHIRT'. It may give you magic powers. Or it may kill you (so don't wear it next time you play).

Make a map as you go. Put on this map all of the possible directions that you can go from each room that you get to. Also mark on it where certain objects can be found. Then your 20th attempt at solving the adventure will be a little easier.

Now for a few hints to get you through some (but not all) of the hard spots in Jerusalem Adventure:

When you first begin the adventure, go north twice. Get the keys. Then

go south three times. You will be out of that @#&!*# 'Street in Jerusalem'.

The 'Shore of the Dead Sea' is an area similar to the 'Street in Jerusalem'. As you move around the shore, there will be times that you will allowed to go north. The north directions lead to other rooms. But these rooms only lead back to the Dead Sea shore. However, a magic word in one of the other rooms can change this hopeless situation.

When you are at the 'Western Wall', be very religious.

Bugs in the Holy Land...

An 'FC ERROR' can occur on occasion when you type certain commands without a second word (ie: if you just type 'SAY' without adding what it was you wanted to say). To fix this add 'SP=LEN(A$):' after the 'ELSES=Ø:' in line 15Ø.

I/O error in brain...

We got a few 'bad' tapes back last month. Since the duplication system is relatively new, we tested all of them. A couple were blank, a couple we couldn't load, and the rest loaded from volume 4 to 1Ø on our CTR-8Ø. What? How could tapes that we loaded so easily not be loaded by our subscribers? After a little head scratchin' and talkin' to other subscribers, we found out that the CTR-8Ø and the Color Computer really go together. Other recorders may not load as easily or at all into CoCo. It turns out that there is a variance in the CTR-8Øs also - ours loads from 4-1Ø and others may load from Ø-4! Finally, it does happen that a tape will NOT load one day, and the next day will load in fine. Don't even try to ask me why. Slapping the tape down on a table may help (this lines the tape up in the cassette shell). I just keep telling myself, 'Tape is fun... tape is fun...'

OM ERROR, Dave

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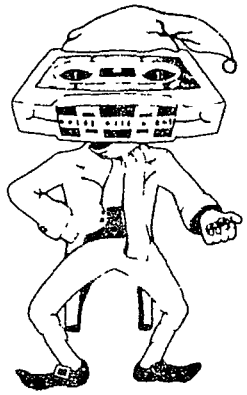

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