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**Family Budget 1987**

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<b>Budget</b>					
	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>	
<b>Salary Income</b>	\$2400.00	\$2400.00	\$2400.00	\$2400.00	

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Design your own animated sequence of facial expressions with *Face Cartoon* on an Apple, Atari, Commodore, IBM PC or compatible, or Tandy computer.\*

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*Micro Phonebook* helps you manage telephone numbers and addresses of business contacts, family, and friends. A data-base program for Apple, Commodore, and IBM PC and compatible computers.\*

\*See program for specific computer models and hardware requirements.

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# MACHINE SPECIFICS

The package I use for my system, *Mace Utilities* (Paul Mace Software; [503] 488-0224; \$99) offers the above features, plus the ability to restore your disk even if you accidentally issue the DOS FORMAT command (and thus wipe out the contents of the hard disk).

Neither utility should be considered a replacement for regularly backing up your data onto floppies. However, both are valuable safety nets and provide additional, useful features.

Incidentally, the reason you can "undelete" files at all is that DOS doesn't actually erase a file when you issue the ERASE command. It just changes the first letter of the file name to an obscure ASCII character and indicates when the section of the disk that contained your file is available to be overwritten. Until DOS reuses the space, though, the information is still on the disk.

**Scanning for Scanners.** For the Macintosh, a clever gizmo called ThunderScan has been a big hit for quite a while now. By replacing the ImageWriter printer ribbon cartridge with a scanning device, ThunderScan travels back and forth across a page fed into the printer, converting the picture into digital information and feeding it to the computer. It's an inexpensive way to transfer images from a piece of paper onto your computer screen.

Now MS-DOS computer users with certain Epson printers can finally do the same trick. The Epson Image Scanner Option Kit (\$300) is a scanner for the Epson EX-800, EX-1000, and LQ-2500 printers. The system comes with a program called *Inset* that enables users to insert graphics into word-processing or spreadsheet documents.

For Epson FX-80/85 owners, E. Arthur Brown Co. ([612] 762-8847) has announced a scanner that works on the same principle. PC-PictaScan (\$150) produces files compatible with popular PC paint programs.

**New Game Releases.** As MS-DOS computers continue to sell, software companies continue to convert old-time favorites to MS-DOS format. New conversions include *Where in the World Is Carmen SanDiego?* (Broderbund), *Wizard's Crown*, *Phantasia*, and *Shard of Spring* (Strategic Simulations).

Contributing editor STEVE MORGENSTERN can be reached on CompuServe (ID: 72545.606).

## TANDY

BY STEPHEN MILLER

As mentioned in previous columns, most CoCo 1 & 2 software will run on the CoCo 3, but because there are significant differences in the way the CoCo 3 works, some programs may not run properly. Most of the problems have to do with the way older models generate color, but there are also differences in the operating system that can prevent some packages from running at all.

According to Radio Shack, the following software will not run on the CoCo 3, and Radio Shack is not planning to upgrade or fix these programs: *Appliance/Light Controller*, *Art Gallery*, *Audio Spectrum Analyzer*, *Cyrus*, *Diagnostics ROM*, *Downland*, *DragonFire*, *Kidwriter*, *Music*, and *Videotex*.

If you discover any other candidates for the above list, drop me a note at P.O. Box 782, Adelphi Station, Brooklyn, NY 11238.

**OS-9 Update.** It's unclear why there's been a delay in shipping OS-9 Level II for the CoCo 3, but some things are clear. You must purchase Level II if you have a CoCo 3 and want to use OS-9. Level 1 won't work on the CoCo 3. Second, the lag in Level II availability is causing delays for third-party software developers. They are unable to furnish the "run time" version of OS-9 Level II, which allows their programs to run on CoCos without OS-9.

**1000 EX Second Drive.** Every month, I plan to install an additional piece of equipment on the newer Tandy machines and report on the difficulty of installation and the clarity of the documentation. Most of the upgrades will be those that are "user installable." This month, the 1000 EX gets a second external 5 1/4-inch disk drive (\$249.95).

The drive gets four stars for ease of installation. In fact, "installation" is too technical a term for connecting the external drive. All you need to do is plug the cable and the ground wire into the back of the drive and into the back of the computer. The only note of caution is to make sure that the Torroid, a round filter tube at one end of the cable used to reduce electrical interference, is close to the computer.

STEPHEN MILLER, former computer columnist for UPI, is a freelance writer and computer consultant.

## ORPHANS

BY PATRICK SPERA

Sometimes I'm asked, "Why bother with those old machines? Aren't they useless? Dead?" Well, the only dead computer is one that isn't used. Many users' groups seem to share my opinion. They are finding new uses for their computers and helping their communities while they're at it.

The local TI users' group here in Oklahoma City (Sooner 99er, BBS [405] 672-8270) is using its spare machines to help handicapped children with learning disabilities. Three users' groups in San Francisco (EBZUG, PUG, and SVSTUG) are gathering Sinclair ZX81s and TS-1000s, refurbishing them, and donating them to Nevada prisons.

I'm sure other groups are starting equally worthwhile projects. If you or your users' group is involved in a community project, why not drop me a line in care of FAMILY COMPUTING and let me know. Information not shared is not information!

**Adam CP/M Software.** Workman & Associates (1925 E. Mountain St., Pasadena, CA 91104; [818] 791-7979) has several pieces of software available in the Adam CP/M disk format. For daring souls who want to brave the perils of space, there is *StarKill* (\$19.50), a text adventure. For the do-it-yourselfers, there's *Build-An-Adventure* (\$49.50). And those of you with Eve or Orphanware printer interfaces might be interested in *Write* (\$99.95).

**Timex Telecommunications.** Steve Ishii (18414 Deloie Ave., Cerritos, CA 90001) and Peter Fischer (P.O. Box 2002, Tempe, AZ 85281) have released a pamphlet called *The Guide to T/S Telecommunications*. This 52-page manual is packed with almost everything that one would need to know to get into telecomputing. Send \$2 to Steve or Peter for a copy. A second, expanded edition is available for \$5.

Just a quick reminder that the second annual TS Fest will be at the Holiday Inn North in Indianapolis, Indiana, on May 2 and 3. Call (317) 291-6002 during evenings and weekends for more information. If you're in the area and miss it, you'll regret it for the rest of your life because I will be there.

PATRICK SPERA can be reached on CompuServe (ID: 76703.4350).

# MUSIC PROGRAMS

## BY JOEY LATIMER

### ON TOP OF SPAGHETTI

"Do you feel like having spaghetti tonight?" my wife called up to me from the bottom of the stairs. Little did she know that I had spent the entire day writing a program called *On Top of Spaghetti* for K-POWER. "Sorry, hon, I'm not hungry just yet," I replied hastily, although I was famished. She'll understand—and so will you—why I wasn't particularly hungry for spaghetti, when you type in this month's music program. SAVE it, and then RUN it. Excuse me while I sneeze . . . AH CHOOO!



### ADAM ON TOP OF SPAGHETTI

```
10 LOMEM: 29000:DIM c(25),d(22),n1(22),n2(22),w$(25)
20 FOR x = 28000 TO 28005:READ m:POKE x,m:NEXT x
30 POKE 28006,159:CALL 28000
40 FOR x = 1 TO 22:READ n:n2(x) = INT(n/16)
50 n1(x) = n-n2(x)*16:READ d(x):NEXT x
60 FOR x = 1 TO 25:READ c(x),w$(x):NEXT x
70 TEXT:PRINT TAB(5);"- ON TOP OF SPAGHETTI -";:PRINT
80 t1 = 1:t2 = 1:FOR y = 1 TO 6:PRINT
90 FOR x = 1 TO 22
100 IF c(t2) = t1 THEN PRINT TAB(2);w$(t2):t2 = t2+1
110 POKE 28006,144:CALL 28000
120 POKE 28006,128+n1(x):CALL 28000
130 POKE 28006,n2(x):CALL 28000
140 FOR de = 1 TO d(x)*200:NEXT de:t1 = t1+1
150 POKE 28006,159:CALL 28000:NEXT x,y
160 PRINT:PRINT "Press <q> to quit"
170 PRINT "or any other key to play again.";
180 GET k$:IF k$ <> "q" AND k$ <> "q" THEN 70
190 END
999 REM --MACHINE LANGUAGE DATA--
1000 DATA 58,102,109,211,255,201
1999 REM --TIMING AND TEXT DATA--
2000 DATA 859,1,859,1,682,1,574,1,430,4,511,6
2010 DATA 511,1,644,1,574,1,511,1,574,9
2020 DATA 574,1,859,1,682,1,574,1,574,4,766,6
```

```
2999 REM --TEXT AND TIMING DATA--
3000 DATA 1,ON TOP OF SPAGHETTI
3010 DATA 7,ALL COVERED WITH CHEESE
3020 DATA 12,I LOST MY POOR MEATBALL
3030 DATA 18,WHEN SOMEBODY SNEEZED.
3040 DATA 23,IT FELL OFF THE TABLE
3050 DATA 29,AND ONTO THE FLOOR
3060 DATA 34,AND THEN MY POOR MEATBALL
3070 DATA 40,ROLLED OUT OF THE DOOR.
3080 DATA 45,IT ROLLED IN THE GARDEN
3090 DATA 51,AND UNDER A BUSH
3100 DATA 56,AND THEN MY POOR MEATBALL
3110 DATA 62,WAS NOTHING BUT MUSH.
3120 DATA 67,THE MUSH WAS AS TASTY
3130 DATA 73,AS TASTY CAN BE
3140 DATA 78,AND EARLY NEXT SUMMER
3150 DATA 84,GREW INTO A TREE.
3160 DATA 89,THE TREE WAS ALL COVERED
3170 DATA 95,WITH BEAUTIFUL MOSS
3180 DATA 100,IT GREW LOVELY MEATBALLS
3190 DATA 106,AND TOMATO SAUCE.
3200 DATA 111,IF YOU EAT SPAGHETTI
3210 DATA 117,ALL COVERED WITH CHEESE
3220 DATA 122,HOLD ONTO YOUR MEATBALLS
3230 DATA 128,AND DON'T EVER SNEEZE!,0,0
```



### APPLE II SERIES/ON TOP OF SPAGHETTI

```
10 DIM C(25),D(22),N(22),L$(25)
20 FOR X = 768 TO 796:READ ML:POKE X,ML:NEXT X
30 FOR X = 1 TO 22:READ N(X),D(X):NEXT X
40 FOR X = 1 TO 25:READ C(X),L$(X):NEXT X
50 HOME:PRINT TAB(8);"- ON TOP OF SPAGHETTI -";:PRINT
60 T1 = 1:T2 = 1:FOR Y = 1 TO 6:PRINT
70 FOR X = 1 TO 22
80 IF C(T2) = T1 THEN PRINT TAB(2);L$(T2):T2 = T2+1
90 POKE 8,N(X):POKE 6,D(X)*28:CALL 768
100 FOR DE = 1 TO D(X)*5:NEXT DE:T1 = T1+1:NEXT X,Y
110 PRINT:PRINT "PRESS <q> TO QUIT"
120 PRINT "OR ANY OTHER KEY TO PLAY AGAIN.";
130 GET K$:IF K$ <> "q" THEN 50
140 END
999 REM --MACHINE-LANGUAGE DATA--
1000 DATA 165,8,74,133,10,164,8,173,48,192,136,234
1010 DATA 234,208,251,165,7,56,229,10,133,7,176,237
1020 DATA 198,6,208,233,96
1999 REM --NOTE DATA--
2000 DATA 162,1,162,1,128,1,108,1,81,4,96,6
2010 DATA 96,1,121,1,108,1,96,1,108,9
2020 DATA 108,1,162,1,128,1,108,1,108,4,144,6
2030 DATA 128,1,121,1,128,1,144,1,162,9
```

After you have typed in the above lines, add the DATA statements (lines 2999-3230) from the Adam version.



### ATARI 400/800, 600/800XL, & 130XE/ ON TOP OF SPAGHETTI

```
10 DIM C(25),D(22),N(22),L$(625),T$(25)
20 OPEN #1,4,0,"K":L$=CHR$(32):L$(625)=L$:L$(2)=L$
30 FOR X=1 TO 22:READ A,B:N(X)=A:D(X)=B:NEXT X
40 FOR X=1 TO 25:READ A:C(X)=A:READ T$
50 L$(X*25-24)=T$:NEXT X:POKE 82,2:POKE 752,1
60 PRINT CHR$(125):POSITION 7,1
70 PRINT "- ON TOP OF SPAGHETTI -";:PRINT
80 T1=1:T2=1:FOR Y=1 TO 6:PRINT
90 FOR X=1 TO 22:IF C(T2)<>T1 THEN 110
```

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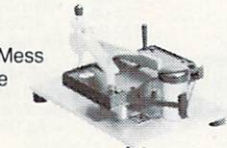
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