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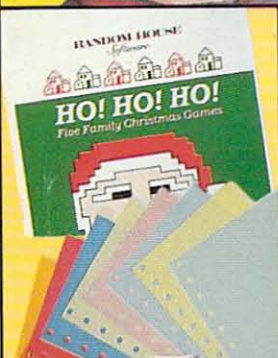
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CHRISTMAS**



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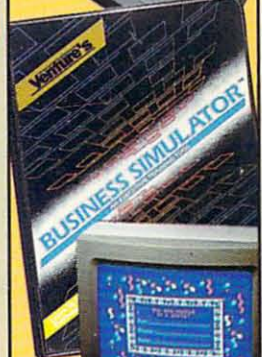
BEST EVER

SHOPPING GUIDE

EDITORS PICKS

BEST HARDWARE OF '86

GIFTS & SEASONAL SPECIALS



ORIGINAL PROGRAMS FOR ADAM, APPLE II SERIES & MACINTOSH,
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MACHINE SPECIFICS

ORPHANS

BY PATRICK SPERA

Your kids are waiting for the newest cartoon heroes from Santa, and you picked up that item your spouse has been subtly hinting about. Even Rover has a package or two under the tree. But what about your computer? After doing all your dirty work for a year, doesn't it deserve a gift? Here are a few suggestions for those long-neglected "orphan" computers. (I've tried to include the postage in the listed prices.)

Gifts for the TS 1000/1500. Zebra Systems' ([718] 296-2385) selection includes Memotech 32K and 64K RAM packs for \$24.95 and \$49.95, respectively. RMG Enterprises ([503] 655-7484) will get you into telecommunications with the Byte-Back MD-2B modem for \$67 (supplies limited). Markel Enterprises ([718] 627-1293) carries a line of business software including *Invoice Control* and *Financial Record Keeper*. Curry Computer ([602] 978-2902) has Timex 2040 printer paper for \$6.95 (three rolls).

TI-99/4A Treasures. A must for your 99 is the Tenex Computer Express "The Everything Book" catalog. These people are not kidding! You can call (219) 259-7051 for more information. Bryght Data ([607] 272-4351) has the CorComp 32K add-on memory cartridge that plugs into the side of the computer. It has a feed-through to allow additional modules to be used. The cost is \$99.95. Disk Only Software ([301] 369-1339) markets a 128K RAM card for \$195. It can be expanded to 512K and includes a built-in RAM disk and printer spooler routines.

TS 2068 Presents. Knighted Computers ([315] 593-8219) has Spectrum programs that will run on a standard TS 2068. They cost between \$13.95-\$19.95. Sunset Electronics ([415] 665-8330) carries all the TS 2068 equipment. Call for availability. Zebra (see *TS 1000*) introduces *Sprites 2068*. This manual, which includes a cassette tape, will explain how to create sprite graphics. The cost is \$19.95. Russell Electronics ([814] 364-1325) has improved their ROMSWITCH. This device allows your TS 2068 to act like a Sinclair Spectrum and run virtually all Spectrum programs. You

will have to open the computer to install the card. It sells for \$39.95.

Adam Delights. NIAD Adam User Group ([312] 961-3529) sells the ADAMLink modem for communicating with other computers (\$69.95). NIAD also offers a complete line of software and supplies for the Adam. Astro International Inc. ([212] 889-1995) offers the Adam Extension Module #3, which converts ColecoVision into the Adam computer system for \$165. Ask for Udy when you call. Alpha-One LTD ([718] 336-7612) has 10 Data Pack tapes for \$29. M.W. Ruth Co. ([609] 667-2526) carries Digital Data Drives to fill that blank hole in your Adam. The price is \$29.95 (limited supply).

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

TANDY

BY STEVE MILLER

Nothing pleases most of us like a sale, and Tandy, unlike most other computer companies, has them frequently. An especially good time for a sale is during the holiday season, so Tandy is in the midst of its annual Christmas Sale.

Prices Slashed! Topping the list of holiday goodies is a free CM-5 RGBI monitor (valued at \$299.95) with the purchase of either of the new Tandy 1000's, the EX, or the SX. The EX, which is geared for the home and educational markets, retails for \$799.

With the introduction of the new Color Computer 3, the CoCo 2's (64K model) price has been cut to \$99.95, down from an already reduced price of \$159.95. Before the introduction of the CoCo 3, it was \$199.95. The cost of a complete CoCo 2 system (minus a television or monitor) is reduced to \$499.95. The system includes a 64K Color Computer, disk drive, OS-9 Profile, DMP 105 printer, and cable. The regular price of the package is \$714.75.

The 128K CoCo 3 is also on sale. Until Christmas, it's going for \$199.95, down from its regular price of \$219.95. If you want to add a disk drive, the FD-501 Thinline has been reduced by \$100 to \$199.95. A similar \$100 savings can be had for the DMP 130 printer. It now sells for \$249.95.

CoCo Top 10. Sale or no sale, what's a CoCo (or any computer) without software? Since individual tastes and needs vary, it is difficult to make blanket recommendations about what package you might need. I thought, however, that it might be interesting and useful to know the best-selling Color Computer programs. The official Tandy top ten list is as follows: *DeskMate*, *Color SCRIPSIT*, *Personal Finance*, *Color Baseball*, *Dragonfire*, *Spectaculator*, *Flight Simulator I*, *Color Math*, *Pyramid*, *Downland*, *Dungeons of Daggorath*.

The sharp-eyed among you may have noticed that there are 11 items on the list. "I know that there are 11 programs on the list," chuckled a Tandy spokesperson, "but the last few are so close in sales that we decided to throw in an extra one."

There will be some new programs for the CoCo 3 available soon. *DeskMate 3*, *OS-9 Level II*, *Color SCRIPSIT II*, *Color File II* and *TSSpell* are definitely on the way. It's safe to assume that many of the current CoCo 2 packages (which will run on the CoCo 3 in the CoCo 2 mode) will be upgraded to take advantage of the CoCo 3's expanded capabilities.

Catalog Shopping. Before becoming interested in computers, I was not much for catalog shopping, but I now pore over them trying to decide which new gadget or program will make my computing life easier, more powerful, and more fun. Unfortunately, most computer catalogs are geared toward a narrow, technical audience. Few catalogs appeal to the whole family.

Tandy is one of the exceptions. In addition to the main catalog featuring all Tandy's computers and peripherals, two other catalogs list most of the software available through Tandy Computer Centers. All three publications—the *Tandy Computer Catalog*, the *Radio Shack Software Reference Guide*, and the *Radio Shack Educational Software Reference Guide*—are available free of charge through any Radio Shack Store or Computer Center. The only problem is that the catalogs have been out since late summer, and they rarely last long in the stores.

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

COMPUCOPIA

SHORT PROGRAMS BY STEVEN C.M. CHEN

Type this in, RUN it, and let it snow, let it snow, let it snow!!!

ADAM/SNOW . . .

```
10 HOME:DIM DP%(30,1,11),LL%(30)
20 FOR L = 0 TO 30:DP%(L,0,0) = 70+RND(1)*169
30 DP%(L,1,0) = RND(1)*15:FOR Y = 1 TO 11
40 DP%(L,0,Y) = DP%(L,0,Y-1)-INT(RND(1)*3)*3
50 DP%(L,1,Y) = DP%(L,1,Y-1)+14+INT(RND(1)*5):NEXT Y
60 DP%(L,1,11) = 189:NEXT L:H = 0:V = 0
70 HGR2:HCOLOR = 3
80 HD = 0:TL = 0:P = HD:LL%(0) = 1
90 HPLLOT DP%(0,0,0),DP%(0,1,0)
100 F = 0:FOR Y = 1 TO 400
110 T = LL%(P):HCOLOR = 0
120 HPLLOT DP%(P,0,T-1),DP%(P,1,T-1):HCOLOR = 3
130 HPLLOT DP%(P,0,T),DP%(P,1,T)
140 LL%(P) = T+1:IF P = TL THEN 170
150 P = P+1:IF P > 30 THEN P = 0
160 GOTO 110
170 IF F > 0 THEN F = F-1:GOTO 200
180 HCOLOR = 0:HPLLOT H,V:HCOLOR = 3:H = 60+RND(1)*169
190 V = RND(1)*150:F = 3:HPLLOT H,V
200 IF Y > 389 THEN 240
210 TL = TL+1:IF TL > 30 THEN TL = 0
220 LL%(TL) = 1:HPLLOT DP%(TL,0,0),DP%(TL,1,0)
230 IF Y < 11 THEN 250
240 HD = HD+1:IF HD > 30 THEN HD = 0
250 P = HD:NEXT Y:HOME
260 FOR D = 1 TO 800:NEXT D:GOTO 70
```

APPLE II SERIES/SNOW . . .

```
10 HOME:DIM DP%(30,1,11),LL%(30)
20 FOR L = 0 TO 30:DP%(L,0,0) = 70+RND(1)*189
30 DP%(L,1,0) = RND(1)*15:FOR Y = 1 TO 11
40 DP%(L,0,Y) = DP%(L,0,Y-1)-INT(RND(1)*3)*3
50 DP%(L,1,Y) = DP%(L,1,Y-1)+14+INT(RND(1)*5):NEXT Y
60 DP%(L,1,11) = 189:NEXT L:H = 0:V = 0
70 HGR2:HCOLOR = 3
80 HD = 0:TL = 0:P = HD:LL%(0) = 1
90 HPLLOT DP%(0,0,0),DP%(0,1,0)
100 F = 0:FOR Y = 1 TO 400
110 T = LL%(P):HCOLOR = 0
120 HPLLOT DP%(P,0,T-1),DP%(P,1,T-1):HCOLOR = 3
130 HPLLOT DP%(P,0,T),DP%(P,1,T)
140 LL%(P) = T+1:IF P = TL THEN 170
150 P = P+1:IF P > 30 THEN P = 0
160 GOTO 110
170 IF F > 0 THEN F = F-1:GOTO 200
180 HCOLOR = 0:HPLLOT H,V:HCOLOR = 3:H = 60+RND(1)*189
190 V = RND(1)*150:F = 3:HPLLOT H,V
200 IF Y > 389 THEN 240
210 TL = TL+1:IF TL > 30 THEN TL = 0
220 LL%(TL) = 1:HPLLOT DP%(TL,0,0),DP%(TL,1,0)
230 IF Y < 11 THEN 250
240 HD = HD+1:IF HD > 30 THEN HD = 0
250 P = HD:NEXT Y:HOME
260 FOR D = 1 TO 800:NEXT D:GOTO 70
```

IBM PC & COMPATIBLES/SNOW . . .

This program has been tested and found to work on the following computers and hardware configurations, using the BASICs shown: IBM PC w/Color/Graphics Monitor Adapter, w/Disk BASIC D2.00 or Advanced BASIC A2.00. IBM PCjr w/Cartridge BASIC J1.00, Tandy 1000 w/GW-BASIC 2.02 version 01.01.00. It should also work on many other PC compatibles.

```
10 RANDOMIZE:DEFINT A-Z:KEY OFF:CLS:SCREEN 1,0
20 DIM DP(30,1,14),LL(30)
30 FOR L=0 TO 30:DP(L,0,0)=90+RND*229
40 DP(L,1,0)=RND*9:FOR Y=1 TO 14
50 DP(L,0,Y)=DP(L,0,Y-1)-INT(RND*3)*3
60 DP(L,1,Y)=DP(L,1,Y-1)+12+INT(RND*5):NEXT Y
70 DP(L,1,14)=196:NEXT L:H=0:V=0
80 HD=0:TL=0:P=HD:LL(0)=1
```

```
90 PSET (DP(0,0,0),DP(0,1,0))
100 F=0:FOR Y=1 TO 400
110 T=LL(P):PRESET (DP(P,0,T-1),DP(P,1,T-1))
120 IF RND>.25 THEN PSET (DP(P,0,T),DP(P,1,T))
130 LL(P)=T+1:IF P=TL THEN 150
140 P=(P+1) MOD 31:GOTO 110
150 IF F>0 THEN F=F-1:GOTO 180
160 PRESET (H,V):H=80+RND*219
170 V=RND*150:F=3:PSET (H,V)
180 IF Y>386 THEN 210
190 TL=(TL+1) MOD 31:LL(TL)=1
200 PSET (DP(TL,0,0),DP(TL,1,0)):IF Y<14 THEN 220
210 HD=(HD+1) MOD 31
220 P=HD:NEXT Y:CLS
230 FOR D=1 TO 1000:NEXT D:GOTO 80
```

MACINTOSH W/MICROSOFT BASIC 2.0 OR 2.1/SNOW . . .

```
10 RANDOMIZE TIMER:DEFINT A-Z
20 DIM DP(30,1,16),LL(30)
30 CLS:WINDOW 1,"SNOW ...",0,38)-(527,338)
40 FOR L=0 TO 30:DP(L,0,0)=120+RND*380
50 DP(L,1,0)=RND*20:FOR Y=1 TO 16
60 DP(L,0,Y)=DP(L,0,Y-1)-INT(RND*3)*3
70 DP(L,1,Y)=DP(L,1,Y-1)+14+INT(RND*6):NEXT Y
80 DP(L,1,16)=296:NEXT L:H=0:V=0
90 LINE (0,0)-(527,338),33,BF
100 HD=0:TL=0:P=HD:LL(0)=1
110 PSET (DP(0,0,0),DP(0,1,0)),30
120 F=0:FOR Y=1 TO 400
130 T=LL(P):PSET (DP(P,0,T-1),DP(P,1,T-1)),33
140 IF RND>.25 THEN PSET (DP(P,0,T),DP(P,1,T)),30
150 LL(P)=T+1:IF P=TL THEN 170
160 P=(P+1) MOD 31:GOTO 130
170 IF F>0 THEN F=F-1:GOTO 200
180 PSET (H,V),33:H=110+RND*380
190 V=RND*220:F=3:PSET (H,V)
200 IF Y>384 THEN 230
210 TL=(TL+1) MOD 31:LL(TL)=1
220 PSET (DP(TL,0,0),DP(TL,1,0)),30:IF Y<16 THEN 240
230 HD=(HD+1) MOD 31
240 P=HD:NEXT Y:LINE (0,0)-(527,298),33,BF
250 FOR D=1 TO 2000:NEXT D:GOTO 100
```

TANDY COLOR COMPUTER W/EXTENDED BASIC/SNOW . . .

```
10 CLS:DIM DP(30,1,11),LL(30)
20 FOR L=0 TO 30:DP(L,0,0)=70+RND(189)
30 DP(L,1,0)=RND(1)*15:FOR Y=1 TO 11
40 DP(L,0,Y)=DP(L,0,Y-1)-INT(RND(0)*3)*3
50 DP(L,1,Y)=DP(L,1,Y-1)+13+RND(5):NEXT Y
60 DP(L,1,11)=189:NEXT L:H=0:V=0
70 PMODE 4,1:SCREEN 1,0:PCLS 0
80 HD=0:TL=0:P=HD:LL(0)=1
90 PSET(DP(0,0,0),DP(0,1,0),1)
100 F=0:FOR Y=1 TO 400
110 T=LL(P)
120 PRESET(DP(P,0,T-1),DP(P,1,T-1),0)
130 PSET(DP(P,0,T),DP(P,1,T),1)
140 LL(P)=T+1:IF P=TL THEN 170
150 P=P+1:IF P>30 THEN P=0
160 GOTO 110
170 IF F>0 THEN F=F-1:GOTO 200
180 PRESET(H,V,0):H=60+RND(179)
190 V=RND(150):F=3:PSET(H,V,1)
200 IF Y>389 THEN 240
210 TL=TL+1:IF TL>30 THEN TL=0
220 LL(TL)=1:PSET(DP(TL,0,0),DP(TL,1,0),1)
230 IF Y<11 THEN 250
240 HD=HD+1:IF HD>30 THEN HD=0
250 P=HD:NEXT Y:PCLS 0
260 FOR D=1 TO 800:NEXT D:GOTO 80
```

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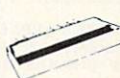
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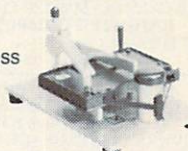
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