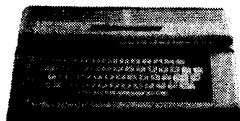
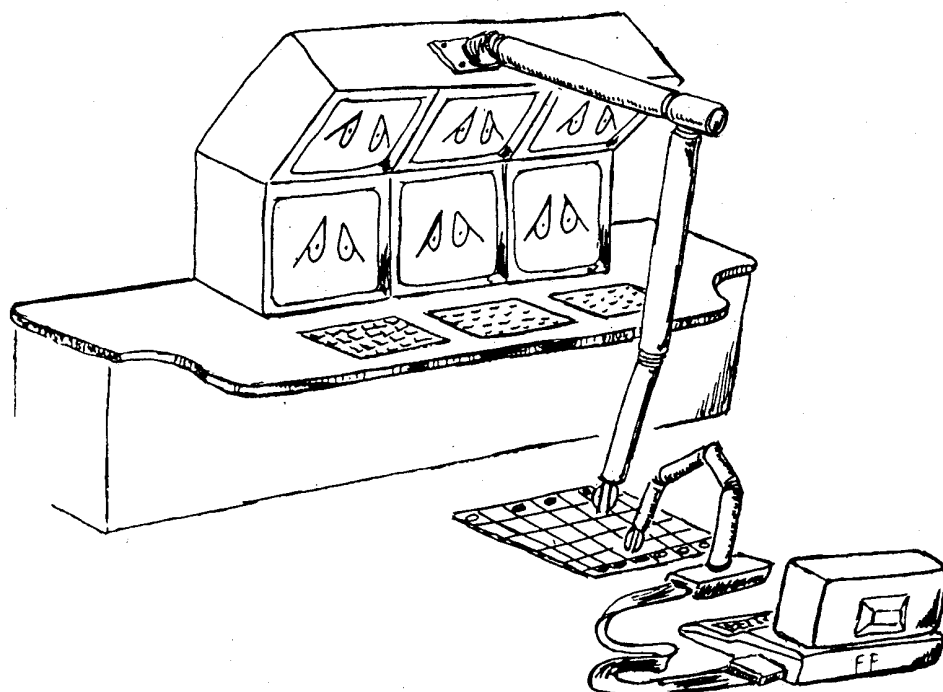


COCO-ADS



The Color Computer Users Magazine
Mar, 1987 \$2.00 Issue C-4



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Discoveries.....

Hi gang,

This is the one we've been waiting for ! This month a letter arrived from Keith Alphonso of Chalmette, La., with a method of addressing the other banks of memory either 128K or 512K. I'm going to quote Keith here, since his presentation is better than anything I can come up with.

Quote

" The way the memory is set up in the CoCo III is very simple. So simple in fact, that I couldn't believe it when I found out. Since the 6809 can really only address 64K directly, how can we access 512K? That's where the memory management unit (MMU) comes in. It seems that the MMU in the CoCo III breaks up the 64K available to the CPU into 8 8K segments (8*8=64). Each 8K segment then can represent any 8K segment of the whole 512K. In order to tell the computer which segments go where, we have 16 DAT's (one for user memory and one for system memory). These are located from \$FFA0 to \$FFAF.

Thus by POKEing a value into one of these locations, we can change the segment at that 8K position (\$FFA0=> \$0-\$1FFF, \$FFA1=> \$2000-\$4000, etc.). This method is much better than the old 32K page switching used in earlier CoCos.

For example;

In RAM the 32 column screen memory is \$400 to \$600. this means that if I POKE \$400 with the ASCII value for a specific character, that character will appear in the upper left hand corner of the screen. (Try it. Poke &H400,65)

If you look at the CoCo III manual, \$400 is seen by the CPU as \$70400. So let's put address \$70400 at location \$2400. To do this, type POKE &HFFA1,&H78. Now clear the screen (CLS) and type POKE &H2400,65. Wait a minute!!! Address \$2400 is now the screen address ! Okay, now try this. Clear the screen (CLS) and type POKE &H400,65. What's this ? Address \$400 is on the screen too?? Yes, that's right, locations \$400 and \$2400 are exactly the same thing! Now that's impressive. With this method of segmenting memory, we can easily access all 512K in a snap. In fact, all we really need is one 8K page to switch through all of the 512K of memory, but it's nice to have eight 8K pages as well"

End quote.

I confess that I'm not sure I understand all that Keith has said here, though it does work. I invite any of you to expand on this further and let's see where it takes us.

Please send your questions or discussions about this to...

John C. Burke
38699 Greenwich Circle
Fremont, Ca. 94536

Don't forget, SASE. Also don't forget that I can burn an EPROM for you if you have ADOS or some other DOS you want to install in your controller.

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PROGRAM OF THE MONTH

By Eric G. Robichaud

This month I am going to provide a couple of short patches for programs that I've previously submitted. The main patch is for a program that appeared in the July 1986 issue (B8), entitled "Stock Market Analysis". I received some letters, all requesting one major change in the program.

It seems that the program works well and performs what it is supposed to, but doesn't easily allow for updating of the information. The problem was of great importance to the program, yet quite easy to fix (as you can see by the length of the patch).

When updating a file, one had to re-enter ALL of the data for that file; this meant that updating one's portfolio was as much work as entering it initially. I've taken two steps to counter this problem, which are similar to the method I used in my "Teacher's Grade Book" program. (Actually, I don't know why I didn't incorporate it in the program originally since I did put it in grade book program)

When REVISE-ing a file (option #2), you now have the choice of RE-ENTERing the entire file (as before), or Modifying one aspect of a certain file. To accomplish the latter, simply hit enter to keep any information the same, and re-type the information you would like to change. The data that is currently in being used is displayed before you are prompted to change it or not, so that you can see if it is the data you are looking to revise.

The other feature that I've incorporated into this program is a full PortFolio UPDATE (option #5 now). Use this when you would like to update a certain aspect of ALL of the files on record. This would be used to enter the latest closings, etc. at the end of the week. Select this option, then enter the number of the field you will be entering information into. From there, the name of the company will be listed, and you will be prompted to enter the new data.

The other patch, which is quite brief to say the least, is a one line change in "ML-BASIC DATA CONVERTER" which was presented in the August 1986 issue (B9). The converter program did not allow for conversion of a program loaded off disk, but rather only off cassette. The reason for this was that

cassette loaded ML programs store their start, end, and execute addresses in low RAM, and therefore can be easily found and used. I felt that the code to decipher these addresses from disk would double the size of the program, and would occupy more memory than I cared to use; I didn't want a long BASIC program spilling over into the area occupied by the ML program.

What I've decided to do is throw in a line to prompt the user for the necessary addresses, if the program has not been loaded from cassette. This way, you can just enter the addresses manually, and still get the conversion of your ML program into BASIC DATA statements.

Is this patch necessary? Perhaps not, but it's there if you need it.

Ok, patching the programs may be done in one of two ways. The first method is to take the program (with the lines numbered exactly as originally listed in the magazine) and just type in the new lines. The second, more preferable, way is to type the patch in as a separate program, save it to disk in ASCII (SAVE "FILENAME/BAS",A), load in the original version, and merge the two (MERGE "FILENAME/BAS",A).

I recommend the second approach, since you will have two separate programs; if something bombs out you still have the two listings to work from.

If you have any questions or comments, please feel free to write to me at 10 Stoneham Drive, Woonsocket, RI 02895 or contact me on SOFTWARE CONNECTION BBS (401)-766-5867. If there are any patches you would like to see for any of the programs that have appeared thus far, or will appear in the future, please let me know. I am working on a few longer projects now, and I should have some good, full blown programs real soon, so hang in there!

```

130 CLS3:PRINT@139,"MAIN
MENU";:PRINT@229," 1) ENTER
INFORMATION ";:PRINT@261," 2)
REVISE/DELETE FILE";:PRINT@293,"
3) PRINT TO PRINTER
";:PRINT@325," 4) PRINT TO
SCREEN ";
140 PRINT@357," 5) UPDATE FILE
";:PRINT@389," 6) SAVE LIST
";:PRINT@421," 7) RETRIEVE LIST
";:PRINT@453," 8) END
";
170 M=VAL(M$):ONM GOTO
190,260,440,600,1000,720,800,910
340
CLS:PRINT@12,"-REVISE-":PRINT@19
6:INPUT " REVISE WHICH
RECORD";X:IF X<1 OR X>I THEN 350
ELSE IF X<>INT(X) THEN 350 ELSE
351
351
CLS:PRINT@12,"-REVISE-":PRINT:PR
INT" 1) RE-ENTER THE
FILE":PRINT" 2) EDIT FILE
INFO":PRINT" 3) RETURN TO
MAIN MENU":PRINT@206,"
";:LINEINPUTM$:M=VAL(M$):ON M
GOTO 360,353,120
352 GOTO 351
353
CLS:PRINT@12,"-REVISE-":PRINT:PR
INT" PRESS ENTER TO KEEP
VALUES":PRINT:PRINT"
COMPANY:";C$(X,1):LINEINPUT"
";M$:IFM$="" THEN 354 ELSE
C$(X,1)=M$
354 PRINT"
SYMBOL:";C$(X,2):LINEINPUT"
";M$:IFM$="" THEN 355 ELSE
C$(X,2)=M$
355 PRINT"
MARKET:";C$(X,3):LINEINPUT"
";M$:IFM$="" THEN 356 ELSE
C$(X,3)=M$
356 PRINT" # OF
SHARES:";C$(X,4):LINEINPUT"
";M$:IFM$="" THEN 357 ELSE
C$(X,4)=M$
357 PRINT" LAST

```

```

CLOSING:";C$(X,5):LINEINPUT"
";M$:IF M$="" THEN 358 ELSE
C$(X,5)=M$
358 PRINT"
INDEX:";C$(X,6):LINEINPUT"
";M$:IFM$="" THEN 359 ELSE
C$(X,6)=M$
359 FORX=1 TO 500:NEXT:SOUND
125,1:GOTO 340
1000 '----full file update----
1010 IF I=0 THEN 940
1020 CLS:PRINT@36,"CHANGE WHICH
FIELD:";PRINT
STRING$(32,45);:PRINT" 1)
COMPANY NAME":PRINT" 2)
SYMBOL":PRINT" 3)
MARKET":PRINT" 4) # OF
SHARES":PRINT" 5) LAST
CLOSING":PRINT" 6) INDEX"
1030 PRINT" 7) EXIT TO MAIN
MENU":PRINT:LINEINPUT "
SELECT (1-7): ";M$:M=VAL(M$):IF
M<1 OR M>7 OR M<>INT(M) THEN
SOUND 30,1:GOTO 1020
1035 IF M=7 THEN 120
1040 FOR X=1 TO
I:CLS:PRINT@96,"COMPANY:";C$(X,1
);:PRINT@128,"NEW
VALUE:";:LINEINPUT C$(X,M)
1050 NEXT X
1060 FORX=1 TO 500:NEXT:SOUND
125,1:GOTO 1020

```

```

110 IF SA=0 THEN CLS:PRINT@200,"
WHAT IS THE START ADDRESS";:
INPUT SA:PRINT" WHAT IS THE
ENDING ADDRESS";:INPUT EA:PRINT"
WHAT IS THE EXEC ADDRESS";:INPUT
XA

```

BUDGET

BUDGET WILL HELP YOU KEEP TRACK OF YOUR HOME FINANCES. PRINT REPORTS AND STORE ALL INFORMATION. ALL INSTRUCTIONS ARE IN THE PROGRAM.

```

5 'BUDGET
10 GOTO585
15 SN=K:T$=T$(K):T$(K)=T$(J):T$(J)=T$:RETURN
20 MX=INT(MEM/43):M=MX*38:POKE1024,INT(MX/256):POKE1025,MX-PEEK(1024)*256:CLEARM:MX=PEEK(1024)*256+PEEK(1025):MX=MX-9:DIMT$(MX),BA(100):LG$=STRING$(32,191)
25 CLS:PRINT:PRINTLG$:PRINTTAB(6)"BUDGET ANALYSIS MENU":PRINTLG$:PRINTTAB(6)"1 LOAD CHECK FILE":PRINTTAB(6)"2 BUDGET REPORT":PRINTTAB(6)"3 CHART OF ACCOUNTS":PRINTTAB(6)"4 EXIT PROGRAM"
30 PRINT:PRINTTAB(6)"SELECTION?"
35 A$=INKEY$:IFA$=""THEN35ELSEA=VAL(A$):ON A GOTO75,145,90,45
40 SOUND128,1:PRINT@390,"TRY AGAIN!":GOTO35
45 CLS:END:GOTO25
50 TF=0:FORI=1TO100:BA(I)=0:NEXT I:PRINT:INPUT"FILE NAME":F$:F$=LEFT$(F$,8):IFPEEK(188)=6THENDV=-1ELSEGOSUB65
55 IFDV=1THENCLS0:RETURNELSEPRINT:PRINT"POSITION CASSETTE.":GOTO70
60 PRINT " ";:IFF$=""THENRETURNELSEPRINT">"F$ " ";:RETURN
65 PRINT:INPUT"USE DISK":A$:IFLEFT$(A$,1)><"Y"THENDV=-1:RETURNELSEDV=1:F$=F$+".DAT":RETURN
70 LINEINPUT"PRESS <ENTER> WHEN READY ":A$:CLS0:RETURN
75 IFTM>0THENPRINT@390," ";:INPUT"ARE YOU SURE":A$:IFA$><"Y"THEN25
80 CLS:TM=0:PRINTTAB(8)"LOAD FILE SETUP":PRINTLG$:GOSUB50:PRINT@384," SEARCH FOR FILE":GOSUB60:OPEN"I",DV,F$:CLS0:PRINT@384,"LOADING FILE":GOSUB60:INPUT#DV,LC$,BL,BK

```

```

85 IFEOF(DV)ORTM=MX THENCLOSE#DV:GOTO25ELSETM=TM+1:LINEINPUT#DV,T$(TM):PRINT@448," AT RECORD"TM;:GOTO85
90 CLS:PRINTTAB(7)"CHART OF ACCOUNTS":PRINTLG$:INPUT"USE PRINTER ":PS$:IFLEFT$(PS$,1)="Y"THENGOSUB115:GOTO25
95 CLS:PRINTTAB(7)"CHART OF ACCOUNTS":PRINTLG$;:LC=0
100 READBC$:IFBC$="END"THEN105ELSEREADBD$:PRINT@64+LC*32,BC$ "BD$;LC=LC+1:IFLC<12THEN100ELSEGOSUB110:IFA$="Q"THENRESTORE:GOTO25ELSE95
105 RESTORE:GOSUB110:IFA$="Q"THEN25ELSE95
110 PRINT@480,"'Q' QUIT, 'ENTER' NEXT PAGE ";:LINEINPUTA$:RETURN
115 PRINT:PRINT"PREPARE PRINTER.":PRINT:GOSUB70:GOSUB135:LC=LC-1
120 READBC$:IFBC$="END"THENRESTORE:GOTO125ELSEREADBD$:PRINT#-2,TAB(20)BC$TAB(26)BD$;LC=LC+1:IFLC>61THENGOSUB130:GOTO120ELSEGOTO125
125 IFLC<66THENLC=LC+1:PRINT#-2:GOTO125ELSE25
130 IFLC<66THENLC=LC+1:PRINT#-2:GOTO130
135 PRINT#-2:PRINT#-2:PRINT#-2,TAB(25)"CHART OF ACCOUNTS":PRINT#-2:PRINT#-2,TAB(19)"CODE"TAB(30)"DESCRIPTION":PRINT#-2:LC=7:RETURN
140 PRINT"THE 'DETAIL' REPORT REQUIRES A","SORT, THE 'SUMMARY' REPORT","DOES NOT.":PRINT:RETURN
145 IFTM=0THENPRINT@390,"MEMORY EMPTY!":GOTO35
150 CLS:PRINTTAB(9)"BUDGET REPORT":PRINTLG$:GOSUB140:INPUT"PERFORM 'DETAIL' REPORT":A$:IFLEFT$(A$,1)><"Y"THEN300
155 IFTM>1THENGOSUB280
160 CLS:PRINTTAB(9)"BUDGET REPORT":PRINTLG$:PRINT"PREPARE PRINTER.":PRINT:LINEINPUT"REPORT TITLE ? ":TT$:GOSUB270:LC=LC-1:OB$=MID$(T$(1),37,2):BA=0:BT=0:CLS0
165 FORI=1TOTM:IFOB$><MID$(T$(I),37,2)THENGOSUB245
170 LC=LC+1:IFLC>62THENGOSUB265
175 PRINT#-2,TAB(5);MID$(T$(I),1,2)"/"MID$(T$(I),3,2) " ";:TY=VAL(MID$(T$(I),5,1))+1:ON TY GOSUB215,220,225,230,235,240:CK$=MID$(T$(I),6,4)

```

```

180 AM=VAL(MID$(T$(I),10,8)):PRI
NT#-2,TY$ "CK$ " ";PRINT#-2
,USING"#####.##-";AM;PRINT#-2,"
      "MID$(T$(I),18,1)" "MID$
(T$(I),19,18)" "MID$(T$(I),37,
2)
185 IFMID$(T$(I),18,1)>"R"THEN19
OELSEIFTY<3THENBA=BA+AM ELSEBA=B
A-AM
190 NEXT:GOSUB245:IFLC>54THENLC=
LC+1:GOSUB265
195 LC=LC+9:PRINT#-2:PRINT#-2:GO
SUB205:PRINT#-2:PRINT#-2,TAB(10)
"CURRENT BALANCE ";PRINT#-2,US
ING"#####.##-";BL:PRINT#-2:PRINT
#-2,TAB(10)"BANK TOTAL ";
PRINT#-2,USING"#####.##-";BK
200 IFLC<66THENLC=LC+1:PRINT#-2:
GOTO200ELSE25
205 IFBT<0THENPRINT#-2,TAB(10)"B
UDGET SURPLUS ";ELSEPRINT#-2,T
AB(10)"BUDGET DEFICIT ";
210 PRINT#-2,USING"#####.##-";BT
:PRINT#-2:RETURN
215 TY$="DEPOSIT ":RETURN
220 TY$="INTEREST":RETURN
225 TY$="FEE " :RETURN
230 TY$=" " " :RETURN
235 TY$="WITHDRAW":RETURN
240 TY$="MEMO " :RETURN
245 IFLC>57THENLC=LC+1:GOSUB265:
LC=LC-1
250 BA=BA*-1:BT=BT+BA
255 H=0:PRINT#-2:GOSUB260:PRINT#
-2,TAB(30);PRINT#-2,USING"#####
.##-";BA;PRINT#-2," "BD$:BA=0:
PRINT#-2:PRINT#-2:LC=LC+4:OB$=MI
D$(T$(I),37,2):RETURN
260 H=H+1:READBC$:IFBC$="END"THE
NRESTORE:BD$="">>> UNKNOWN <<":RE
TURNELSEREADBD$:IFBC$=OB$THENREST
ORE:RETURNELSE260
265 PRINT#-2:IFLC<66THENLC=LC+1:
GOTO265
270 PRINT#-2:PRINT#-2:PRINT#-2,T
AB(19)"BUDGET REPORT"TAB(41)TT$:
PRINT#-2:PRINT#-2,TAB(5)"DATE
TYPE ITEM # AMOUNT CLE
AR DESCRIPTION BUDGET"
275 PRINT#-2,TAB(5)"-----
-- -----
-----":PRINT
#-2:LC=8:RETURN
280 CLS0:PRINT@169," SORTING ";:
B=1:S=TM-1:SN=0:PS=0
285 PS=PS+1:PRINT@265," PASS ="P
S;:FORJ=B TOJ=K+1:IFMID$(T$(K)
,37,2)<MID$(T$(J),37,2)GOSUB15:N
EXTELSENEXT

```

```

290 IFSN=0THENRETURNELSESN=B=B
+1:SN=0:PS=PS+1:PRINT@265," PASS
="PS;:FORK=S TOB STEP-1:J=K-1:I
FMID$(T$(K),37,2)<MID$(T$(J),37,
2)GOSUB15:NEXTELSENEXT
295 IFSN=0THENRETURNELSEB=SN-1:S
=S-1:SN=0:GOTO285
300 IFTF=1THENH=0:GOTO310ELSETF=
1:CLS0:PRINT@170," TOTALING ";:F
ORI=1TOTM:H=0:OB$=MID$(T$(I),37,
2):GOSUB260:AM=VAL(MID$(T$(I),10
,8)):IFMID$(T$(I),18,1)>"R"THEN3
05ELSEIFMID$(T$(I),5,1)<"2"THENB
A(H)=BA(H)+AM ELSEBA(H)=BA(H)-AM

305 PRINT@261," AT ITEM"1"OF"TM;
:NEXT:H=0
310 BT=0:CLS:PRINTTAB(9)"BUDGET
REPORT",LG$:LC=0:INPUT"USE PRINT
ER";A$:IFLEFT$(A$,1)="Y"THEN350
315 CLS:PRINTTAB(9)"BUDGET REPOR
T":PRINTLG$;:LC=0
320 H=H+1:READBC$:IFBC$="END"THE
N325ELSEREADBD$:PRINT@64+LC*32,B
D$:GOSUB330:PRINT@64+LC*32+24,US
ING"#####.##-";BA:LC=LC+1:IFLC<12
THEN320ELSEGOSUB110:IFA$="Q"THEN
RESTORE:GOTO25ELSE315
325 RESTORE:GOSUB110:IFA$="Q"THE
N25ELSEH=0:GOTO315
330 BA=BA(H):IFBA<0THENBA=-1*BA:
RETURNELSERETURN
335 BA=-1*BA(H):BT=BT+BA:RETURN
340 IFLC>59THENGOSUB365
345 LC=LC+3:PRINT#-2:PRINT#-2:PR
INT#-2,TAB(12);PRINT#-2,USING"#
#####.##-";BT;:IFBT<0THENPRINT#-2
,TAB(32)"BUDGET SURPLUS":GOTO200
ELSEPRINT#-2,TAB(32)"BUDGET DEFI
CIT":GOTO200
350 PRINT:PRINT"PREPARE PRINTER.
":PRINT:LINEINPUT"REPORT TITLE?
";TT$:GOSUB370:LC=LC-1:CLS0
355 H=H+1:READBC$:IFBC$="END"THE
NRESTORE:GOTO340ELSEREADBD$:GOSU
B335:PRINT#-2,TAB(12);PRINT#-2,
USING"#####.##-";BA;PRINT#-2,TAB
(25)BC$TAB(32)BD$:LC=LC+1
360 IFLC>62THENGOSUB365:GOTO355E
LSE355
365 IFLC<66THENLC=LC+1:PRINT#-2:
GOTO365
370 PRINT#-2:PRINT#-2:PRINT#-2,T
AB(7)"BUDGET REPORT"TAB(29)TT$:P
RINT#-2:PRINT#-2,TAB(14)"AMOUNT"
TAB(24)"CODE"TAB(32)"DESCRIPTION
":PRINT#-2:LC=7:RETURN
375 REM
380 REM CHART OF ACCOUNTS
385 REM

```


390 DATA AC,AUTOMOBILE CARE
395 DATA AI,AUTOMOBILE INSURANCE

400 DATA AM,AMERICAN EXPRESS
405 DATA AP,APPLIANCES
410 DATA BF,BALANCE FORWARD
415 DATA BK,BOOKS & MAGAZINES
420 DATA CE,COMPUTER EXPENSE
425 DATA CI,COMPUTER INCOME
430 DATA CL,CLOTHING
435 DATA CM,CONDOMINIUM MAINTENANCE FEE
440 DATA CP,CAR PAYMENT
445 DATA EC,VISA (EXECUTIVE CHARGE)
450 DATA ED,EDUCATION
455 DATA EN,ENTERTAINMENT
460 DATA FD,FOOD
465 DATA FO,FOLEY'S DEPARTMENT STORE
470 DATA FU,FURNITURE
475 DATA GF,GIFTS
480 DATA GS,GASOLINE
485 DATA JC,J. C. PENNEY'S
490 DATA LT,ELECTRIC BILL
495 DATA MA,MARI'S ALLOWANCE
500 DATA MC,MASTER CARD
505 DATA ME,MEDICAL EXPENSE
510 DATA MI,MISCELLANEOUS INCOME

515 DATA MT,MORTGAGE PAYMENT
520 DATA MS,MISCELLANEOUS
525 DATA PA,PAY CHECK
530 DATA PH,TELEPHONE BILL
535 DATA RE,RELIGIOUS & CHARITABLE
540 DATA RI,RENTER'S INSURANCE
545 DATA SA,SAVINGS (REGULAR)
550 DATA SI,SAVINGS (IRA)
555 DATA SR,SEAR'S ROEBUCK & CO.

560 DATA TV,CABLE TV BILL
565 DATA TY,TOYS
570 DATA VA,VACATION
575 DATA VS,VISA (MACON GA.)
580 DATA END
585 CLEAR800:PMODE0:PCLEAR1:GOTO 20

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DWINDLING COCO CLUBS

IDEAS ON DWINDLING COCO CLUB MEMBERSHIP AND WAYS TO INCREASE

Dan Robins

I can remember the days I lived in Oklahoma City, Okla. which at the time bragged on the fact that they had the largest CoCo Club membership in the nation, whether true or not, it was nice to attend a meeting and have a great big room at the Red Cross Building completely full! But that was over 2 years ago.

Having moved to Raleigh, N.C. since that time, the number of members attending was quite a difference. And it is my understanding that at one time, the club was some 120 members plus strong. I do recall a meeting back in October of 1986 when only 8 members were present. But, at our last meeting we had 35 or so members present, including 3 new folks who heard about the club and were now in attendance.

Of course this is now speculation on my part, but from the input I receive on a local BBS CoCo Sig that I manage, at one time the Color Computer 2 was a powerful machine! But along came the MacIntoshes, the Amigas, the Atari 512's and such, and the CoCo2 just lost some of the zip in the ever growing computer field in comparison to what was out there. And I know of quite a few members who dropped the CoCo for an IBM or another type of personal computer. We could go on blaming Tandy for ever for not coming out with the CoCo3 as soon as they did, but now it is here!

I think with the advent of the new computer, and soon, new software for this latest in the CoCo family, is the fact that shortly before Christmas, Radio Shack stores unloaded an enormous amount of CoCo2's. With current CoCo3 owners and a new base of CoCo2 owners whom have just entered the market I have an honest feeling that CoCo clubs, if they handle this correctly will see the clubs once again increase in membership. But you have to tell the public about it.

My basic work background is with public relations and the media, so I hope these hints will help you and your fellow club members get the word out, and you too, see an increase in the membership of you local club.

1> FLYERS.

We still have a darn good computer that can do some excellent graphics work. With CoCoMax2, Graphicom 1 & 2, or another graphics editor, make an 8 1/2 by 11 colored flyer that gives the information of your club meetings. This should include the dates (2nd Tuesday of the month), time, location, and what computers are covered. Then, with flyers in hand, cover the town. Libraries, grocery stores with a bulletin board, public schools, and any place you can stick the flyer up without getting into trouble.

2> NEWSPAPERS.

If your club charges dues, or has a fund where monies can be drawn from, place an ad, the Sunday prior to the meeting. In the same telephone call that you place this order ask to speak to a reporter or the assignment editor. When you speak to this person, make sure you denote that you have placed an ad in there paper (it really does help!) and that you would like to know if would be interested in a public interest story about the club. Although the latter won't always work, if you leave your name and number with that person, and things at the paper get slow, you just may get a call one of these days unexpectedly.

3> RADIO/TV STATIONS.

Both of these mediums are 'public trusts' of the community and are required by the FCC to offer free air time to legitimate organizations. Exactly what a CoCo club is. So contact the stations Public Affairs or Public service director and offer a member or members of the club to appear before camera or in front of the microphone to talk about the club, what it does, and the benefits of joining. And if on a TV station, bring along a computer with some darn good demos, as most stations can hook the output directly into their mixing boards!

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4> BBS'S.

Make sure to log on to all the BBS's local in your area and a simple one or two liner about the clubs next meeting date, time, and place, and if possible a major topic or demonstration that will take place. Even if it is an IBM or other type of computer's representative BBS, most don't mind as long as you don't overdo it!

5> RADIO SHACK STORES.

Although some managers don't go for the posting of club meetings, some do. Talk to all the stores in the area and see if they would welcome a flyer or poster of the club's meeting information. If they don't go for it, make sure ALL the salesmen know, and if possible have a card with the president or representative's phone number. If a prospective customer asks about support and clubs in the area, a Radio Shack salesperson is not going to lose the sale by keeping his or her mouth shut. They will pass along the information!

I hope some of this information will be helpful to you and to sum it up, it is simply getting the information about the club out to the public. The more people with the computer that know about the meetings, and the advantages of attending, WILL result in a higher membership level.

Dan Robins

COCO III

COCO III THE BUGS AND THEIR FIXES

THE COCO 3 HAS UNFORTUNATELY MANY ANNOYANCES IN THE WAY IT HANDLES THINGS ALONG WITH OUTRIGHT BUGS THAT WILL CRASH YOUR MACHINE. HERE IS A LIST OF THE KNOWN ONES SO FAR AND A FIX TO SOME OF THEM .

THE HPRINT BUG

AS IT IS THE HPRINT COMMAND CAN ONLY DRAW A MAXIMUM OF ONE LINE WIDTH. IT WON'T DO A WRAP AROUND TO THE NEXT LINE AS A TEXT SCREEN WOULD. SO THE LINE WIDTH IS LIMITED TO 40 COLUMN IN HSCREEN 1 AND 2 AND 80 COLUMN IN THE OTHERS BUT IF YOU START PRINTING IN THE MIDDLE OF A LINE IT STOPS AT THE END OF THE LINE .

A PROBLEM OCCURS HOWEVER IF THE STRING HAPPENS TO BE LONGER THEN THEN 128 CHARACTERS. THEN, THE STRING HPRINTED WILL NOT BE THE ONE YOU JUST TOLD IT TO BUT THE ONE SPECIFIED IN THE PREVIOUS HPRINT. WORST YET, EACH CODE IN THAT STRING WILL BE DECREASED BY 20 !!

TO MAKE THIS CLEARER. SAY YOU HPRINT(0,0), STRING\$(20,65), THIS WILL PRINT A LINE OF 'A' AT THE TOP OF THE SCREEN. NOW DO HPRINT(0,1),STRING\$(129,66), THIS SHOULD PRINT A LINE OF 'B' BUT WILL PRODUCE A PART LINE OF '!'. ON TOP OF THAT, AT ANY POINT A LINE THAT WAS LONGER THEN THE LAST ONE PRINTED WAS DONE, PART OF THAT STRING WILL APPEAR TOO. BEING ABLE TO 'WRAP-AROUND' TO THE NEXT LINE WOULD REQUIRE QUITE A REWRITE THAT MAY FRANKLY NOT BE WORTH IT. FIXING THAT BUG HOWEVER CAN BE DONE BY PATCHING THE CODE WITH THE FOLLOWING CODE:

```

      ORG  $EF45
      JSR  $B26A
      JSR  $E7B2
      JSR  $B267
      JSR  $B26D
      JSR  $B156
      TST  $06
      BNE  TAG1
      JSR  $BDD9
      JSR  $B516
TAG1   JSR  $B657
      TSTB
      BPL  TAG2
      LDB  #$50
TAG2   LDY  #$FE19
      STB  -1,Y

```

THE ACTUAL PATCH IS THE 3 LINES BEGINNING WITH 'TSTB' IT CHECK IF THE STRING LENGTH IS LESS THEN 128, IF NOT IT WILL REDUCE IT TO 80. THE REST IS NEEDED TO MAKE ROOM FOR THIS PATCH.

THE LPEEK , LPOKE AND HIGH RES TEXT SCREEN BUG THIS BUG STEMS FROM THE FACT THAT IN ORDER TO ACCESS ONE OF THE SEGMENTS THAT THE 6809 CANNOT ACCESS DIRECTLY ONE MUST PUT THE SEGMENT IT IS IN IN ONE ON THE MMU SLOTS .

IF THE STACK HAPPENS TO BE IN THAT SLOT, THE SYSTEM WILL CRASH AT THE NEXT 'RTS'. THE GRAPHIC SCREEN WORK OK BECAUSE A SPECIAL AREA WAS RESERVED FOR THEM DURING THE SWITCHING BUT THE TEXT SCREEN AREA WAS NOT SO PROTECTED. SO, IF THE STACK IS IN THE 2000-3FFF AREA AND YOU ARE IN 40 OR 80 COLUMN MODE THE SYSTEM WILL CRASH.

IN THE SAME WAY, IF THE STACK IS LOWER THEN 1FFF THE LPEEK , LPOKE COMMAND WILL CRASH THE SYSTEM BECAUSE THEY USE MMU SLOT 0. I DO NOT HAVE A FIX FOR THE TEXT SCREEN BUG YET, IT WILL REQUIRE A REWRITE OF MOST OF THAT CODE TO ELIMINATE STACK REFERENCES, BUG THE LPEEK AND LPOKE CAN BE FIXED IN THIS WAY.

LPOKE

```

      ORG  $E560
      ORCC #$50
      LDY  $FFFA0
      STB  $FFFA0
      STY  $FFFA0

```

LPEEK

```

      ORG  $E575
      CMPB #$3F
      LBHI $B44A
      ORCC #$50
      LDY  $FFFA0
      LDA  ,Y
      STB  ,Y
      LDB  ,X
      STA  ,Y
      ANDCC #$AF

```

THIS ELIMINATES ANY STACK REFERENCES WHEN ADDRESS 0000-1FFF GETS SWAPPED OUT THE ENHANCED DOS BUG BECAUSE THIRD PARTY DOS USE EXTRA COMMANDS, THOSE CONFLICT WITH THE NEW ENHANCED BASIC COMMANDS AND RESULT IN BOTH THE DOS AND ENHANCED COMMANDS BEING INOPERABLE. TO FIX THIS THE FOLLOWING POKES WILL ALLOW YOU TO SWITCH BETWEEN THE 2 COMMAND SETS .

AFTER POWER UP ?PEEK(&H134) TAKE NOTE OF THAT # IT THE # OF COMMANDS YOUR DOS HAS TO ENABLE DOS COMMANDS POKE&H134,# OF COMMANDS IN YOUR DOS POKE&HE193,&HFE (MAKE LOWEST ENHANCED TOKEN FF) POKE&HE140,&H21 (MAKE A BLS INTO A BRN) TO ENABLE ENHANCED COMMANDS POKE&H134,&H14 (REDUCE # OF DOS TOKENS) POKE&HE193,&HE2 (RESTORE THE RIGHT # OF LOWEST ENHANCED TOKEN) POKE&HE140,&H23 (RESTORE A BCC INSTRUCTION)

THE LIST BUG.

IF YOU TRIED TO LIST A PROGRAM CONTAINING DOS COMMANDS IN AN EXTENDED BASIC COCO 2 IT WOULD RETURN '!' FOR THE ILLEGAL TOKENS, BUT THE COCO 3 WILL HANG ON YOU BECAUSE OF A BUG. AND YOU CAN'T EVEN EDIT THE BAD LINE SINCE EDIT USES THAT BUGGED ROUTINE. THE FIX IS AS FOLLOWS.

```

ORG    $E186
JMP    QQP
ORG    $E18D
JSR    QQP1
ORG    $E316
QQP    LDU    #$E158
        CMPA    #$16
EXIT    LBHI    $B7E0
        JMP    $E172
QQP1    CMPI    #$E170
QQP2    LBEQ    $B7E0
        CMPI    #$E16C
        BEQ    QQP2
        CMPA    #$4
        BRA    EXIT

```

NOTE THAT THIS IS NOT A PERFECT FIX AS IT OVERWRITES PART OF THE SIGN. ON MESSAGE FOR DOS 2.1.

ALSO A LISTING WITH DOS COMMANDS IN IT IN A NON DOS MACHINE WILL RESULT IN A PARTIALLY GARBLED LINE THAT WILL NEED TO BE RETYPED, BUT IT'S BETTER THAN HANGING .

THE 'VAL' BUG.

THIS IS ONE YOU ARE NOT LIKELY TO EVER SEE. IT WAS DISCOVERED (WITH THE EXPLANATION) BY ART FLEXSER IMMEDIATELY AFTER POWER UP IF YOU DEFINE A STRING THAT IS A VALID HEX # (FOR EXAMPLE A\$="&H20") THEN TO A 'VAL' OF THAT STRING THE COCO 3 WILL RETURN THE CORRECT VALUE (32).

HOWEVER IF YOU GO TO ROM MODE (POKE&HFFDE,0) AND DO A VAL AGAIN YOU WILL GET A VALUE (506) WHICH CORRESPOND TO YOUR STRING + 'E'(&H20E). THIS 'E' IS IN FACT THE FIRST BYTE OF 'EX', THE EXTENDED BASIC ID BYTES. THIS IS DUE TO THE FACT THAT TO DO IT'S WORK IT BASIC USES THE BYTE FOLLOWING THE STRING AS TEMPORARY STORAGE THEN RESTORES IT WHEN IT IS FINISHED.

IN RAM MODE, THE 'E' GETS CLOBBERED TEMPORARILY BUT IN ROM MODE IT OBVIOUSLY STAYS IN PLACE CAUSING THE BUG. THIS WOULD ALSO BE TRUE IN THE COCO 1 AND 2 IF MICROSOFT HAD NOT SET THE TOP OF MEMORY POINTER TO 1 BYTE LESS THEN THE AVAILABLE MEMORY WHICH ENSURED ONE BYTE FREE.

IN THE COCO 3 HOWEVER THE TOP MEM IS SET TO 7FFF WHICH IS WHAT CAUSES THE PROBLEM. TO SOLVE THIS SIMPLY DO A CLEAR 200,&H7FFE.

NOTE THAT TO DUPLICATE THE BUG IN A COCO 2 YOU CAN DO A POKE40,&HFF:NEW (ON ONE LINE) IF IT MAKES YOU FEEL ANY BETTER, YOU DO GET AN EXTRA BYTE OF FREE RAM ON POWER UP.

NEAT LITTLE POKES AND PATCHES.

ONE ADVANTAGE OF HAVING THE DOS IN RAM IS THAT YOU CAN NOW DO ALL KINDS OF LITTLE - MODS TO IT TO SUIT YOUR TASTE. THE FOLLOWING IS A COLLECTION OF THOSE.

MONOCHROME

IF YOU HAVE A MONOCHROME MONITOR, YOU NOTICED THAT IT LOOKS AWFULL. THIS IS PARTLY DUE TO THE COLOR SET AND PARTLY TO THE COLOR BURST. USING THIS COLOR SET.

PALETTE 13,0 PALETTE 13,255 WILL HELP. BUT KILLING THE COLOR BURST WILL MAKE IT LOOK MORE PLEASANT. TO DO SO

POKE &HE033,PEEK(&HE033) OR &H10 FOR 32 COLUMN

POKE &HE03C,PEEK(&HE03C) OR &H10 FOR 40 COLUMN

POKE &HE045,PEEK(&HE045) OR &H10 FOR 80 COLUMN

TO REENABLE COLOR JUST DO POKE ADDRESS, PEEK(ADDRESS) AND &HEF WHERE THE ADDRESS IS THE SAME AS BEFORE NOTE THAT THE 32 COLUMN POKE WILL ALSO DISABLE COLOR ON ALL THE PMODE SCREEN .

HCLS.

WHEN YOU SELECT ANY HSCREEN, THE FIRST THING IT DOES IS TO CLEAR IT. IF YOU JUST DREW A LONG DRAWING, THIS CAN BE VERY ENNOYING. THE FIX IS TO

POKE &HE6C6 , &H21

NOTE THAT YOU CAN STILL DO AN HCLS IF YOU WANT TO BY TYPING HCLS

CLS.

IT ALSO DOES THE SAME THING WHEN YOU SELECT A NEW WIDTH. TO FIX THIS POKE &HF655, &H12:POKE &HF656, &H12:POKE &HF657, &H12 FOR 32 COLUMN POKE &HF670 , &H21 FOR 40 AND 80 COLUMN STATUS LINE

THIS ONE IS NEAT. IT ADDS 8 LINES TO THE SCAN OF THE TV, RESULTING IN THE ADDITION OF ONE LINE AT THE BOTTOM. THE LINE IS NOT DIRECTLY ACCESSIBLE TO PRINT, MAKING IT SCROLL AND CLS PROTECTED. THE DRAW BACK IS THAT BECAUSE YOU ONLY HAVE 8 LINES, THE LOWERCASES WITH DESCENDERS (j,q ... ETC) GET CHOPPED AT THE BOTTOM. ALSO THIS WILL NOT WORK ON A 32

COLUMN SCREEN THE LOCATE ALSO CAUSES AN UNWANTED SCROLL UP OF ONE LINE FOR EACH CHARACTER HPRINTED. THAT COULD BE FIXED BUT YOU WOULD LOOSE THE SCROLL PROTECTION.

POKE &HE03D, PEEK(&HE03D) OR &H20 FOR 40 COLUMN

POKE &HE046, PEEK(&HE046) OR &H20 FOR 80 COLUMN

POKE &HF8F4, &H19 ENABLE THE LOCATE COMMAND TO GO TO LINE 25

TO PRINT ON THE STATUS LINE USE THIS.

A\$="STATUS LINE"

FOR A=1 TO LEN(A\$):LOCATE(25,A):PRINT

MID\$(A\$,A,1);:NEXT

BORDER COLOR AND TRUE LOWERCASE

THE BORDER COLOR CAN BE CHANGED TO MATCH THE ONE OF THE SCREEN (EXCEPT FOR 32 COLUMN WHERE IT CAN ONLY BE BLACK OR GREEN) AS FOLLOW POKE &HE03E, PALETTE COLOR FOR 40 COLUMN POKE &HE047, PALETTE COLOR FOR 40 COLUMN FOR THE 32 COLUMN IT GETS MORE COMPLICATED. YOU NEED TO PATCH BASIC TO DO IT.

THAT SAME PATCH ALSO ALLOWS YOU TO HAVE TRUE LOWERCASE AND REVERSE VIDEO.

ORG \$95AE

LDA #\$10

LDB #\$0A

BSR \$95FD

LDA \$FF22

ANDA #\$7

ORA #VALUE

STA \$FF22

PULS X,D,PC

ORG \$9600

LSRA

'VALUE' IS CHANGED ACCORDING TO WHAT YOU WANT TO DO AS FOLLOW

VALUE EFFECT

8 ALTERNATE COLOR SET (RED SCREEN) 16
TRUE LOWERCASE 32 REVERSE VIDEO 64
REVERSE BORDER

NOTE THAT ONE COMBINATION IS INVALID. IF YOU REVERSE THE VIDEO, THE BORDER GETS REVERSED AS WELL. IF YOU INSIST ON HAVING A GREEN BORDER WITH A BLACK SCREEN, USE THE PALETTE COMMAND TO REVERSE THE GREEN AND BLACK ON THE SCREEN THEN DO THE REVERSE VIDEO POKE.

THIS PATCH WILL ALSO WORK IN THE COCO 1 OR 2 IN RAM MODE ONLY.

WELL, THAT ABOUT COVERS IT. IF YOU HAVE INTERESTING POKES OR DETECT SOME BUGS, PLEASE LET ME KNOW. IN THE MEAN TIME, ENJOY THESE.

(C) 1986 ROGER BOUCHARD 72746,3210

THE SOURCE (COMPUSERVE) AND DOWNLOADED FROM THE FRISKY COCO IN KANSAS CITY 1-816-436-2904

COCO 3 BUGS

This file describes an interesting bug I discovered in writing the CLEARFIX program that appears in the CoCo 3 database. I wanted to protect the couple of pokes required from being destroyed by a reset, so I routed the reset vector to \$4000 (for testing purposes) and patched a CLR \$FFDF into the reset sequence. But the thing kept overwriting my pokes to the \$A000 area, even though a warm start was being correctly executed. Drove me nuts, as I could see from my disassembly of the CoCo 3's reset sequence that ROM was only supposed to be copied to RAM on a cold start, not a warm one. Turned out that I was real unlucky in where I had chosen to point the reset vector to: anyplace BUT \$4000-5fff works just fine! But, as I subsequently discovered upon more careful examination of the reset sequence, the \$4000-5FFF segment is switched out of the map when you reset, with the result that the boot code does not find a \$12 as the first byte of your reset sequence, and assumes, incorrectly, that it should be doing a cold instead of a warm start. (A warm reset routine must begin with \$12 (NOP), or a cold start results.) Later, when the usual segment is switched back in, the code at \$A027 and following correctly perceives that a WARM start is what's called for, so it LOOKS exactly like you are getting a regular warm start (OK at top of cleared screen, no bootup message). However, unlike a regular warm start, ROM has been transferred to RAM, completely wiping out the effect of any pokes you've made to the Basic ROM area.

I propose that this in-between creature that is a hybrid of the warm and cold starts be henceforth known as a "tepid start".

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ARTICLES ARE WELCOME and will be published if it is of interest to COCO owners. Please send it in on any ASCII word processor program tape or disk. They will be returned to you with a gift. If you don't have a word processor program, just drop us a letter and ask for a REPORTER KIT. We will send you a program you can enter your report and return the data to us. We do need it saved ASCII to use on a special printer. SENT TO :

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COCO III COLORS

The following consists of my observations of all 64 colors generated by the Color Computer 3. The RGB monitor was a CM-8 and the composite device was a TC-130 color TV. Tint controls were adjusted so that white, orange, black, and green looked alike; these are the colors that have the same values on both monitors as listed in the color BASIC manual. Not all the colors could be perfectly matched, and some duplicates exist, in these cases only one of the matches is listed. While this list may help, for best results you may have to tweak some colors to fit your picture ideally.
by Renard Dellafave.

COMPOSITE to RGB reference:

CMP-RGB	CMP-RGB	CMP-RGB	CMP-RGB
0 - 0	1 - 2	2 - 2	3 - 6
4 - 0	5 - 4	6 - 33	7 - 32
8 - 32	9 - 45	10 - 5	11 - 9
12 - 13	13 - 8	14 - 1	15 - 0
16 - 7	17 - 16	18 - 18	19 - 21
20 - 20	21 - 19	22 - 34	23 - 36
24 - 37	25 - 44	26 - 40	27 - 42
28 - 11	29 - 15	30 - 10	31 - 27
32 - 56	33 - 23	34 - 19	35 - 49
36 - 48	37 - 55	38 - 38	39 - 39
40 - 37	41 - 46	42 - 47	43 - 41
44 - 11	45 - 25	46 - 24	47 - 26
48 - 36	49 - 35	50 - 50	51 - 51
52 - 53	53 - 54	54 - 36	55 - 37
56 - 32	57 - 60	58 - 49	59 - 61
60 - 56	61 - 59	62 - 52	63 - 63

12 - 13	13 - 8	14 - 1	15 - 0
16 - 7	17 - 16	18 - 18	19 - 21
20 - 20	21 - 19	22 - 34	23 - 36
24 - 37	25 - 44	26 - 40	27 - 42
28 - 11	29 - 15	30 - 10	31 - 27
32 - 56	33 - 23	34 - 19	35 - 49
36 - 48	37 - 55	38 - 38	39 - 39
40 - 37	41 - 46	42 - 47	43 - 41
44 - 11	45 - 25	46 - 24	47 - 26
48 - 36	49 - 35	50 - 50	51 - 51
52 - 53	53 - 54	54 - 36	55 - 37
56 - 32	57 - 60	58 - 49	59 - 61
60 - 56	61 - 59	62 - 52	63 - 63

RGB to COMPOSITE reference:

RGB-CMP	RGB-CMP	RGB-CMP	RGB-CMP
0 - 0	1 - 14	2 - 2	3 - 14
4 - 5	5 - 10	6 - 3	7 - 16
8 - 13	9 - 11	10 - 30	11 - 28
12 - 11	13 - 12	14 - 30	15 - 29
16 - 7	17 - 17	18 - 18	19 - 21
20 - 20	21 - 19	22 - 34	23 - 36
24 - 37	25 - 44	26 - 40	27 - 42
28 - 11	29 - 15	30 - 10	31 - 27
32 - 56	33 - 23	34 - 19	35 - 49
36 - 48	37 - 55	38 - 38	39 - 39
40 - 37	41 - 46	42 - 47	43 - 41
44 - 11	45 - 25	46 - 24	47 - 26
48 - 36	49 - 35	50 - 50	51 - 51
52 - 53	53 - 54	54 - 36	55 - 37
56 - 32	57 - 60	58 - 49	59 - 61
60 - 56	61 - 59	62 - 52	63 - 63

NOTE

Do not modify the numbers in this list. Opinion and tint controls will cause differences. These values are as close to neutral as I could get. Adjust your set to match them as closely as you can.

SCREEN PRINT

DUKE NORRIS

Not another CoCo screen print program!
Well, this might be the least expensive screen print program you have in your supply of screen prints. All it will cost you is the time to key it in.

I wrote the programs because I was never satisfied with the screen print programs that I have seen on the market and most, I believe, were written to fit many different types of printers and consequently cause the user (us) to supply special codes, etc.

This program also is not perfect; 1) it's for the R.S. DMP-105 printer, 2) it only prints PMODE4 screen(s) and 3) it requires 8 1/2 x 11 paper. Aside from that, I think you will be pleased with the output especially once you have seen some of Mike Trammel's graphic screen(s) printed.

PROGRAM OPERATION

The program is written in two parts, Program 1, SCRPR5L.BAS, will POKE memory with the M.L. SCRPR5 program and save it to disk as SCRPR5.BIN.

Program 2, SCRPR5.BAS, will then prompt you to make sure you have PCLEARED 8, ask if you have POKEd 150 with the appropriate baud rate value and ask for the drive number that contains your PMODE4 screens. I run my DMP-105 at 2400 baud, so I POKEL50,18 every time I power up my CoCo and printer. I would suggest you do the same, since print time is significantly faster. You can consult your DMP-105 manual for the DIP switch settings.

LET'S GO

In disk drive 0, place a formatted disk.

Key in listing 1, SCRPR5L.BAS and save it to disk after about every 5 statements you key in. This may 'save' you, if the glitch gremlin comes along.

Key in listing 2, SCRPR5.BAS and again save it frequently. Better to be safe than sorry.

Once you have keyed in both listings you can then copy your favorite screens to the "SCRPR5" disk.

Run SCRPR5L.BAS, the screen should turn black with some numbers printing in the top left corner of the screen to let you know the program is working. You will then be prompted to load the "SCRPR5" disk in drive 0, press <ENTER> after loading it. I have added a checksum value of 426069 to let you know if you keyed one of DATA statements incorrectly.

Type these commands:

1. NEW
2. POKEL50,18 (if running the printer at 2400 baud)
3. PCLEAR8
4. RUN"SCRPR5.BAS"

You will be prompted for the drive number that has the PMODE4 screen(s) you wish to print and then asked for the filename and extension of the screen to load. The screen that you will load HAS TO BE IN BINARY FORMAT.

The last of the prompts are for ensuring you have POKEd 150 with the proper baud rate code and if you PCLEARED 8. Then you will be prompted as to which PMODE 4 screen you wish to print;

- 1) PMODE4,1
- 5) PMODE4,5
- 8) ALL graphic pages

Just respond accordingly.

THAT'S ALL FOLKS

I hope these programs are as useful to you as they have been to me. Now you can save your masterpieces for all to see.

If you have any suggestions or comments, feel free to write me at:

NorriSoft
P.O. Box 241,
Shelbyville, IN 46176

GO TO PAGE 53 FIRST

1
SCRPR5L.BAS - SCRPR5 LOADER
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```
2 CLS0:CT=0:MN=0:CLR200,&H6E00:RESTORE
3 FORBN=&H7051 TO &H7FB6:READ MN:PRINT@0,MN;:CT=CT+MN:POKEBN,MN:
NEXTBN:IF CT<>426069 THEN SOUND1,5:PRINT"ERROR IN DATA STATEMENT(S)":END
4 INPUT"READY DRIVE 0 AND C\R ";A$:SAVE"SCRPR5.BIN",&H7051,&H7FB6,&H7600:END
```

5 DATA 31,80,158,73,140,15,100,3
6,76,49,139,48,2,159,73,236,164,
57,134,79,52,2,189,163,144,166,2
24,38,2,37,5,48,1,90,32,33,126,1
74,9,53,32,225,228,35,2,230,228,
53,66,52,32,150,174,39,20,126,17
8,119,141

6 DATA 196,230,164,58,48,31,159,
73,48,33,225,192,34,15,231,192,9
2,90,39,194,166,128,167,192,32,2
47,198,6,206,198,26,126,172,70,5
3,32,141,123,235,99,37,243,166,9
9,231,99,23,0,157,31,137,51,132,
174,100,141

7 DATA 127,239,100,141,211,141,1
11,141,207,53,20,110,164,76,76,7
6,52,64,141,60,150,6,38,8,189,18
8,20,141,111,237,241,57,230,132,
174,2,53,64,32,170,76,76,76,52,6
4,141,33,150,6,38,10,236,241,189
,180,244

8 DATA 158,57,126,188,53,236,244
,189,181,13,222,77,175,66,231,19
6,51,132,53,16,48,2,32,136,68,15
1,6,37,3,126,179,145,215,3,15,5,
206,4,0,174,195,52,16,90,38,249,
126,180,40,53,64,140,4,0,36,2,12
,174,52,20

9 DATA 110,196,223,81,53,64,53,2
0,52,64,222,81,140,4,0,36,2,10,1
74,57,93,189,183,25,13,84,42,3,1
26,179,237,126,179,251,142,2,0,1
3,174,39,2,158,171,52,16,58,140,
4,1,36,4,159,171,53,144,126,181,
83,31,152

10 DATA 198,1,141,226,167,132,57
,95,173,159,160,0,38,242,57,30,1
37,141,211,52,20,92,90,39,4,167,
128,32,249,53,148,52,4,198,4,141
,193,95,141,7,53,2,141,3,39,18,5
7,52,2,68,68,68,68,141,4,53,2,13
2,15,38,3

11 DATA 93,39,238,138,48,129,58,
37,2,139,7,167,133,92,57,53,32,1
66,228,52,4,160,224,39,7,134,255
,36,3,230,228,64,52,2,238,98,92,
90,38,4,166,224,32,13,166,128,16
1,192,39,243,134,1,36,1,64,50,97
,23,255,77

12 DATA 77,110,164,31,152,224,98
,35,4,206,31,152,95,80,92,53,32,
52,6,111,226,206,53,32,174,100,2
30,98,39,98,90,58,166,224,43,9,2
35,228,225,98,53,4,35,11,206,50,
97,230,97,224,228,92,36,1,95,231
,97,175,98

13 DATA 32,190,215,79,53,102,52,
6,52,112,39,45,230,101,39,53,225
,98,34,35,174,99,90,58,49,1,238,
228,166,101,74,155,79,161,98,34,
18,214,79,166,128,161,192,39,6,1
08,101,48,160,32,231,90,38,241,2
06,111,101

14 DATA 50,98,23,254,212,53,4,32
,43,93,38,5,126,180,74,31,1,230,
132,32,31,189,147,29,189,146,152
,31,137,150,182,68,228,132,36,8,
193,4,37,7,84,84,32,248,39,6,95,
92,88,219,193,84,79,32,125,142,0
,82,189,169

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15 DATA 162,204,2,0,51,140,5,52,
70,126,169,235,79,214,81,57,141,
10,174,228,110,139,141,4,53,16,1
10,139,53,64,52,2,225,224,34,5,1
34,3,61,38,34,57,53,64,174,102,2
36,228,43,13,227,132,41,19,237,1
32,163,100
16 DATA 46,13,110,248,2,227,132,
41,6,237,132,163,100,44,243,50,1
04,110,196,16,131,0,2,37,37,221,
79,141,74,220,81,211,83,68,86,77
38,15,52,4,166,228,61,147,79,53
4,39,13,134,0,37,3,221,83,206,2
15,82,48,31
17 DATA 38,223,131,0,0,57,47,253
141,33,220,81,211,83,68,86,31,3
246,1,19,219,173,134,7,61,215,1
73,43,3,223,83,204,223,81,48,31,
38,227,31,48,32,26,221,83,15,81,
15,82,142,0,18,88,73,48,31,36,25
0,57,141,12
18 DATA 141,101,13,84,42,191,67,
83,195,0,1,57,221,79,53,112,52,4
8,223,81,152,81,151,84,220,79,14
1,232,39,6,221,79,220,81,141,224
221,81,57,53,64,164,224,228,224
52,64,32,148,53,64,170,224,234,
224,32,244
19 DATA 67,83,32,136,141,205,39,
30,141,177,48,31,221,81,204,0,1,
32,6,8,82,9,81,89,73,16,147,79,3
7,4,12,82,147,79,48,31,38,237,22
1,119,220,81,32,157,221,81,39,16
150,79,38,2,220,80,61,215,83,15
0,80,214,82
20 DATA 61,155,83,57,141,4,52,68
110,164,53,48,237,97,53,4,92,11
0,132,53,16,159,100,79,95,53,16,
172,193,36,32,221,79,39,6,236,94
141,200,48,139,31,16,10,3,38,23
4,110,159,0,100,79,88,48,235,238
132,230,192
21 DATA 208,3,39,196,126,180,71,
141,198,215,3,92,141,234,141,200
88,73,239,228,32,13,141,183,92,
215,3,141,219,237,132,141,183,52
64,227,228,237,228,110,164,223,
79,53,32,231,128,53,64,239,129,9
0,38,249,53
22 DATA 4,231,128,111,128,58,156
79,37,247,110,164,39,7,198,1,77
42,1,80,29,57,189,180,244,198,8
23,253,4,51,132,52,64,189,189,2
20,53,16,198,255,92,166,133,38,2
51,57,141,229,141,9,134,32,206,1
34,13,110
23 DATA 159,160,2,92,90,39,33,16
6,128,141,244,32,247,189,163,95,
208,108,34,15,57,189,163,95,214,
108,209,107,36,223,208,106,36,25

2,80,141,213,90,38,251,57,198,57
247,2,217,16,254,1,254,57,150,1
88,151,186
24 DATA 215,182,88,206,151,7,171
197,145,25,16,34,253,183,151,18
3,90,166,197,151,185,15,179,134,
3,151,178,57,215,213,95,68,151,2
16,89,206,151,202,215,212,38,3,2
06,151,183,212,216,39,21,49,140,
57,214,213
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7,214,213,84,84,84,236,165,221,2
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9,221,79,236,129,23,254,182,32,
243,88,73,48,31,159,207,48,139,1
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03,220,191
27 DATA 221,205,150,182,133,2,39
4,8,210,9,209,214,217,189,159,2
46,221,217,214,199,189,159,246,1
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4,141,3,126,153,18,215,216,189,1
47,29,214,180,189,149,99,126,149
162,53,16
28 DATA 159,100,254,1,155,223,10
2,51,140,6,255,1,155,126,150,149
222,102,255,1,155,206,50,126,16
255,1,254,190,1,252,175,228,110
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29 DATA 1,126,174,86,141,26,215,
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89,169,118,53,4,126,154,57,53,32
31,152,206,0,0,198,1,52,70,110,
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30 DATA 45,6,206,47,3,198,255,13
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38,2,221,166,206,2,0,174,228,54
80,204,1,44,52,6,220,39,189,117
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31 DATA 204,0,19,52,6,142,110,20
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37,132,142,110,202,79,95,237,132
142,110,200,79,95,237,132,204,1
28,0,142,110,70,237,132,95,52,4,
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32 DATA 204,0,5,52,6,142,110,57,
198,1,189,116,42,204,0,0,189,169,
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241,189,127,48,189,126,151,204,0,
0,189,169,24,189,127,48,204,0,0,
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33 DATA 113,131,189,116,116,15,1
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100,0,189,116,116,204,0,128,189,
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8,3,22,0,4,121,111,117,0,189,116,
116,15,111,204,4,39,52,6,204,0,
58,231,241
34 DATA 204,0,96,189,165,87,48,1
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2,86,65,76,85,69,0,189,116,116,1
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2,2,0,4,97
35 DATA 110,100,0,189,116,116,15
111,204,0,160,189,165,87,48,140
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2,56,0,189,116,116,189,116,110,1
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32,52,4,204,0,32,53,2,189,113,1
31,189,116
36 DATA 116,15,111,204,0,224,189
165,87,48,140,5,198,0,22,0,1,0,
189,116,116,15,111,48,140,5,198,
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9,112,99,142,110,71,230,128,189,
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37 DATA 140,5,198,0,22,0,1,0,189
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81,126,118,132,142,110,71,230,12
8,189,113,45,48,140,5,198,1,22,0
2,89,0,189,113,192,189,117,236,
16,39,0,3
38 DATA 126,120,143,189,116,110,
15,111,204,0,1,215,140,204,0,0,1
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40,5,198,5,22,0,6,109,117,115,11
6,58,0,189
39 DATA 116,116,189,116,110,15,1
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75,69,32,49,53,48,32,87,73,84,7
2,32,65,32,66,65,85,68,32,82,65,
84,69,32,86,65,76,85,69,0,189,11
6,116,189,116,110,15,111,48,140,
5,198,7,22
40 DATA 0,8,80,67,76,69,65,82,56
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32,0,189,116,116,204,0,34,189,1

13,114,189,116,116,48,140,5,198,
7,22,0,8,83,67,82,80,82,84,53,0,
189,116,116
41 DATA 204,0,34,189,113,114,189
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127,135,204,0,0,189,169,24,189,1
27,48,204,0,0,189,165,87,204,0,3
2,52,4,204,0,128,53,2,189,113,13
1,189,116,116,15,111,48,140,5,19
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231,241,204,4,36,52,6,204,0,49,2
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1,241,204,4,38,52,6,204,0,53,231
241,204,0,39,189,165,87,204,0,1
28,189,113
43 DATA 114,189,116,116,48,140,5
198,8,22,0,9,104,97,114,100,99,
111,112,121,0,189,116,116,204,0,
128,189,113,114,189,116,116,48,1
40,5,198,2,22,0,3,111,102,0,189,
116,116,15,111,204,4,51,52,6,204
0,58,231
44 DATA 241,204,0,96,189,165,87,
48,140,5,198,31,22,0,32,70,73,82
83,84,32,83,67,82,69,69,78,32,4
0,80,77,79,68,69,52,44,49,41,32,
35,61,61,61,62,32,49,0,189,116,1
16,189,116,110,15,111,48,140,5,1
98,31,22,0
45 DATA 32,83,69,67,79,78,68,32,
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68,69,52,44,53,41,32,35,61,61,6
2,32,53,0,189,116,116,189,116,11
0,15,111,48,140,5,198,31,22,0,32
65,76,76,32,83,67,82,69,69,78,8
3,32,35,61
46 DATA 61,61,61,61,61,61,61,61,
61,61,61,61,61,61,62,32,56,0,189
116,116,189,116,110,15,111,204,
0,230,189,165,87,48,140,5,198,5,
22,0,6,101,110,116,101,114,0,189
116,116,204,0,128,189,113,114,1
89,116,116

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DISCOVERIES ...

One of the most enjoyable activities CoCo provides me is the graphing of trig or algebraic functions. Especially those marvelously intricate, 3D landscapes you see in computer magazines, advertising the capabilities of various machines or software.

There have been a number of these programs for the CoCo, but never enough, and even with the high speed POKE, they ran slow as molassass. Early in 1983, there appeared a program by Delmar Searles in Graphically Speaking, his column in Hot CoCo. Unlike many others, his program graphed both sides toward the middle symmetrically to save time.

CoCo then produced many beautiful views of the graph that was generated from equations that were called from within the program. One can choose a viewing azimuth from 0 degrees to 90 and a selection of east or southeast projection is allowed plus any variation of line and dot density one desires.

These are quite interesting drawings and can add to one's computer room decor as

well as one's understanding of CoCo's graph capabilities. One problem still remains

IT'S SLOW !! You can watch an evening's TV while waiting for these to plot and print. Ho hum..

Enter CoCo III....

All of a sudden we've got speed! This machine with it's own POKE 65487,0 drives the program at more than twice the speed. I entered the same program in both machines, side by side, and the III was finished, calling for a print out, before the old "F" board had created a bare outline!

I'm going to include Delmar's program here so that you can enjoy the plots that can be generated from the formulas in lines 1000 and 1010. See Hot CoCo, June '83 for full article or write me for other variations.

John C. Burke
38699 Greenwich Circle
Fremont, Ca. 94536

Don't forget, SASE, and also don't forget that I will burn an EPROM for you of your favorite DOS, if you send me your tape.

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1 '3D/III
2 'DELMAR SEARLES
5 'SPEED POKES IN 105 AND 165
7 'SOUTHEAST VIEW
9 POKE359,57:POKE65314,60
10 CLS:PRINTSTRING$(32,38):PRINT
:PRINT"      COCO III VERSION"
20 PRINT:INPUT "PMODE 3 or 4";M
50 PRINT:INPUT "Line Density ( 1
to 8)";LD
55 PRINT:INPUT "Dot Density";DD:
DD=DD/2:DX=1/4/DD
70 PRINT:INPUT "Azimuth (0 to 90
)";A
95 PMODE M,1:PCLS:SCREEN1,1
105 POKE 65497,0
110 FOR I=-4*DD TO 0
115 MAX=-100:MIN=100:X=1/DD:X1=I
NT(30*X+.5)
120 NL=INT(SQR(16-X*X)*LD)
125 FOR K=-NL TO 0
130 Y=K/LD
135 GOSUB 1000
140 A(-K)=Z
145 GOSUB 2000
150 NEXT K
155 GOSUB 3000
160 NEXT I
165 POKE 65496,0
170 FOR I=1 TO 20
175 SOUND 100,2
180 NEXT:EXEC44539:RUN
1000 R=SQR(X*X+Y*Y)
1010 Z=COS(4*A)/(RPRINT2+2)-3*A/
B+1
1020 RETURN
2000 Y=INT(30*(C*Y+S*Z)+.5)
2005 IF M=4 THEN 2050
2010 IFY<MIN THEN MIN = Y ELSE20
50
2030 PSET(128+X1,96-Y,3)
2040 PSET(128-X1,96-Y,3)
2050 IF Y>MAX THEN MAX=Y ELSE 20
90
2070 PSET(128+X1,96-Y)
2080 PSET(128-X1,96-Y)
2090 RETURN
3000 FOR K=0 TO NL
3010 Z=K/LD
3040 GOSUB2000
3050 NEXT K
3060 RETURN

```

ADVENTURE GENERATOR

THE ADVENTURE GENERATOR IS A MENU-DRIVEN PROGRAM THAT WILL ALLOW YOU TO ENTER AND EDIT NOUN AND VERB LIST, THE ADVENTURE MAP AND ROOM DESCRIPTIONS, AND THE INITIAL POSITIONS ON THE MAP OF ALL OF THE NOUNS (AS OBJECTS)

THE ADVENTURE GENERATOR WILL PRODUCE A BASIC PROGRAM WHICH WILL DO THE FOLLOWING DIMENSION NECESSARY ARRAYS, READ NOUN, VERB, AND MAP DATA INTO THE PROPER ARRAYS, PROVIDE CODE FOR DISPLAYING ROOM DESCRIPTIONS, OBVIOUS EXITS, VISIBLE OBJECTS, PROVIDE 'I' (INVENTORY) COMMAND, PROVIDE N,S,E,W DIRECTIONAL MOVEMENT, PROVIDE COMMAND PROMPT AND PARSING ROUTINE, PROVIDE PARTIAL VERB DECODING.

PROVIDE COMMON USE PHRASE ROUTINE, PROVIDE ALL NEEDED DATA STATEMENTS.

THE ADVENTURE GENERATOR IS MENU-DRIVEN WITH SEVEN CHOICES.

1. LOAD ADVENTURE DATA
2. SAVE ADVENTURE DATA
3. EDIT NOUN LIST
4. EDIT VERB LIST
5. EDIT MAP
6. PRODUCE ADVENTURE
7. END PROGRAM"

THE FIRST CHOICE, LOAD ADVENTURE DATA, WILL ALLOW YOU LOAD DATA THAT WAS PREVIOUSLY SAVED WITH THE SECOND CHOICE, SAVE ADVENTURE DATA. THE THIRD CHOICE, EDIT NOUN LIST WILL LEAD YOU TO ANOTHER MENU WHICH WILL ALLOW YOU TO:

1. ADD A NOUN
2. DISPLAY NOUN LIST
3. EDIT A NOUN
4. MAIN MENU"

YOU MAY HAVE UP TO 50 NOUNS IN YOUR ADVENTURE. WHEN YOU ADD A NOUN, YOU WILL BE PROMPTED FOR THE NOUN AND ITS Y AND X POSITIONS IN THE MAP. THE MAP YOU WILL BE USING IS 24 WIDE (0-23) AND 14 DOWN (0-13). THE ROOM DESCRIPTIONS WILL BE PUT INTO AN ARRAY CALLED M\$. M\$ IS A DUAL DIMENSION STRING ARRAY, WHICH IS DIMENSIONED DIM M\$(13,23). THROUGHOUT THE ADVENTURE PROGRAM THE VARIABLES Y AND X WILL INDICATE THE ADVENTURER'S CURRENT POSITION. THINK OF M\$(Y,X) AS BEING THE DESCRIPTION OF A ROOM ON THE MAP. M\$(0,0) WOULD CONTAIN THE DESCRIPTION

OF THE ROOM IN THE UPPER LEFT CORNER. M\$(13,0) WOULD CONTAIN THE DESCRIPTION OF THE ROOM IN THE LOWER LEFT CORNER OF THE MAP. M\$(0,23) WOULD CONTAIN THE DESCRIPTION OF THE ROOM IN THE UPPER RIGHT CORNER. THUS IF YOU ARE AT THE POSITION WHERE Y=13 AND X=0 YOU WOULD LOOK AT THE DESCRIPTION AT M\$(Y,X) WHICH IS THE LOWER LEFT CORNER OF THE SCREEN.

THE Y AND X COORDINATE SYSTEM IS USED ALSO FOR INITIAL PLACING OF NOUNS (AS OBJECTS). THE DUAL DIMENSION ARRAY IV IS THE 'INVENTORY' ARRAY THAT KEEPS TRACK OF THE LOCATIONS OF THE NOUNS. IV(1,0) WOULD CONTAIN THE Y POSITION COORDINATE FOR NOUN NUMBER 1. IV(1,1) WOULD CONTAIN THE X POSITION COORDINATE FOR NOUN NUMBER 1. THUS, IF IV(5,0)=13 AND IV(5,1)=0 THEN WHEN THE PLAYERS STOOD AT M\$(13,0) THEY WOULD SEE NOUN #5 ON THE 'VISIBLE OBJECTS' LIST. TO INDICATE THAT A PLAYER IS CARRYING A NOUN, IV(N,0) WILL BE SET TO -1. (N IS NOUN NUMBER.)

WHEN EDITING A NOUN, YOU MAY CHANGE IT, ITS INITIAL Y POSITION, AND ITS INITIAL X POSITION. THE FOURTH MAIN MENU SELECTION, EDIT VERB LIST WILL ALLOW YOU TO ADD VERBS TO THE LIST. EDIT VERBS, AND DISPLAY VERBS.

SELECTING THE FIFTH SELECTION, EDIT MAP, WILL PUT YOU INTO THE MAP EDITING MODE. A REPRESENTATIVE MAP AREA WILL BE DRAWN ON THE LEFT OF THE SCREEN. A RED CURSOR WILL FLASH.

PRESSING THE ARROW KEYS WILL MOVE THE CURSOR. PRESSING M WILL RETURN YOU TO THE MAIN MENU. PRESSING W WILL PLACE A WALL AT THE CURRENT CURSOR POSITION. A WALL CANNOT BE TRAVELED THROUGH AND WILL SHOW UP AS A BLACK SQUARE ON THE MAP.

PRESSING E WILL ALLOW YOU TO ENTER THE DESCRIPTION FOR THE ROOM AT THE CURRENT CURSOR POSITION.

AFTER YOU ENTER DESCRIPTION, YOU WILL BE PROMPTED FOR A SPECIAL CODE. THIS CODE WILL BE PLACED IN AN ARRAY CALLED M. M IS A DUAL DIMENSION ARRAY SIMILAR TO M\$.

M IS ADDRESSES THE SAME WAY AS M\$. M\$(13,0) AND M(13,0) BOTH REFER TO THE ROOM AT THE LOWER LEFT OF THE SCREEN.

WHEN THE PLAYER ENTERS A ROOM, THE SPECIAL CODE IN M WILL BE PUT INTO THE VARIABLE SP FOR YOUR USE.

A SPECIAL CODE OF 0 MEANS THAT NOTHING SPECIAL HAPPEN. WHEN YOU USE SPECIAL CODES, USE ONES GREATER THAN 0.

SPECIAL CODES CAN BE USED TO LET THE PROGRAM KNOW WHEN A PLAYER HAS ENTERED A ROOM WHERE SOMETHING SPECIAL SHOULD HAPPEN.

THE PROGRAM GENERATED BY THIS GENERATOR IS INTENDED TO BE USED AS A BUILDING BLOCK. A LOT OF CODE IS GENERATED FOR YOU, BUT YOU

MUST WRITE THE ROUTINES FOR EACH OF THE VERBS THAT YOU USE.

THE PARSING ROUTINE WILL TAKE THE CURRENT COMMAND STRING AND PUT THE VERB INTO V\$ AND THE NOUN INTO N\$. THE VERB WILL THEN BE SEARCHED FOR IN THE VERB ARRAY. IF FOUND, THEN THE VERB NUMBER WILL BE PUT INTO CV.

THE NOUN WILL THEN BE SEARCHED FOR IN THE NOUN ARRAY. IF FOUND, THEN THE NOUN NUMBER WILL BE PUT INTO CN.

FROM THERE ON, AN ON CV GOTO STATEMENT WILL REDIRECT CONTROL TO THE SEPERATE VERB ROUTINES. THE LINE NUMBERS FOR THESE ROUTINES WILL BE MARKED WITH REM STATEMENTS.

ONCE INSIDE THE INDIVIDUAL VERB ROUTINES, YOU WILL HAVE TO WRITE THE CODE WHICH WILL DETERMINE WHICH ACTION SHOULD BE TAKEN DEPENDENT ON NOUN NUMBER, LOCATION, OR SPECIALS.

THE FOLLOWING IS A LINE AND VARIABLE SUMMARY FOR THE CODE GENERATED BY THE ADVENTURE GENERATOR:

LINES 10-30 : SET-UP ARRAYS
 LINES 40-70 : READ ARRAY DATA
 LINE 80 : SET INITIAL Y,X
 LINE 90 : SET OLD Y,X
 LINE 100 : CLS AND PRINT DESCRIPTION
 LINES 110-155 : PRINT OBVIOUS EXITS
 LINES 160-170 : PRINT VISIBLE OBJECTS
 LINE 200 : GET COMMAND INPUT
 LINE 210 : TEST FOR SINGLE LETTER
 LINES 220-223 : DO INVENTORY
 LINES 230-232 : NORTH
 LINES 240-242 : SOUTH
 LINES 250-252 : EAST
 LINES 260-262 : WEST
 LINES 300-310 : PARSE COMMAND
 LINES 320-330 : FIND VERB & PUT CODE IN CV
 LINES 340-350 : FIND NOUN & PUT CODE IN CN
 LINES 360-362 : CODE FOR GET
 LINES 370-372 : CODE FOR DROP
 LINE 380 : ON CV GOTO DISPATCH TO VERB ROUTINES
 LINES 8000-8090 : THESE LINES COMPOSE A ROUTINE OF COMMON USED PHRASES LIKE 'I DON'T SEE IT HERE.' THERE ARE NINE PHRASES. TO USE THIS ROUTINE SET ER TO PHRASE NUMBER AND GOSUB8000.
 LINES 50000-54000 CONTAIN DATA STATEMENTS FOR NOUN, VERB, AND MAP ARRAYS.

ARRAY NAME	USE"
M\$	DESCRIPTIONS
M	SPECIAL CODES
IV	NOUN INVENTORY
N\$	NOUN LIST
V\$	VERB LIST

VARIABLE NAME	USE"
CV	VERB NUMBER
CN	NOUN NUMBER
Y	CURRENT Y POS
X	CURRENT X POS
OX	PREVIOUS X POS
OY	PREVIOUS Y POS
NN	NUMBER OF NOUNS
NV	NUMBER OF VERBS
I,J	GENERAL INDEX
SP	SPECIAL CODE

```

1 REM COPYRIGHT (C) T&D SOFTWARE
  1984
2 PMODE0:GOTO205
3 CLEAR3000:Q$=CHR$(34)
4 DIM V$(30),N$(50),M$(13,23),M(
  13,23),IV(50,1)
5 CLS:PRINT"      adventure gene
  rator"
6 PRINTTAB(14)"menu":PRINT
7 PRINT"      1. LOAD ADVENTURE
  DATA      2. SAVE ADVENTURE
  DATA      3. EDIT NOUN LIST
              4. EDIT VERB LIST
              5. EDIT MAP
              6. PRODUCE ADVENTU
              7. END PROGRAM"
8 PRINT:PRINTTAB(7)"your choice
  ? (1-7)":CX=0:CY=0
9 K$=INKEY$:IFK$=""THEN9
10 K=VAL(K$):IFK<1 ORK>7 THEN9
11 ON K GOTO 12,19,25,59,87,117,
  192
12 GOSUB196:OPEN"I",#DN,F$:NN=0:
  NV=0
13 FORI=1 TO 50:LINEINPUT#DN,N$(
  I):NEXT:LINEINPUT#DN,L$:NN=VAL(L
  $)
14 FORI=1 TO 30:LINEINPUT#DN,V$(
  I):NEXT:LINEINPUT#DN,L$:NV=VAL(L
  $)
15 FORI=0TO13:FORJ=0TO23:LINEINP
  UT#DN,M$(I,J):LINEINPUT#DN,L$:M(
  I,J)=VAL(L$):NEXT:NEXT
16 IFNN=0 THEN18
17 FORI=1 TO NN:LINEINPUT#DN,L$:
  IV(I,0)=VAL(L$):LINEINPUT#DN,L$:
  IV(I,1)=VAL(L$):NEXT
18 CLOSE#DN:GOTO5
19 GOSUB196:OPEN"O",#DN,F$
20 FORI=1 TO 50:PRINT#DN,N$(I):N
  EXT:PRINT#DN,STR$(NN)
  
```

```

21 FORI=1 TO 30:PRINT#DN,V$(I):N
EXT:PRINT#DN,STR$(NV)
22 FORI=0 TO 13:FORJ=0 TO 23:PRI
NT#DN,M$(I,J):PRINT#DN,STR$(M(I,
J)):NEXT:NEXT
23 FORI=1 TO NN:PRINT#DN,STR$(IV
(I,0)):PRINT#DN,STR$(IV(I,1)):NE
XT
24 CLOSE#DN:GOTO5
25 CLS:PRINTTAB(8)"noun list men
u":PRINT
26 PRINTTAB(6)"number of nouns:"
;:PRINTUSING" ##";NN
27 PRINT:PRINT"          1. ADD TO
NOUN LIST                2. DISPLAY
NOUN LIST                3. EDIT NO
UN                        4. MAIN me
nu"
28 PRINT:PRINTTAB(7)"your choice
? (1-4)"
29 K$=INKEY$:IFK$="" THEN29
30 K=VAL(K$):IFK<1 OR K>4 THEN29

31 ON K GOTO 32,38,44,5
32 IF NN=50 THEN29
33 NN=NN+1:CLS:PRINT" THIS WILL
BE NOUN NUMBER "NN:PRINT
34 LINEINPUT" NOUN ->";N$(NN):IF
N$(NN)="" THEN34
35 INPUT"INITIAL Y START POSITIO
N";IV(NN,0)
36 INPUT"INITIAL X START POSITIO
N";IV(NN,1)
37 GOTO25
38 IF NN=0 THEN29
39 SC=0:CLS:FORI=1 TO NN
40 PRINTUSING"##. ";I;:PRINTN$(I
);" POS Y=";IV(I,0);" POS X=";IV
(I,1)
41 SC=SC+1:IFSC=13 THENSC=0:GOSU
B193:CLS
42 NEXT:IFSC<>0 THENGOSUB193
43 GOTO25
44 IF NN=0 THEN29
45 CLS:PRINT" EDIT WHICH NOUN? "
;
46 LINEINPUT N$:IFN$="" THEN45
47 EF=0:FORI=1 TO NN:IFN$(I)=N$
THENEF=I
48 NEXT:IFE=0 THENPRINT" COULDN
'T FIND THAT NOUN.":GOSUB193:GOT
O25
49 CLS:PRINT" 1. NOUN: ";N$(EF):
PRINT" 2. INITIAL Y POS: ";IV(EF
,0):PRINT" 3. INITIAL X POS: ";I
V(EF,1):PRINT
50 PRINT" EDIT WHICH ? (1-3, 0 T
O EXIT)"
51 K$=INKEY$:IFK$="" THEN51
52 K=VAL(K$):IFK=0 THEN25

```

```

53 IFK<1 ORK>3 THEN51
54 ON K GOTO 55,57,58
55 PRINT:LINEINPUT" NOUN ->";N$(
EF):IFN$(EF)="" THEN55
56 GOTO49
57 PRINT:INPUT" INITIAL Y POSITI
ON ";IV(EF,0):GOTO49
58 PRINT:INPUT" INITIAL X POSITI
ON ";IV(EF,1):GOTO49
59 CLS:PRINTTAB(8)"verb list men
u":PRINT
60 PRINTTAB(6)"number of verbs:"
;:PRINTUSING" ##";NV
61 PRINT:PRINT"          1. ADD TO
VERB LIST                2. DISPLA
Y VERB LIST              3. EDIT V
ERB LIST                4. MAIN m
enu"
62 PRINT:PRINTTAB(7)"your choice
? (1-4)"
63 K$=INKEY$:IFK$="" THEN63
64 K=VAL(K$):IFK<1 OR K>4 THEN63

65 ON K GOTO 66,70,76,5
66 IF NV=30 THEN63
67 NV=NV+1:CLS:PRINT" THIS WILL
BE VERB NUMBER "NV:PRINT
68 LINEINPUT" VERB ->";V$(NV):IF
V$(NV)="" THEN68
69 GOTO59
70 IF NV=0 THEN63
71 CLS:SC=0
72 FORI=1 TO NV:PRINTUSING"##. "
;I;:PRINTV$(I)
73 SC=SC+1:IFSC=13 THENSC=0:GOSU
B193
74 NEXT:IFSC<>0 THENGOSUB193
75 GOTO59
76 IF NV=0 THEN63
77 CLS:PRINT" EDIT WHICH VERB? "
;
78 LINEINPUT V$:IFV$="" THEN77
79 EF=0:FORI=1 TO NV:IFV$(I)=V$
THENEF=I
80 NEXT:IFE=0 THENPRINT" COULDN
'T FIND THAT VERB.":GOSUB193:GOT
O59
81 CLS:PRINT" VERB : ";V$(EF):PR
INT
82 PRINT" EDIT ? Y/N"
83 K$=INKEY$:IFK$="" THEN59
84 IFK$<>"Y" THEN83
85 PRINT:LINEINPUT" VERB ->";V$(
EF):IFV$(EF)="" THEN85
86 GOTO81
87 CLS:FORI=0TO13:FORJ=0TO23:IF
M$(I,J)="W" THEN POKE1024+I*32+J
,128 ELSEPOKE1024+I*32+J,207
88 NEXT:NEXT
89 PRINT@26,"map";

```

```

90 PRINT@89,USING" Y ##";CY;:PRI
NT@121,USING" X ##";CX;
91 PRINT@448,STRING$(63,32);:PRI
NT@448,"DESC: ";LEFT$(M$(CY,CX),5
0);:PRINT@152,"SPECIAL";:PRINT@1
86,USING"##";M(CY,CX);:PRINT@248
,"OBJECTS";:PP=0:IFNN=0THEN93
92 FORI=1 TO 5:PRINT@248+32*I,ST
RING$(8,32);:NEXT:FORI=1 TO NN:I
F PP<5 AND CX=IV(I,1) AND CY=IV(
I,0) THENPP=PP+1:PRINT@PP*32+248
,LEFT$(N$(I),8);:NEXT ELSE NEXT
93 AD=CY*32+CX+1024:C=PEEK(AD)
94 POKEAD,191:FORTD=338T0345:POK
ETD,255:NEXT:POKEAD,C:K$=INKEY$;
IFK$="" THEN94
95 IFK$="^" THEN103
96 IFK$=CHR$(10) THEN105
97 IFK$=CHR$(8) THEN107
98 IFK$=CHR$(9) THEN109
99 IFK$="E" THEN111
100 IFK$="M" THEN5
101 IFK$<>"W" THEN94
102 M$(CY,CX)="W":C=128:M(CX,CY)
=0:GOTO94
103 IF CY=0 THEN94
104 CY=CY-1:GOTO90
105 IF CY=13 THEN94
106 CY=CY+1:GOTO90
107 IF CX=0 THEN94
108 CX=CX-1:GOTO90
109 IF CX=23 THEN94
110 CX=CX+1:GOTO90
111 PRINT@256,STRING$(96,32);
112 PRINT@256,"ENTER DESCRIPTION
: ";:LINEINPUT D$:IFD$="" THEN111

113 M$(CY,CX)=D$:IFD$="W" THEN M
(CY,CX)=0:GOTO116
114 PRINT@256,STRING$(96,32);
115 PRINT@256,"ENTER SPECIAL COD
E";:INPUT M(CY,CX):IF M(CY,CX)<0
THEN114
116 GOTO87
117 GOSUB196
118 OPEN"D",#DN,F$
119 PRINT#DN,"10 GOTO60000":PRIN
T#DN,"20 CLEAR3000:NV="+STR$(NV)
+":NN="+STR$(NN)

```

W A N T E D

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```

120 PRINT#DN,"30 DIM M$(13,23),M
(13,23),N$(NN),V$(NV),IV(NN,1)"
121 IF NN<>0 THENPRINT#DN,"40 FO
RI=1 TO NN:READ N$(I):NEXT:FORI=
1 TO NN:READ IV(I,0),IV(I,1):NEX
T"
122 IF NV<>0 THENPRINT#DN,"50 FO
RI=1 TO NV:READ V$(I):NEXT"
123 PRINT#DN,"60 FORY=0T013:FORX
=0T023:READ M$(Y,X):NEXT:NEXT"
124 PRINT#DN,"70 FORY=0T013:FORX
=0T023:READ M(Y,X):NEXT:NEXT"
125 PRINT#DN,"80 X=0:Y=0:REM SET
INITIAL X AND Y"
126 PRINT#DN,"90 OX=X:OY=Y:REM S
ET 'OLD' X AND Y"
127 PRINT#DN,"100 CLS:?M$(Y,X)"
128 PRINT#DN,"110 ?"+Q$+" OBVIU
S EXIT(S): "+Q$+";"
129 PRINT#DN,"120 IF Y=0 THEN TY
=13 ELSE TY=Y-1"
130 PRINT#DN,"125 IF M$(TY,X)<>"
+Q$+"W"+Q$+" THEN?"+Q$+"N "+Q$+"
;"
131 PRINT#DN,"130 IF Y=13 THENTY
=0 ELSETY=Y+1"
132 PRINT#DN,"135 IF M$(TY,X)<>"
+Q$+"W"+Q$+" THEN?"+Q$+"S "+Q$+"
;"
133 PRINT#DN,"140 IF X=0 THENTX=
23 ELSETX=X-1"
134 PRINT#DN,"145 IFM$(Y,TX)<>"
+Q$+"W"+Q$+" THEN?"+Q$+"W "+Q$+";"
"
135 PRINT#DN,"150 IF X=23 THENTX
=0 ELSETX=X+1"
136 PRINT#DN,"155 IF M$(Y,TX)<>"
+Q$+"W"+Q$+" THEN?"+Q$+"E "+Q$+"
;"
137 PRINT#DN,"160 ?:"+Q$+" VISI
BLE OBJECT(S): "+Q$
138 PRINT#DN,"165 FORI=1 TO NN:I
F IV(I,0)=Y AND IV(I,1)=X THEN?"
+Q$+" "+Q$+"N$(I)"
139 PRINT#DN,"170 NEXT:?:SP=M(Y,
X)"
140 PRINT#DN,"200 LINEINPUT"+Q$+
"COMMAND: "+Q$+";C$"
141 PRINT#DN,"210 IF LEN(C$)<>1
THEN300"
142 PRINT#DN,"220 IF C$<>" +Q$+"I
"+Q$+" THEN230"
143 PRINT#DN,"221 ?"+Q$+" YOU AR
E CARRYING: "+Q$
144 PRINT#DN,"222 FORI=1 TO NN:I
F IV(I,0)=-1 THEN?"+Q$+" "+Q$+"N
$(I)"
145 PRINT#DN,"223 NEXT:GOTO200"
146 PRINT#DN,"230 IF C$<>" +Q$+"N
"+Q$+" THEN240"

```

```

147 PRINT#DN,"231 IF Y=0 THENY=
13 ELSE TY=Y-1"
148 PRINT#DN,"232 IF M$(TY,X)<>"
+Q$+"W"+Q$+" THENOX=X:OY=Y:Y=TY:
GOTO100 ELSE ER=8:GOSUB8000:GOTO
200"
149 PRINT#DN,"240 IF C$<>" +Q$+"S
"+Q$+" THEN250"
150 PRINT#DN,"241 IF Y=13 THENY
=0 ELSEY=Y+1"
151 PRINT#DN,"242 GOTO232"
152 PRINT#DN,"250 IF C$<>" +Q$+"E
"+Q$+" THEN260"
153 PRINT#DN,"251 IF X=23 THENX
=0 ELSEX=X+1"
154 PRINT#DN,"252 IF M$(Y,TX)<>"
+Q$+"W"+Q$+" THENOX=X:OY=Y:X=TX:
GOTO100 ELSE ER=8:GOSUB8000:GOTO
200"
155 PRINT#DN,"260 IF C$<>" +Q$+"W
"+Q$+" THEN ER=1:GOSUB8000:GOTO2
00"
156 PRINT#DN,"261 IF X=0 THENX=
23 ELSEX=X-1"
157 PRINT#DN,"262 GOTO252"
158 PRINT#DN,"300 P=INSTR(C$,"+Q
$+" "+Q$+""):IFP=0 THENER=9:GOSUB
8000:GOTO200"
159 PRINT#DN,"310 V$=LEFT$(C$,P-
1):N$=MID$(C$,P+1):IFV$="+Q$+"GE
T"+Q$+" OR V$="+Q$+"DROP"+Q$+" T
HEN 340"
160 PRINT#DN,"320 CV=0:FORI=1 TO
NV:IF V$(I)=V$ THEN CV=I"
161 PRINT#DN,"330 NEXT:IF CV=0 T
HENER=1:GOSUB8000:GOTO200"
162 PRINT#DN,"340 CN=0:FORI=1 TO
NN:IFN$=N$(I) THENCN=I"
163 PRINT#DN,"350 NEXT:IFCN=0 TH
ENER=2:GOSUB8000:GOTO200"
164 PRINT#DN,"360 IF V$<>" +Q$+"G
ET"+Q$+" THEN370"
165 PRINT#DN,"361 IF IV(CN,0)<>Y
OR IV(CN,1)<>X THENER=3:GOSUB80
00:GOTO200"
166 PRINT#DN,"362 IV(CN,0)=-1:GO
TO100"
167 PRINT#DN,"370 IF V$<>" +Q$+"D
ROP"+Q$+" THEN380"
168 PRINT#DN,"371 IF IV(CN,0)<>-
1 THENER=4:GOSUB8000:GOTO200"
169 PRINT#DN,"372 IV(CN,0)=Y:IV(
CN,1)=X:GOTO100"
170 T$="380 ON CV GOTO":L=400:FO
RI=1 TO NV:T$=T$+MID$(STR$(L),2)
:IFI<>NV THENT$=T$+", "
171 L=L+200:NEXT
172 PRINT#DN,T$

```

```

173 L=400:FORI=1 TO NV:T$=MID$(S
TR$(L),2)+" REM PUT "+V$(I)+" "
CODE HERE FROM LINES "+STR$(L)+"
TO"+STR$(L+199):PRINT#DN,T$:L=L
+200:NEXT
174 PRINT#DN,"8000 ON ER GOTO801
0,8020,8030,8040,8050,8060,8070,
8080,8090"
175 PRINT#DN,"8010 ?"+Q$+"I DON'
T UNDERSTAND THAT VERB." +Q$+":RE
TURN"
176 PRINT#DN,"8020 ?"+Q$+"I DON'
T UNDERSTAND THAT NOUN." +Q$+":RE
TURN"
177 PRINT#DN,"8030 ?"+Q$+"I DON'
T SEE IT HERE." +Q$+":RETURN"
178 PRINT#DN,"8040 ?"+Q$+"YOU DO
N'T HAVE IT." +Q$+":RETURN"
179 PRINT#DN,"8050 ?"+Q$+"NOTHIN
G HAPPENS." +Q$+":RETURN"
180 PRINT#DN,"8060 ?"+Q$+"YOU SE
E NOTHING SPECIAL." +Q$+":RETURN"

181 PRINT#DN,"8070 ?"+Q$+"THAT'S
IMPOSSIBLE." +Q$+":RETURN"
182 PRINT#DN,"8080 ?"+Q$+"YOU CA
N'T GO THAT WAY." +Q$+":RETURN"
183 PRINT#DN,"8090 ?"+Q$+"PLEASE
USE A NOUN AND VERB." +Q$+":RETU
RN"
184 L=50000:FORI=1 TO NN:T$=MID$
(STR$(L),2)+" DATA "+Q$+N$(I)+Q$
:PRINT#DN,T$:L=L+1:NEXT
185 L=51000:FORI=1 TO NN:T$=MID$
(STR$(L),2)+" DATA "+STR$(IV(I,0
))+", "+STR$(IV(I,1)):PRINT#DN,T$
:L=L+1:NEXT
186 L=52000:FORI=1 TO NV:T$=MID$
(STR$(L),2)+" DATA "+Q$+V$(I)+Q$
:PRINT#DN,T$:L=L+1:NEXT
187 L=53000:FORI=0TO13:FORJ=0TO2
3STEP4:T$=MID$(STR$(L),2)+" DATA
"+Q$+M$(I,J)+Q$+", "+Q$+M$(I,J+1
)+Q$+", "+Q$+M$(I,J+2)+Q$+", "+Q$+
M$(I,J+3)+Q$:PRINT#DN,T$:L=L+1:N
EXT:NEXT
188 L=54000:FORI=0TO13:T$=MID$(S
TR$(L),2)+" DATA ":FORJ=0TO23:T$
=T$+MID$(STR$(M(I,J)),2):IFJ<>23
THEN T$=T$+", "
189 NEXT:PRINT#DN,T$:L=L+1:NEXT
190 PRINT#DN,"60000 GOTO20"
191 CLOSE#DN:GOTO5
192 PRINT:END
193 PRINT@484,"press [enter] to
continue";
194 IFINKEY$<>CHR$(13) THEN194
195 RETURN
196 CLS:PRINT@232,"tape/disk t/d
?";

```



```

197 K$=INKEY$:IFK$="T" THENDN=-1
:GOTO200
198 IFK$<>"D" THEN197
199 DN=1
200 CLS:PRINT@232,"filename: ";
201 LINEINPUT F$:IFF$="" OR LEN(
F$)>12 THEN200

```

```

202 CLS:PRINT@203,"";:IFDN=1 THE
NPRINT"ready disk"; ELSEPRINT"re
ady tape";
203 PRINT@266,"press [enter]";
204 GOSUB194:RETURN
205 PCLEAR1:GOTO3

```



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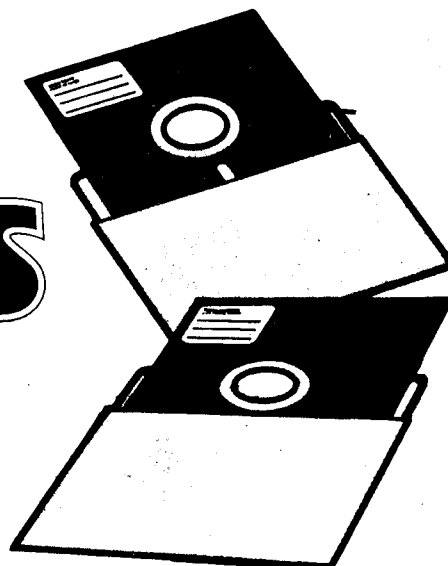
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BACK ISSUES

BACK ISSUES OF THE 'COCO ADS' WITH THE PROGRAMS ON TAPE OR DISK ARE NOW AVAILABLE TO YOU. THE PACKAGE COMES WITH THE NEWSPAPER AND TAPE OR DISK WITH THE PROGRAMS ALREADY TYPED IN AND READY TO RUN. THE FOLLOWING ARE AVAILABLE.

ISSUE A1 YAHTZEE SORT	GAME OF DICE BASIC SORT	ISSUE A3 TAPELIST CLOCK DISKMAP LIST KEYBOMER PONE BOXLABL DESIGNS REMULKS	UTILITY UTILITY DISK UTIL UTILITY GAME GAME UTILITY PICTURES ADVENTURE	ISSUE A4 LABELS 2 ACCROSS DATA BASE - FIVE PROGRAMS IN THIS PACKAGE OF A VERY POWERFUL DATA BASE PROGRAM	
ISSUE A2 SCREENDMP SEE CALENDAR LABYRINTH FINDWORD	UTILITY DISK UTILITY PRINT A CALENDAR ADVENTURE WORD SEARCH				
ISSUE A5 LABELS DATA SPEAK MULTI PAC GONDOLA AUTO LINE DISK FILE ODD COUPLE HANGMAN FLIP-FLOP TRANSFER	UTILITY UTILITY UTILITY GAME UTILITY DISK UTIL TRIVIA GAME GAME GAME DISK UTIL	ISSUE A6 AIR-RAID GRAPH AUTOLINE2 TANKS RACE-ACE PERCENT SUBDEST ANIMAL COPYTK17 AUTORITE	GAME BUSINESS UTILITY GAME GAME SCHOOL GAME GAME DSK UTIL UTILITY	ISSUE A7 AIRATTAK STGEORGE CASDICE PURCHASE EQUATION TRACKMOVE PHONE	GAME ADVENTURE DICE GAME BUSINESS EDUCATION DSK UTIL DATA BASE
ISSUE A8 DISKCOPY CERIFY SCANNER TIME MUSIC PING PONG PHONDIALER PHONE SORT	UTILITY UTILITY UTILITY EDUCATION MAKE MUSIC GAME UTILITY UTILITY	ISSUE A9 COMPAC DISKLIST JEWELS CASSCAT TITLEPG CNGSQUAR MYSTILSD PIG	UTILITY DSK UTIL ADVENTURE TAPE UTIL SCHOOL GAME ADVENTURE GAME	ISSUE A10 ROMMAP ROLLOVER CODETABL MAZE ANIMALDK SOUNDRE DESTROY SAFECKR	UTILITY UTILITY GAME GAME GAME GAME GAME GAME
ISSUE A11 TAX ESTIMATE M L T T D PARTS INVEN DATA MAKER KABOOM DEF MOV R/C AIRPLANE MATCH SQU	ESTIMATE TAX UTILITY INVENTORY FILE DATA STATEMENT GAME GAME GAME GAME	INPUTS	ISSUE A12 PILOT TEST SCHOOL MINI-GEN DISK-CAL COCO-MON	UTILITY UTILITY ADVENTURE ADVENTURE MAKER SPREADSHEET UTILITY	

ISSUE B1 CHESS TRUCKER CODEFIL FRACTIO 4-D TIC DRAWPK JUNGLE	GAME GAME GAME EDUCATION GAME CARD GAME ADVENTURE	ISSUE B2 CLOCK WORD PROC CASS FILE CASTLE HOME BGT DISK MAST ROAD RACE	A CLOCK PROCESSOR TAPE UTILITY ADVENTURE BUDGET DISK UTILITY GAME	ISSUE B3 AMORIT SPOOLER DISKCOPY PUZZLE STOCKKET WIDTHCGE BIORHYTHM TANK	UTILITY UTILITY UTILITY GAME GAME UTILITY GAME GAME
ISSUE B4 RECOVER DATABOOK ROMTOTPE CALENDAR LETTER ANTI-TOP	UTILITY DATA BASE UTILITY UTILITY BUSINESS GAME	ISSUE B5 CANNON CRYPT BANNER FLASH CRD WORDS REPORTER	GAME ADVENTURE UTILITY EDUCATION GAME EDUC BUSINESS	ISSUE B6 RETRIEV POOL STATES DRAW DISKSPED ML ADDR TRIANGLE NAMES HANGMAN	UTILITY GAME EDUCATION GAME UTILITY UTILITY ART DATA BASE GAME

ISSUE B7
 CONQUEST ADVENTURE
 MTERMCON UTILITY
 LOSTREAS ADVENTURE
 DISKZAP DSK UTIL
 LOTTO GAME
 SPELLHLP EDUCATION
 UNSCRAMBL EDUCATION

ISSUE B8
 STOCKMKT GAME
 DISKTCK UTILITY
 DRAW DRAW
 BRICKS GAME
 WATTS UTILITY
 DIARY DATA BASE
 ORBOUEST ADVENTURE
 ROM2ROM UTILITY
 CLOCK UTILITY

ISSUE B9
 MEMTEST UTILITY
 ML CONV UTILITY
 DATAENTY UTILITY
 ML-TTD UTILITY
 R P M DKS UTIL
 ALPHA UTILITY
 PERTTY UTILITY
 CHART BUSINESS
 DSK2TAPE UTILITY
 CASSINDX UTILITY
 UGLYWORD GAME
 VOICESYN UTILITY
 TIMERACE GAME
 DIRHELP UTILITY

ISSUE B10
 GRADEBOOK SCHOOL
 WONDERBAR BUSINESS
 COCOKENNO GAME
 DSKENVEL UTILITY
 HORSES GAME
 SQUEEZE UTILITY
 DATAPRNT UTILITY
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84
12 CLS:GOTO60
13 POKE65495,8:FORX=1TO19:L(X)=B
(X):IFB(X)=0THENB(X)=100:L(X)=10
0:O(X)=100:N(X)=100:GOTO18
14 IFL(X)>N(X)THENN(X)=L(X)ELSEI
FL(X)<O(X)ORO(X)=0THENDO(X)=L(X)
15 IFG2>1THENI=RND(200):IFI=111T
HENB(X)=0:GOTO17ELSEIFI=112THENB
(X)=149:GOTO18
16 B(X)=L(X)+INT((RND(3)-2)*(X/2
)*G2+(RND(25)-12)):IFB(X)>25THEN
FORZ=0TO4:Q=Y1(X,Z)*(20-X)*.01*L
(X):GOSUB32:IFB(X)>149THENGOSUB3
2:NEXTZ:B(X)=INT(B(X)/2):GOSUB34
:ELSENEXTZ
17 IFB(X)<1GOSUB53
18 NEXTX:FORZ=0TO4:Q=Y1(0,Z)*12.
5:GOSUB32:NEXTZ=0:POKE65494,4
19 IFINKEY$<>" "THEN19ELSECL:XS=
P$(Z)+"'S TURN":R4=16:GOSUB27:IF
ZZ>Z AND TY>0THEN41
20 PRINT@34,"BUY <B> SELL <S> L
IST <L> UP <U> DOWN <D> Q
UIT <Q>":PRINTC$:R4=USR1(0)
21 C=128:FORDA=D TOD+6:DD=DA:IFD
D<0THENDD=20+DD
22 IFDD>19THENDD=DD-20
23 IFD=-10ORD=30THEND=10
24 C=C+32:PRINT@C," A1$(DD)B(DD
)TAB(9)"-"A$(DD)" ":NEXT:GOSUB39
25 IFB$="L"THEN35ELSEIFB$="Q"THE
N58ELSEIFB$="U"THEND=D+1ELSEIFB$
="D"THEND=D-1ELSEIFB$="B"ORB$="S
"THENPRINT@450,"TYPE STOCK SYMB
L - ":KY=1494:E1$="":GOTO28
26 GOTO21
27 R4=R4-LEN(X$)/2:PRINT@R4,X$:R
31 ETURN
  
```

```

28 FB$=INKEY$:IFFB$=""GOTO28ELSE
E1$=E1$+FB$:POKEY,ASC(FB$):KY=K
Y+1:IFLEN(E1$)<3GOTO28
29 FORX=0TO19:IFE1$=A1$(X)THENE=
X:CLS:IFB$="B"GOTO46ELSEGOTO54
30 NEXT:CLS:PRINT@227,E1$ IS NO
T A STOCK SYMBOL":GOTO31
31 PRINT@416," PRESS ANY KEY T
O CONTINUE":GOSUB39:GOTO19
32 J6(Z)=J6(Z)+Q
33 S(Z)=INT(S(Z)+Q):Y1(E,Z)=Y1(E
,Z)+Y:Y=0:RETURN
34 R4=USR8(0):CLS:R4=80:X$=A$(X)
:GOSUB27:PRINT@140,"SPLITS!":PRI
NT@200,"SPPL-LI-IITTS!":PRINT@2
63,"SPLITS! SPLITS!":PRINT@457
,"NEW PRICE IS"+STR$(B(X)):R4=US
R1(0):FORZ=0TO4:Y1(X,Z)=2*Y1(X,Z
):NEXT:FORR4=1TO2800:NEXT:RETURN

35 R4=48:CLS:X$=P$(Z)+" OWNS THE
SE STOCKS":GOSUB27:C=128:PRINT@9
7,"AMNT - STOCK NAME
36 FORX=0TO19:IFY1(X,Z)>0THENC=C
+32:PRINT@C,Y1(X,Z)TAB(6)" - "A$(
X)
37 NEXT:IFJ7=3GOTO56
38 PRINT@387,"CASH ON HAND - $
"S(Z):GOTO31
39 B$=INKEY$:IFTIMER/60>6 THENG=
INT(TIMER/60):GT=GG-G:IFGT=<-1GO
TO58
40 PRINT@448," YOU HAVE"GT"SEC
ONDS LEFT":IFB$=""THEN39ELSERETU
RN
41 ZZ=Z:PRINT@64,C$:PRINT" SYM -
PRICE - AMNT - VALUE":PRINT:FOR
X=0TO19:IFY1(X,Z)>0THENPRINT" "A
1$(X)TAB(6)B(X)TAB(14)Y1(X,Z)TAB
(21)Y1(X,Z)*B(X):TN=TN+(Y1(X,Z)*
B(X))
42 NEXT:TN=TN+S(Z):IFTN>9999999T
HEN45ELSEPRINT@355,"LAST DIVIDEN
D - $"INT(J6(Z)):PRINT" your
total net worth $"TN:TN=0
43 PRINT" PRESS ANY KEY TO CON
TINUE
44 IFINKEY$=""THEN44ELSETIMER=0:
CLS:GOTO19
45 CLS:PRINT@170,"congratulation
s":PRINT:PRINT"your net worth is
$"TN:PRINT:PRINT"YOU WILL START
AGAIN WITH $5000":FORX=0TO19:Y1
(X,Z)=0:NEXT:J6(Z)=0:S(Z)=5000:G
OTO43
46 SN=0:X$="DATA ON "+A$(E):R4=4
8:GOSUB27:IFY1(E,Z)>0THENR4=80:X
$="YOU OWN "+STR$(Y1(E,Z))+" SHA
RES":GOSUB27

```

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47 PRINT@96,"HIGH : LOW : LA
ST : CLOSE":PRINT@128,N(E)TAB(
8)O(E)TAB(16)L(E)TAB(25)B(E):PRI
NTC$:IFJ7=3GOTO56
48 FORX=0TO19:IFY1(X,Z)=0ORX=E T
HENNEXTELSESN=SN+1:NEXT
49 IFSN>4THENCLS:PRINT@96,"YOU M
AY ONLY OWN FIVE STOCKS!":GOTO31

50 IFB(E)>0THENR=S(Z)/B(E)ELSER=
0
51 PRINT@259,"CASH ON HAND $"S(
Z):PRINT@321,"YOU MAY BUY UP TO"
FIX(R)"SHARES":PRINT@386,"HOW MA
NY SHARES OF "A1$(E)"?:INPUTY:Y
=INT(Y):IFY<0ORY>R GOTO51
52 Q=-B(E)*Y:GOSUB33:GOTO35
53 R4=USR8(0):B(X)=0:R4=112:X$=A
$(X):CLS:GOSUB27:FORR4=169TO361S
TEP64:PRINT@R4,"- bankrupt -":NE
XT:K=USR1(0):FORK=1TO3500:NEXT:F
ORZ=0TO4:Y1(X,Z)=0:NEXT:RETURN
54 IFY1(E,Z)<1THENCLS:PRINT@200,
"YOU DO NOT OWN ANY":R4=240:X$=A
$(E):GOSUB27:PRINT@352,"":GOTO31
ELSEJ7=3:GOTO46
55 J7=3:GOTO46
56 J7=0:PRINT:INPUT"HOW MANY SHA
RES ARE YOU SELLING";V:IFV<0ORV>
Y1(E,Z)THEN56ELSEFORR4=1312TO131
8:POKER4,96:NEXT
57 Q=B(E)*V:Y1(E,Z)=Y1(E,Z)-V:GO
SUB33:X$="SELLING "+STR$(V)+" SH
ARES ADDS":R4=304:GOSUB27:R4=336
:X$=STR$(Q)+" TO YOUR ACCOUNT":G
OSUB27:X$="CASH ON HAND IS $"ST
R$(S(Z)):R4=368:GOSUB27:GOTO31
58 TG=25:ZZ=12:D=0:J6(Z)=0:Z=Z+1
:TIMER=0:G=0:IFZ>Z1 THENCLSELSE1
9
59 TY=TY+1:PRINT@166,"TRADING FI
NISHED FOR":PRINT@230,"SESSION N
UMBER "TY:PRINT@294,"DIVIDENDS A
ND PRICES":PRINT@329,"BEING COMP
UTED":PRINT@392,"- PLEASE WAIT -
":X=USR2(0):GOTO13
60 PCLEAR1:DIMA1$(19),A$(19),B(1
9),L(19),N(19),O(19),Y1(19,4),P$(
4),S(4),J6(4)
61 PRINT@140,"STOCKS":PRINT@205,
"OR":PRINT@268,"BOMBS
62 FORX=1573TO1611:READR4:POKEY,
R4:NEXT:DEFUSR2=1573:X=USR2(0)
63 C$=STRING$(32,""):FORX=0TO19
:READA$(X):B(X)=RND(50)+50:L(X)=
B(X)-10:N(X)=RND(50)+50:O(X)=RND
(50)+50:READA1$(X):NEXT:B(0)=100
:L(0)=100:O(0)=100:N(0)=100:GOSU
B64:GOTO65

```



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64 FORX=1443T01467:READX1:POKEX,
X1:NEXT:RETURN
65 Z9$=INKEY$:IF Z9$="" THEN 65ELSE
Z1=VAL(Z9$):Z1=Z1-1:IF Z1<0 OR Z1>4
THEN 65
66 FORR4=1538T01552:READX:POKER4
,X:NEXT:DEFUSR1=1538:GOSUB 64:FOR
R4=1613T01634:READX:POKER4,X:NEX
T:DEFUSRB=1613
67 Z9$=INKEY$:IF Z9$="" THEN 67ELSE
62=VAL(Z9$)
68 IF 62<10 OR 62>3 THEN 67 ELSE 62=120/
62:FORX=0T0Z1:S(X)=5000:CLS:PRIN
T 259,"TYPE NO."X+1"PLAYERS NAME
.":INPUT P$(X):IF LEN(P$(X))>9 THEN
P$(X)=LEFT$(P$(X),9)
69 NEXT:TG=25:G2=62-1:G2=62*2:T
IMER=0:GOTO 19
70 DATA 142,4,0,134,207,167,128,1
40,4,29,35,249,167,3,167,2,167,0
,167,1,48,136,32,140,5,226,37,24
0,142,5,226,167,128,140,6,0,37,2
49,57
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73 DATA 72,79,87,96,77,65,78,89,9
6,80,76,65,89,69,82,83,127,96,96
,113,96,84,79,96,117
74 DATA 142,4,0,166,132,136,64,16
7,128,140,6,0,37,245,57
75 DATA 83,69,84,96,68,73,70,70,7
3,67,85,76,73,84,89,96,113,96,96
,114,96,79,82,96,115,54,18,134,1
28,142,4,0,167,128,140,6,0,35,24
9,76,145,255,38,241,55,18,57



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BOXLABLE	993	U,C	MONOL	15132	G,K	ATOMS	2803	G,K
FLIP	2700	G,K,J	POWER UP	249	U,P	DISKSORT	1883	U,D
READBIN	461	U,D	MACDATA	898	U,C	CUBES	2263	G,K
HEXLOAD	1812	U	HANGMAN	2509	G,K	OHMS	1234	U,E
SPEDMATH	6303	EDUC	SCRDUMP	133	U,P	DSKCLEAN	505	U,D
DIRGET	252	U,D	DIRSAVE	295	U,D	ML ADDR	262	U,D
WALLHIT	2112	G,K,J	TEMPCONV	571	U	CHKBOOK	2248	HF,C
DIS	4104	U,P	LOCFind	669	U	MISSLETT	767	G,E
MEMORIE	2767	G,K	FISH	2088	G,K	CHIPER	770	G,K
CARCAL	1388	HF	BIGHILLG	2140	G,K	PROTECT	3095	G,K,J
STOCK	5227	G,K	JUMP	1999	G,K	FOOTBALL	7078	G,K
BOWLSUM	2491	FILE	HILOW	5709	G,K	MEMTEST	1889	U

PROGRAM PACK # 4

COMMAND	5154	G	PACMAN	16605	G	TYCOON	4317	G
DIALER	2324	U	DEXICON	1715	U	DISK FIX	893	D,U
DISKTIME	1170	D,U	DOS64A	6569	U	GDS	10055	G
PIXCMP	4490	PIC	ROMPACK	928	U	SOUND	58	U
SPOOLER	159	U	UT	3148	U	Z	8311	U
QUADDRAW	263	DRAW	B	2183	U	CLOCK	370	U
COPY DIR	1055	D,U	DDCOPY	3193	D,U	FDCTST	6277	G
FIND	622	G	ODIE	6154	PIC	PEANUTS	6154	PIC
SPACE	6154	PIC	ISLAND	13403	ADV	PATTERN	4572	ART
CHEKBOOK	7098	FIN						

			PROGRAM PACK # 5					
MLDISK	3070	D,U	SORT	794	U	TELETERM	5792	COMM
DSK EDIT	8165	D,U	HEALTH	18728	EDU	SOUND	58	EDU
TOF	3019	G	AIRPORT	12031	G	CUBE	5907	G
OBJECTS	4211	G	TANKS	8323	G	CIA	13777	ADV
TRIANGLE	4539	PIC	WORLDMAP	7435	EDU	GARFIELD	6154	PIC
HALLDEMO	1910	PIC	LINES	2263	ART	KALVOS	1259	G
CASTLE	21217	ADV						

			PROGRAM PACK # 6					
SLITHER	2156	G	TUMBLERS	3979	G	ELIZA	7083	G
ICELAND	3472	G	EDUCATE	1511	G	DUNGEON	4362	ADV
PIXDUMP	2140	U,P	CONTOUR	1143	U	SLOSKROL	218	U
COPYDIR	1566	D,U	DIRLIST	1535	D,U	PILOT	4135	G
INVITE	1533	U	MATHPAL	6460	EDU	DUPER	2971	U
IN-OUT	226	ART	GOLDMINE	5646	G	HUSTLE	1239	G
HOBBIT	3634	G	CONNECT4	2647	G,K	OTHELLO	5800	G,K
BIOTYTHM	1787	G,P	SIMON	782	G,K	TICTACT	4269	G,K
3-D-T	4263	G,K	DARTBORD	4431	G,K	COPTER	3022	G

			PROGRAM PACK # 7					
D-ADV	17651	ADV	SWORDS	9198	G	TROLL	11561	ADV
QUEST	8439	G	SURVIVE	9751	ADV	SPELWORD	2135	EDU
CUBIC	5331	G	DOTMAT	16651	G	FLIGHT	5435	G
GRID	3715	PIC	TIGER	6154	PIC	ZIGGY	6154	PIC
LABELPRT	420	U,C	PEEK	1799	U	ROMDUMP	421	U
DISASSY	7512	U	MLFINDER	440	U	COLORBAR	91	U
PATTERN	994	U	PORT	249	U	PAYMENT	340	U
PHONE	1629	F	LOAN	6038	BUS			

			PROGRAM PACK # 8					
LOANAMOR	1633	FIN	MLTTD	840	U	BLACKJK	7520	G,K
SLITTER	2137	G,K	IDKIT	12911	G	SPACE	17397	PIC
FARMING	12878	G	TREK	10169	G,K	DSCOPY	1946	D,U
DSKSPEED	1470	D,U	EXREF	5524	U	ALARM	4150	U
CLOCK	1112	U	PHONEDIR	2393	F,C	TICKTAPE	5510	U
FINANCE	18343	FIN	BARTENDR	5710	REF	DSKLIBRY	5598	F,D
MESSAGE	828	U	FLIPPAGE	5734	U	DSKAID	8025	D,U

			PROGRAM PACK # 9					
DECIDE	4795	G	BIBLE	3249	EDUC	BOMBER	2604	G,K
WEATHERX	4797	U	PROJEVAL	9107	B	FILES	8401	B,C
SUB	9473	ADV	DATAPRNT	413	U	DISKDIRE	4979	D,U
BASEBALL	21936	PIC	AMORLN	3655	F	ASSMLBER	6211	U
GUITAR	10886	E,M	POKER	6924	G,K	TANK	4132	G,J
TRIANGLE	7007	PIC	SHIPS	3756	PIC	HANDBALL	3883	G,J
TRAIL	7938	G,K,J						

			PROGRAM PACK # 10					
KINGDOM	11949	ADV	CHECKS	6453	F,D,C	BONGOCARD	1701	G,P
DKS2TP	2483	D,U	SLOTS	3984	G,K	DATAFILE	7239	F
MLADFND	2762	U	ICE	6060	G	ASSMBLER	12803	U
DISMON	13924	U	SIMSAS	636	G,K	DISKNAME	7820	D,U
SQUEEZE	3166	D,U	STATUS	7787	D,U	DISKLOOK	684	D,U
MAZE	7106	G,K	CROSROAD	2991	G,J	ANIMALS	6219	E,K
DSKLOCK	2795	D,U	SELFMAIL	985	U,P			

PROGRAM PACK # 11

COMBAT	5862	G	MCONVERT	2895	U	FRACTION	7192	G,E
BALONS	4976	G,K,J	DATA3	6066	B,F	LIFE	7561	G
MUSCOMP	3441	G,E	BOGSEL	6013	G,K	OFFSET	2241	U
BATSHIP	7357	G,K	DUMPALL	5409	U	GEOGAME	8452	G,E
MAILLIST	4641	B	VALENCE	2414	G,E	GRAPHDZN	4942	PIC
WEREWAND	10443	ADV	POKER	5943	G,K	ASSMBLER	11338	U
MAZE3	6237	G	RUBCUBE	10321	G			

PROGRAM PACK # 12

CIPHER	772	G,K	COPYM	1929	U	SCRPRINT	3033	U,P
MOPLY	15219	G,K	SOUNDS	5276	U,E	DISTANCE	7454	U
DATES	3221	U	PHONWORD	1424	U	ROBOTS	5201	G,K
DIGGEM	5850	G,K	CONNT4	8002	G,K	ROLLON	4360	G,K
WILLSADV	10330	ADV	BASICMAP	6159	U	GRAPHICS	10794	U
RACEWAY	7335	G,K	TYPING	2803	E,G	CHECKS	6951	FIN
MONEYHLP	8074	FIN	WORDPRC	9387	B,C			

PROGRAM PACK # 13

CADIOH	9696	EDU	HAUNTHSE	12572	ADV	DISKHLP	8162	D,U
FINT-IT	4782	G,K	MISSLES	4154	G,K	PLANE	1066	G,J
FLASHCRD	4062	EDU	COMPTALK	3815	G	HOMEUTIL	12284	FIN
CHKBOOK	6601	FIN	SHAPES	6463	G,K	VIPERS	5169	G
POKING	7137	EDU	BUGS	13238	G	GEOSTUDY	7579	EDU
USASTUDY	7720	EDU	HEALTH	18697	EDU			

PROGRAM PACK # 14

DISKWASH	2150	D,U	AUTODIAL	2326	U	MASTMESS	5980	B
BIGPRINT	5751	U	TRIVIA	8053	G	D-TO-D	3539	D,U
SORT32	967	U	CHARACTR	3794	G	64KLOOK	16361	U
SCRIPT	5553	EDUC	LOADINTR	6184	B	FINDAWRD	3966	G
BUTR17	3543	U	BATTSHIP	4039	G,K	FLY	6252	G
64KMEMT	2798	U	OTHELLO	7144	G,K	FINANAD	12250	EDU
SPDSHEET	10430	BUS	METCONV	2238	U	CRACE	3630	G,J

PROGRAM PACK # 15

DKTODK	4764	D,U	ATTACKER	7439	G	BIORYTHM	2309	G,P
HANGMAN	2592	G,K	TREK	8730	G,K	3DTT	7614	G,K
TYPEFACE	5280	U,P	STAT-LOG	4937	F	WORDSCAR	3863	G
DSKMSTER	9083	D,U	TYPING	4799	E,G	CHECKS	5675	FIN
200DD	8383	ART	FISHING	2091	G	MEMORY	2729	G
HORSERAC	5373	G	KRAKEN	10046	ADV	KINGS	13660	ADV
STOCKS	9603	B,U	CYRPTO	6252	G			

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A COLLECTION OF 6 DIFFERENT COMMUNICATION PROGRAMS.

PROGRAM PACK # 21

A COLLECTION OF 23 HI-RES PICTURES.

PROGRAM PACK # 22

A COLLECTION OF 19 HI-RES PICTURES

PROGRAM PACK # 23

A COLLECTION OF 21 DIFFEREND SONGS.

PROGRAM PACK # 24

A COLLECTION OF 19 DIFFERENT SONGS.

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201 376 4462	THE MORGUE	NJ	312 359 9450	CO-OPERATIVE COMP	IL	612 699 5657	PH.B.I. PHREAKERS	
201 486 2956	CFONJ	NJ	312 397 8308	OS9 USERS GP	IL	614 676 2505	ARCADIA 4 BBS	OH
201 526 6839	THE AIRPORT	NJ	312 597 8485	CREME DE COCO	IL	614 754 1971	COLORAMA	OH
201 564 6112	COCO NUTS	NJ	312 679 8111	ENCHANTED TOILET	IL	615 476 3340	ONLINE EXCHANGE	TN
201 569 0162	NAME UNKNOWN	NJ	312 720 0796	COCO EXTRACORDINARIE	IL	615 476 3340	BBS	TN
201 572 0617	COLORAMA COCO BBS	NJ	312 879 6811	SPEECH SYSTEMS	IL	615 581 9752	COCO PALACE	TN
201 637 6286	B&J SOFTWARE ORDER	NJ	313 662 8303	BARTON DATA LINE	MI	615 581 9752	COCO POWER	TN
201 637 6644	B&J SOFTWARE 24HR	NJ	313 981 5061	COCO CLUB	MI	615 587 0051	GREAT WHITE NORTH	TN
201 657 0611	COLOR CORNER	NJ	314 428 2692	AS IS SOFTWARE	MO	615 839 3130	COLORAMA	TN
201 725 5028	CCIE #1	NJ	315 437 4890	ANORIN MICROWAVE	NY	615 842 6809	68 MICRO	TN
201 773 8265	MEADOWLANDS BBS	NJ	315 446 7793	COMPUTER STORE	NY	615 982 8232	DISK FIX	TN
201 790 6795	PHOTO-80	NJ	315 487 0503	COLOR 80	NY	615 983 6163	REBEL CORNER	TN
201 827 7815	SUSSEX CO BBS	NJ	315 986 4828	COLOR 80 #12	NY	615 983 7180	COM-NET 1	TN
201 928 0949	COCO CREATIONS	NJ	316 663 3600	SALT CITY SWAPPER	KS	616 345 0536	SUNBURST	
201 928 9488	COCO CREATIONS	NJ	316 686 3813	COLOR 80	KS	616 364 7621	DARBY'S DEN	
203 229 6481	COOL COCO OS9	CT	317 392 2769	DUKES SHERBYVILLE	IN	616 534 1822	GRITBBS	
203 237 2668	DAVE SCHWARTZ	CT	317 873 5808	COCO HOTLINE	IN	616 538 8229	COBBS	
203 334 5778	MISSION CONTROL	CT	319 277 0646	COMPUTER CELLAR	IA	616 895 6722	DELTA BBS	
205 649 2894	UNKNOWN	AL	319 396 8875	BLOOM COUNTY HERALD	IA	616 949 2521	WESTERN ALLIANCE	
206 255 5150	LIGHT HOUSE	WA	401 272 1138	SYSLINK HQ	RI	617 321 6809	ORMAN BECKLER	MA
			401 765 2890	COLORAMA	RI	617 472 8612	PHOTO TALK	MA
			403 474 0147	NORTHERN ALBERTA COCO		617 646 6809	LOGICAL PRODUCTS	MA
			403 564 4118	WES-CAN BBS		617 872 5170	FARMINGHAM	MA
			404 378 4410	COCO BOARD HQ	GA	617 879 4086	GATOR BOWL	MA
			404 924 1248	COCOSERVE	GA	619 368 3478	INNER CONN	CA
			404 997 6238	INDEX SYSTEM	GA	619 437 1130	MONITOR	CA
206 425 2576	KWCBBBS	WA	405 248 8433	SHAMBALA	OK	701 281 0233	DAKOTA DATA	ND
206 435 4803	COLORAMA	WA	405 436 6885	TRADERS HOTLINE	OK	701 839 0390	COUNTRY MICRO BBS	ND
206 692 8408	US ONLINE	WA	405 598 6113	HIDEAWAY	OK	703 476 1147	SAMOH TBS	VA
206 762 5141	MINI-BIN	WA	405 728 7654	COCO INC	OK	703 631 8577	SHADOW KEEP	VA
206 883 0403	JCTS	WA	408 629 2277	MICROBUR BBS	CA	703 680 3075	COLORAMA	VA
207 596 0556	MAINE-FRAME	ME	408 646 1850	PEN-CO BBS	CA	704 255 0032	ACCES TBBS	NC
209 223 3800	GOLD COUNTRY	CA	408 733 6809	SHAWN JIPP	CA	704 264 7381	INFORMATION EXCHANGE	NC
209 836 1074	KEN DENNY	CA	408 984 7937	RAINBOW CONNECTION	CA	704 541 3306	SAQCNC	NC
212 423 4623	ARNOLD SCHIFFMAN	NY	409 983 2383	COCO CLUB BBS	TX	707 257 1485	PHIL RUSIN	CA
212 682 0681	GRAND CENTRAL TERMIN	NY	412 479 3786	COLORAMA	PA	707 437 6336	FALCON COLOR 80	CA
212 682 0681	STEVE SCHECHTER	NY	412 744 2335	COCONET	PA	712 323 2943	MACCC	NE
213 244 1100	FANTASY PLAZA	CA	413 532 9631	COCO NUT	MA	713 280 8711	NASA	TX
213 258 0640	MASASHI COLOR 80	CA	414 377 6226	ADVENTUREWARE	WI	713 354 3717	COBBS	TX
213 388 5198	MAGNETIC FANTASIES	CA	414 699 3214	COLOR 80	WI	713 376 9102	-- COCO ADS --	TX
213 690 4589	NEXT STEP	CA	414 793 4055	MIDWEST DATA	WI	713 666 9076	NETHER WORLD	TX
213 773 3024	COBBS #8	CA	415 364 2658	REDWOOD BOARD	CA	713 923 6809	COCO LOCO	TX
213 926 9553	DATA EXCHANGE	CA	415 552 8268	KINKY KOMPUTER	CA	713 941 1542	GOLDEN COCO	TX
214 579 1840	IRVING BBS	TX	415 651 4147	AARDWOLF EXPRESS	CA	713 946 2825	DATA BASE	TX
214 686 4796	FLYING FORTRESS	TX	415 782 4402	EAST BAY BBS	CA	714 350 2668	COLOR CORNER	CA
214 769 3036	MICROSERVE	TX	415 991 4911	X-RATED BOARD	CA	714 354 8004	KANDY SHACK	CA
214 784 7883	NE TX BBS	TX	416 494 7001	COLOUR BBS	ON	714 359 1586	GROWTH NET BBS	CA
215 244 0864	THE CITADEL	PA	416 653 2248	COLOUR DRAGON 1	ON	714 534 5174	ORANGE COCO	CA
215 252 1608	A-S-C-I-I 80	PA	416 689 7950	DAVES DATACOM	ON	716 473 2334	COLORAMA	NY
215 768 0699	COBBS	PA	416 743 6221	COCO NUT	ON	717 652 8659	COLORAMA	PA
215 857 3035	JOE BRACH	PA	416 823 4521	COLOUR DRAGON 2	ON	718 499 1633	CALL BOARD	NY
215 866 1805	COLORAMA	PA	501 857 3138	COBBS41	AR	718 727 1781	TELE-NET	NY
216 788 7910	COCO NUT TREE	OH	502 365 7785	COLORAMA	KY	718 837 2881	KING BYTE C.C.	NY
217 359 9577	COSH BBS 1	IL	502 937 4594	COLORAMA	KY	800 323 0905	MCI MAIL SERVICE	
217 753 3167	LINK UP	IL	503 649 4497	BEE COLOR BBS	OR	803 279 5392	AUGUSTA TBBS	SC
217 893 0453	COSH #1	IL	503 761 6345	BIT BUCKET SYS	OR	803 288 0613	DLOAD OS9	SC
219 234 9717	SAGCOM COCO LINE	IN	504 277 6926	CHALMETTE BBS	LA	803 393 7399	PER DEE EXCH	SC
301 344 9156	NASA GET AWAY SPEC	MD	504 876 1790	BAYOU BOARD	LA	803 791 7389	MIDLAND 80	SC
301 599 1726	JOE SARTORI	MD	504 885 5619	STARBASE 6809	LA	804 285 0041	SKELTON ISLAND	VA
301 675 7626	AIRPORT BBS	MD	512 285 5028	COLORAMA	TX	804 862 4663	3 MUSKETEERS	VA
301 736 9425	COLORAMA	MD	512 353 1508	COLORAMA	TX	804 868 0922	PEN COLOR BD	VA
303 249 7866	CHUCK DAVID	CO	512 629 7670	COBBS	TX	804 887 5302	GAMMA COLOR 80	VA
303 278 4244	UFONET	CO	512 674 0264	SA COLOR BOARD	TX	805 484 5491	COLORAMA	CA
303 297 9127	TRASH HEAP TBBS	CO	513 236 8307	DACCUG	OH	805 656 3746	VENTURZ BBS	CA
303 634 8342	COBBS	CO	513 396 7467	CINSOFT	OH	805 687 9400	COCO CORNER 1	CA
303 690 4566	TBBS #1 H.Q.	CO	513 399 1262	COLORAMA	OH	806 374 9711	BURG BOARD	
303 690 9423	CONTROLLER BOARD	CO	513 474 2985	CINTUG	OH	812 476 9453	EVANSVILLE	IN
304 599 0760	MOUNTAINEER	WV	514 658 3087	COLOR 80 #7	QU	813 321 0397	COMPUNET BBS	FL
304 925 3338	BOB VAUGHAN	WV	515 277 6510	COCO CLUB	IA	813 321 0397	EMERY MANDEL	FL
305 274 3394	REMOTE OS9	FL	515 288 0304	EXCALIBUR	IA	813 345 8100	6809 SIG	FL
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305 731 6097	COMTECH	FL	517 793 1579	C/NET	MI	815 458 6628	COLORAMA	IL
305 751 6809	COLOR INFO CENTER	FL	601 875 8688	OMNI-COM	MS	816 232 4932	DRAGONS LIAR	MO
305 997 6830	JERRY WEISS SYSOP	FL	602 245 0488	COCO NET	AZ	816 436 2904	FRISKY COCO	MO
306 789 7883	PHOENIX BBS	AZ	602 298 0730	SUPER COCO BBS	AZ	817 232 2087	FORT WORTH BBS	TX
			602 344 8070	TBBS	AZ	817 641 0133	DRAGONFIRE BBS	TX
			602 899 1350	COCO PUB	AZ	817 767 5847	COMNET 80	TX
			602 996 8828	MOTOROLA COCO BUGS	AZ	817 789 2254	TY TRAVERS	TX
			604 585 0680	COLOR 80	BC	818 335 6554	COLOR AMERICA BBS	CA
			604 738 2773	COLOR PACIFIC	BC	818 787 0433	OFFICIAL COMP	CA
			606 439 4209	COALMINER'S BBS	KY	818 886 6041	PLAIN RAP	CA
			609 399 7108	COLORAMA	NJ	818 996 1977	TRS 80 COUNTRY	CA
			609 448 1361	TARDIS	NJ	902 434 5278	COLORAMA	NS
			609 448 7768	COCO ENTERPRISE	NJ	902 683 2086	COLORAMA	NS
						902 857 9843	COLORAMA	NS

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DATA MANAGEMENT

CREATE YOUR OWN FILES WITH
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PROGRAM. WILL SAVE DATA TO
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CAN BE MODIFIED FOR DISK USE.

```

10 CLEAR3400:DIMA$(50),B$(50),C$(
(50),D$(50),E$(50)
20 CLS3
30 S$=" "+STRING$(30,"*"):R$=STR
ING$(80,"*"):U$=" "+STRING$(28,
" ")+"*"
40 FORX=1TO50
50 PRINT@160,S$:PRINT@192,"
FILE IT"
60 PRINT@224," DATA MANAGEME
NT PROGRAM"
70 PRINTS$
80 NEXTX
90 CLS:PRINT@224," LOAD AN
EXISTING FILE?":PRINT@256,"PRESS
<Y> FOR YES OR <N> FOR NO."
100 L$=INKEY$:IFL$=""THEN100
110 IFL$="Y"ORL$="Y"THEN2620
120 IFL$="N"ORL$="N"THEN140
130 GOTO 100
140 CLS:PRINT" FIELD NAMING F
UNCTION":PRINT:PRINT
150 LINEINPUT"FIELD 1 NAME: ";BA$

160 LINEINPUT"FIELD 2 NAME: ";BB$

170 LINEINPUT"FIELD 3 NAME: ";BC$

180 LINEINPUT"FIELD 4 NAME: ";BD$

190 LINEINPUT"FIELD 5 NAME: ";BE$

200 CLS3:PRINT@96,S$:PRINTU$
210 PRINT" * 1> FILE MAINTAIN
CE *"
220 PRINT" * 2> SEARCH FILE
*"
230 PRINT" * 3> SORT FILE
*"
240 PRINT" * 4> SAVE FILE
*"
250 PRINT" * 5> VIEW FILE
*"
260 PRINTU$:PRINTS$:PRINT" "RE
C" FILE/S NOW IN MEMORY":SOUND22
0,1
270 L$=INKEY$:IFL$=""THEN270
280 L=VAL(L$)
290 IFL<1ORL>5THEN270ELSE300
300 ONL GOTO310,1180,2030,2490,2
900

```

```

310 REM FILE MAINTAINCE
320 CLS3:PRINT@160,S$:PRINTU$
330 PRINT" * 1> ADD FILE
*"
340 PRINT" * 2> DELETE FILE
*"
350 PRINT" * 3> EDIT FILE
*"
360 PRINT" * R> RETURN MAIN M
ENU *"
370 PRINTU$:PRINTS$
380 SOUND220,1
390 L$=INKEY$:IFL$=""THEN390
400 IFL$="r"ORL$="R"THEN200
410 L=VAL(L$)
420 IFL=1ORL=2ORL=3THEN430ELSE39
0
430 CLS:ONL GOTO 440,710,910
440 REM ADD A LISTING
450 REC=REC+1
460 CLS1:PRINTS$
470 PRINT" * ADD A FILE
*"
480 PRINTS$
490 PRINT" FILE NUMBER:"R
EC:PRINT
500 PRINT"ENTER "BA$ " ";:LINEIN
PUTA$(REC)
510 PRINT"ENTER "BB$ " ";:LINEIN
PUTB$(REC)
520 PRINT"ENTER "BC$ " ";:LINEIN
PUTC$(REC)
530 PRINT"ENTER "BD$ " ";:LINEIN
PUTD$(REC)
540 PRINT"ENTER "BE$ " ";:LINEIN
PUTE$(REC)
550 CLS
560 PRINT" FILE NUMBER:"R
EC:PRINT
570 PRINTBA$ " : "A$(REC)
580 PRINTBB$ " : "B$(REC)
590 PRINTBC$ " : "C$(REC)
600 PRINTBD$ " : "D$(REC)
610 PRINTBE$ " : "E$(REC)
620 PRINT:PRINT"IS THIS CORRECT
(Y/N)"
630 AN$=INKEY$:IFAN$=""THEN630
640 IFAN$="Y"ORAN$="Y"THEN660
650 IFAN$="N"ORAN$="N"THENRN=REC
:CLS:GOTO1010
660 CLS3:PRINT@192," INPUT <A>
ANOTHER OR <R>
RETURN TO MENU"
670 L$=INKEY$:IFL$=""THEN670
680 IFL$="a"ORL$="A"THENREC=REC+
1:GOTO460
690 IFL$="r"ORL$="R"THEN200
700 GOTO670
710 REM DELETE A FILE

```

```

720 CLS(7):PRINT@0,"ENTER <R> TO
RETURN TO MAIN MENU":PRINT@192,
S$
730 PRINT" *          DELETE A FILE
E          *"
740 PRINTS$
750 PRINT:INPUT" FILE NUMBER TO
BE DELETED: ";RN$
760 IFRN$="R"ORRN$="r"THEN200ELS
E770
770 RN=VAL(RN$):IFRN>REC ORRN<1T
HEN720
780 CLS:PRINT@32,"          DELE
TE FUNCTION":GOSUB2780
790 PRINT" CORRECT LISTING (Y/N)
"
800 L$=INKEY$:IFL$=""THEN800
810 IFL$="Y"ORL$="y"THEN850
820 IFL$="n"ORL$="N"THEN710
830 IFL$="r"ORL$="R"THEN200
840 GOTO 800
850 A$(RN)=A$(RN-RN):B$(RN)=B$(R
N-RN):C$(RN)=C$(RN-RN):D$(RN)=D$
(RN-RN):E$(RN)=E$(RN-RN)
860 CLS:FORX=1TO100:PRINT@232,"R
ECORD DELETED":NEXTX:FORX=RN TOR
EC

```

```

870 A$(X)=A$(X+1):B$(X)=B$(X+1):
C$(X)=C$(X+1):D$(X)=D$(X+1):E$(X
)=E$(X+1)
880 NEXTX
890 REC=REC-1:IFREC<1THENREC=0
900 GOTO200
910 REM EDIT A FILE
920 CLS7:PRINT@0,"ENTER <R> TO R
ETURN TO MAIN MENU":PRINT@192,S$

930 PRINT" *          EDIT A FILE
          *"
940 PRINTS$
950 PRINT:INPUT" FILE NUMBER TO
BE EDITED: ";RN$
960 IFRN$="R"ORRN$="r"THEN200ELS
E970
970 RN=VAL(RN$):IFRN<1ORRN>REC T
HEN980ELSE1000
980 CLS:FORX=1TO100:PRINT@256,"
RECORD NUMBER OUT OF RANGE":NE
XTX
990 GOTO200
1000 CLS:PRINT@32,"          E
DIT FUNCTION"
1010 GOSUB2780
1020 PRINT"          EDIT WHICH FIEL
D ?"
1030 L$=INKEY$:IFL$=""THEN1030
1040 IFL$="r"ORL$="R"THEN200
1050 L=VAL(L$):IFL<1ORL>5THEN103
0ELSE1060
1060 CLS:ONL GOTO1070,1080,1090,
1100,1110
1070 PRINTBA$:"A$(RN):PRINT:LI
NEINPUT"CHANGE TO: ";A$(RN):GOTO
1120
1080 PRINTBB$:"B$(RN):PRINT:LI
NEINPUT"CHANGE TO: ";B$(RN):GOTO
1120
1090 PRINTBC$:"C$(RN):PRINT:LI
NEINPUT"CHANGE TO: ";C$(RN):GOTO
1120
1100 PRINTBD$:"D$(RN):PRINT:LI
NEINPUT"CHANGE TO: ";D$(RN):GOTO
1120
1110 PRINTBE$:"E$(RN):PRINT:LI
NEINPUT"CHANGE TO: ";E$(RN):GOTO
1120
1120 CLS:GOSUB2780
1130 PRINT"IS THIS CORRECT (Y/N)
?"
1140 L$=INKEY$:IFL$=""THEN1140
1150 IFL$="y"ORL$="r"ORL$="Y"ORL
$="R"THEN200
1160 IFL$="n"ORL$="N"THENCLS:GOT
O1020
1170 GOTO1140
1180 REM SEARCH ROUTINE

```

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```

1190 CLS0:PRINT@128,S$:PRINTU$
1200 PRINT"      1> SEARCH BY "BA$

1210 PRINT"      2> SEARCH BY "BB$

1220 PRINT"      3> SEARCH BY "BC$

1230 PRINT"      4> SEARCH BY "BD$

1240 PRINT"      R> RETURN TO MENU

1250 PRINTU$:PRINTS$:SOUND220,1
1260 L$=INKEY$:IFL$=""THEN1260
1270 IFL$="r"ORL$="R"THEN200
1280 L=VAL(L$)
1290 IFL<1ORL>4THEN1260ELSE1300
1300 CLS:ONL GOTO1310,1490,1670,
1850
1310 REM SEARCH
1320 CLS:PRINTS$
1330 PRINT"      SEARCH FOR "BA$

1340 PRINTS$
1350 PRINT"ENTER "BA$" FOR SEARC
H":LINEINPUTSR$
1360 M=0:N=0:FORRN=N TOREC:IFSR$
=A$(RN)THEN1370ELSE1380
1370 M=M+1
1380 NEXTRN
1390 CLS1:FORRN=N TOREC:PRINT@32
,"      SEARCH FUNCTION"
1400 IFSR$=A$(RN)THENGOSUB2780EL
SE1470
1410 PRINT"THERE IS/ARE "M" FILE
/S MEETING YOUR SPECIFICATIONS.
IS THIS THE ONE YOU WANT <Y/N
>?"
1420 L$=INKEY$:IFL$=""THEN1420
1430 IFL$="n"ORL$="N"THEN1470
1440 IFL$="r"ORL$="R"THEN200
1450 IFL$="y"ORL$="Y"GOSUB3060
1460 GOTO 1420
1470 NEXTRN
1480 CLS:PRINT@201,"FILE NOT FOU
ND":FORX=1TO300:NEXTX:GOTO200
1490 REM SEARCH
1500 CLS:PRINTS$
1510 PRINT"      SEARCH FOR "BB$

1520 PRINTS$
1530 PRINT"ENTER "BB$" FOR SEARC
H":LINEINPUTSR$
1540 M=0:N=0:FORRN=N TOREC:IFSR$
=B$(RN)THEN1550ELSE1560
1550 M=M+1
1560 NEXTRN
1570 CLS1:FORRN=N TOREC:PRINT@32
,"      SEARCH FUNCTION"

```

```

1580 IFSR$=B$(RN)THENGOSUB2780EL
SE1650
1590 PRINT"THERE IS/ARE "M" FILE
/S MEETING YOUR SPECIFICATIONS.
IS THIS THEONE YOU WANT <Y/N>?"
1600 L$=INKEY$:IFL$=""THEN1600
1610 IFL$="n"ORL$="N"THEN1650
1620 IFL$="y"ORL$="Y"GOSUB3060
1630 IFL$="r"ORL$="R"THEN200
1640 GOTO1600
1650 NEXTRN
1660 CLS:PRINT@201,"FILE NOT FOU
ND":FORX=1TO500:NEXTX:GOTO200
1670 REM SEARCH
1680 CLS:PRINTS$
1690 PRINT"      SEARCH FOR "BC$

1700 PRINTS$
1710 PRINT"ENTER "BC$" FOR SEARC
H":LINEINPUTSR$
1720 M=0:N=0:FORRN=N TOREC:IFSR$
=C$(RN)THEN1730ELSE1740
1730 M=M+1
1740 NEXTRN:CLS1:FORRN=N TOREC
1750 PRINT@32,"      SEARCH F
UNCTION"
1760 IFSR$=C$(RN)THENGOSUB2780EL
SE1830
1770 PRINT"THERE IS/ARE "M" FILE
/S MEETING YOUR SPECIFICATIONS.
IS THIS THEONE YOU WANT <Y/N>?"
1780 L$=INKEY$:IFL$=""THEN1780
1790 IFL$="n"ORL$="N"THEN1830
1800 IFL$="r"ORL$="R"THEN200
1810 IFL$="y"ORL$="Y"GOSUB3060
1820 GOTO1780
1830 NEXTRN
1840 CLS:PRINT@201,"FILE NOT FOU
ND":FORX=1TO500:NEXTX:GOTO200
1850 REM SEARCH
1860 CLS:PRINTS$
1870 PRINT"      SEARCH FOR "BD$

1880 PRINTS$
1890 PRINT"ENTER "BD$" FOR SEARC
H":LINEINPUTSR$
1900 M=0:N=0:FORRN=N TOREC:IFSR$
=D$(RN)THEN1910ELSE1920
1910 M=M+1
1920 NEXTRN
1930 CLS:FORRN=N TOREC:PRINT@32,
"      SEARCH FUNCTION"
1940 IFSR$=D$(RN)THENGOSUB2780EL
SE2010
1950 PRINT"THERE IS/ARE "M" FILE
/S MEETING YOUR SPECIFICATIONS.
IS THIS THEONE YOU WANT <Y/N>?"
1960 L$=INKEY$:IFL$=""THEN1960
1970 IFL$="n"ORL$="N"THEN2010
1980 IFL$="r"ORL$="R"THEN200

```

```

1990 IFL$="Y"ORL$="Y"GOSUB3060
2000 GOTO1960
2010 NEXTRN
2020 CLS:PRINT@201,"FILE NOT FOU
ND":FORX=1TO500:NEXTX:GOTO200
2030 CLS(4):PRINT@160,S$:PRINTU$

2040 PRINT"      1> SORT BY "BA$

2050 PRINT"      2> SORT BY "BB$

2060 PRINT"      3> SORT BY "BC$

2070 PRINT"      R> RETURN TO MA
IN MENU"
2080 PRINTU$:PRINTS$
2090 SOUND220,1
2100 L$=INKEY$:IFL$=""THEN2100
2110 IFL$="r"ORL$="R"THEN200
2120 L=VAL(L$)
2130 IFL>0ANDL<4THEN2140ELSE2100

2140 CLS:ONL GOTO2150,2270,2380
2150 REM SORT
2160 CLS4:PRINT@192,"
    SORTING":PRINT@352,"      DO
    NOT DISTURB"
2170 A2=REC
2180 IFA2<=2THEN2260
2190 A3=0:FORA1=1TOA2-1
2200 IFA$(A1)<=A$(A1+1)THEN2230
2210 A3=A1+1
2220 GOSUB2850
2230 NEXTA1
2240 A2=A3:GOTO2180
2250 GOTO2180
2260 GOTO200
2270 REM SORT
2280 CLS4:PRINT@192,"
    SORTING":PRINT@352,"      DO
    NOT DISTURB"
2290 A2=REC
2300 IFA2<=2THEN2370
2310 A3=0:FORA1=1TOA2-1
2320 IFB$(A1)<=B$(A1+1)THEN2350
2330 A3=A1+1
2340 GOSUB2850
2350 NEXTA1
2360 A2=A3:GOTO2300
2370 GOTO200
2380 REM SORT
2390 CLS(4):PRINT@192,"
    SORTING":PRINT@352,"
DO NOT DISTURB"
2400 A2=REC
2410 IFA2<=2THEN2480
2420 A3=0:FORA1=1TOA2-1
2430 IFC$(A1)<=C$(A1+1)THEN2460
2440 A3=A1+1

```

```

2450 GOSUB2850
2460 NEXTA1
2470 A2=A3:GOTO2410
2480 GOTO200
2490 CLS3:PRINT@192," INSERT DAT
A TAPE INTO RECORDER"
2500 PRINT"      REWIND THE RECO
RDER"
2510 PRINT"      PRESS PLAY AND R
ECORD"
2520 INPUT"NAME OF THIS FILE";DA
$:PRINT:PRINT
2530 L=LEN(DA$)/2:C=207-L
2540 CLS:PRINT@140,"SAVING"
2550 PRINT@C,DA$:PRINT@266,"DATA
FILE"
2560 OPEN"D",#-1,DA$
2570 PRINT#-1,BA$,BB$,BC$,BD$,BE
$
2580 FORX=1TO150:IFA$(X)=""THEN2
610
2590 PRINT#-1,A$(X),B$(X),C$(X),
D$(X),E$(X)
2600 NEXTX
2610 CLOSE#-1:GOTO200
2620 CLS3:PRINT@192," INSERT DAT
A TAPE INTO RECORDER"
2630 PRINT"      REWIND THE RECO
RDER"
2640 PRINT"      PRESS PLAY"

2650 INPUT"ENTER FILE NAME: ";DA$

2660 IFDA$="r"ORDA$="R"THEN200EL
SE2670
2670 L=LEN(DA$)/2:C=207-L
2680 CLS:PRINT@139,"LOADING"
2690 PRINT@C,DA$
2700 PRINT@266,"DATA FILE"
2710 OPEN"I",#-1,DA$
2720 INPUT#-1,BA$,BB$,BC$,BD$,BE
$
2730 FORX=1TO150
2740 IFEOF(-1)THEN2770
2750 INPUT#-1,A$(X),B$(X),C$(X),
D$(X),E$(X)
2760 NEXTX
2770 CLOSE#-1:REC=X-1:GOTO200
2780 PRINT" 1: "A$(RN)
2790 PRINT" 2: "B$(RN)
2800 PRINT" 3: "C$(RN)
2810 PRINT" 4: "D$(RN)
2820 PRINT" 5: "E$(RN)
2830 PRINT"      THIS IS RECORD # "
;RN:PRINT"PRESS <R> TO RETURN TO
MAIN MENU"
2840 RETURN
2850 REMSORT ROUTINE

```

```

2860 T$(1)=A$(A1):T$(2)=B$(A1):T
$(3)=C$(A1):T$(4)=D$(A1):T$(5)=E
$(A1)
2870 A$(A1)=A$(A3):B$(A1)=B$(A3)
:C$(A1)=C$(A3):D$(A1)=D$(A3):E$(
A1)=E$(A3)
2880 A$(A3)=T$(1):B$(A3)=T$(2):C
$(A3)=T$(3):D$(A3)=T$(4):E$(A3)=
T$(5)
2890 RETURN
2900 REM VIEW ROUTINE
2910 CLS:FORX=1TOREC:PRINT:PRINT

```

```

2920 CLS:PRINT@32,"          THIS I
S FILE# "X
2930 PRINTBA$ " : "A$(X)
2940 PRINTBB$ " : "B$(X)
2950 PRINTBC$ " : "C$(X)
2960 PRINTBD$ " : "D$(X)
2970 PRINTBE$ " : "E$(X)
2980 PRINT:PRINT:PRINTS$:PRINT"
PRESS (N) FOR NEXT FILE":PRIN
T" PRESS (R) FOR RETURN TO MENU"
:PRINT" PRESS (L) FOR PRECEDING
FILE":PRINTS$
2990 L$=INKEY$:IFL$=""THEN2990
3000 IFL$="n"ORL$="N"THEN3030
3010 IFL$="r"ORL$="R"THEN200
3020 IFL$="l"ORL$="L"THENX=X-1:S
DUND220,1:IFX=0THEN3040ELSE2920
3030 CLS:SOUND220,1:NEXTX
3040 CLS:FORX=1TO150:PRINT@256,"
FILES COMPLETED":NEXTX
3050 GOTO200
3060 PRINT"GLAD I COULD HELP! P
RESS <R> TO RETURN TO THE MAIN M
ENU":RETURN

```

Quick & Dirty PHONE File

'QUICK & DIRTY PHONE FILE'
BY FAT FINGERS
(I LIKE EM SIMPLE)

I HAVE THE 'BEST'WIFE! SHE NEVER COMPLAINS ABOUT OLE FAT FINGERS MESSES. JUST KINDA CLEANS THE ASTRAYS AND REMOVES THE BEER CANS. WELL THE OTHER DAY I WAS LOOKING FOR A PHONE OF A PERSON I KNOW AND COULD NOT FIND IT AMONG ALL THE LITTLE SCRAPS OF PAPER I KEEP OH SURE! I KNOW THERE ARE PLENTY OF GOOD PHONE FILE PROGRAMS AND I HAVE A FEW, AND ROLODEXES AND PHONE INDEXES, BUT 'YA GATA GET UP AND GET EM'. THIS PROG IS NOW ON MY COM.DISKET, AND WITH A FEW KEY STROKES, I NOW HAVE ANY NAME OR PH I NEED.

(INFO ON PROGRAM)

THE PROGRAMME WRITES TWO(2)FILES, POINT/NO# AND PHONE/NO#

LOAD AND RUN-IF YOU HAVE NEVER RAN THIS PROGRAM TYPE NO TO THE FIRST PROMPT AFTER THAT IT IT'S YOUR'S

WHEN INSTALLING NAMES(NAME PROMPT) YOU CAN ADD UP TO 255 CARECTERS IF YOU WANT PER NAME TO PRINT TO PRINTER CHANGE PRINTNA\$,PH\$ TO PRINT#-2,NA\$,PH\$. THERE IS NO PROVISIONS TO EDIT A NAME OR PH NUMBER YET BUT NEXT MONTH I'LL MAKE YOU ONE

FROM THE KEY BOARD OF FAT FINGERS

```

0 CLS:PRINT"          A FAT FINGERS":
PRINT"          QUICK & DIRTY PHONE FI
LE":FEB 86
1 CLEAR 4300:INPUT"FIRST RUN ? (
Y/N) IF NO HIT ENTER ";TG$:IF TG
$="Y" THEN 5 ELSE 2
2 OPEN"D",#1,"POINT/NO#":GET #1,
1:INPUT #1,PH:CLOSE #1
3 PRINTSTRING$(32,"?"):INPUT"
FIND/WRITE/LIST (F/W/L)";TG$
4 IF TG$="W"THEN 5 ELSE IF TG$="
F"THEN 10 ELSE IF TG$="L" THEN 8
ELSE 3
5 PH=PH+1:LINEINPUT"NAME ";NE$:L
INEINPUT "PH ";NP$
6 CLOSE#1:OPEN"D",#1,"PHONE/NO#"
:WRITE#1,NE$,NP$:PUT#1,PH:CLOSE
#1

```

```

7 CLOSE #1:OPEN"D",#1,"POINT/NO#
":WRITE#1,PH:PUT#1,1:CLOSE:GOTO3
8 FOR X = 1 TO PH:OPEN"D",#1,"PH
ONE/NO#":GET#1,X:INPUT#1,NA$,PH$
:CLOSE#1
9 PRINT:PRINTNA$,PH$:FOR Q = 0 T
O 500:NEXT Q:NEXT X:GOTO 3
10 LINEINPUT"NAME ";F$:FOR X = 1
TO PH
11 CLOSE #1:OPEN"D",#1,"PHONE/NO
#":GET#1,X:INPUT#1,NA$,PH$:CLOSE
#1
12 T=INSTR(NA$,F$):IF T=0 THEN N
EXT X
13 PRINTNA$,PH$:FOR Q= 0 TO 200
:NEXT Q:GOTO 3

```

ADOS-3

A Description of ADOS-3

In addition to the features available in the original ADOS, ADOS-3 features the following:

FAST and SLOW commands for changing between the 1 MHz and 2 MHz clock speeds. These commands automatically adjust the printer baud rate to take into account MPU speed. The currently selected speed is automatically reestablished following a RESET.

Additional configurability options: you can program in the equivalent of four PALETTE commands, an RGB command, a WIDTH command, an ATTR command, the 40/80-column and 32-column border colors, and a FAST or SLOW command, all to be executed automatically on cold start.

The 32-column screen uses real, not inverse, lowercase.

The colorburst signal can be toggled on and off by pressing CTRL-F2.

Disk I/O is reliable at the 2 MHz speed.

Eighty-track drives are now supported, with a full 158 grans per side. (You still must have all drives configured for the same number of tracks, however.)

The CTRL key is the ADOS-3 control key, although down arrow will also work.

All token numbers are the same as usual for the CoCo 3 extended command set, so programs need not be saved in ASCII in order to be transportable to non-ADOS-3 systems.

F2 instead of CLEAR accomplishes a screen clear, ending those annoying accidental clears from the badly placed CLEAR key. F2 also functions to exit edit-insert mode, instead of the awkward shift-up arrow. (These are optional, and can be changed using the configure program.)

The ease of editing a Basic program has been greatly enhanced. If a program is in memory, you can scroll through it line by line using the down and up arrows to list the program forwards or backwards a line at a time. (Key repeat for these arrow keys is also implemented.) When you get to a line you want to edit, simply pressing the right-arrow key will place you in edit mode for that line. The right arrow key will edit the most recent line that has been either listed, edited, or inserted. If you have been dumped from a Basic program by an error, the right arrow key will put you in edit mode for the line where the error occurred. (Works pretty slick, if I do say so!) There is also an alternate method of editing that allows line numbers, as well as line contents, to be edited. This feature allows lines to be moved and copied.

ADOS-3 is designed for use in the CoCo 3. It will, however, function to an extent on the CoCo 1 or 2, acting as a very mildly enhanced version of RSDOS on that machine. We also are making available a switcher device (at a cost of \$20 + \$2 shipping) that will allow use of both the original ADOS and ADOS-3 in a single controller, with the two versions of ADOS being burned into the two banks of a 16K EPROM.

ADOS-3 will debut at Color Expo in Anaheim, CA, on January 30, 1987. Thereafter, it will be available on disk, with configuring utilities, from SpectroSystems, 11111 N. Kendall Dr., Suite A108, Miami, FL 33176 at a cost of \$34.95 + \$2.00 shipping. Included will be a list of sources that can be contacted for burning a configured ADOS-3 into an EPROM, for a cost of about \$20, or about \$15 if you have a controller that can accommodate 28-pin EPROMs. As ADOS-3 is much, much more than just a modified version of the original ADOS, it will not be offered as an upgrade to current ADOS owners, but must be purchased separately.

Art Flexser

(Author of ADOS-3 and owner of SpectroSystems)

HARDCOPY

H A R D C O P Y

By Lonnie Hortick

"Conquering Armies"

I HATE THIS GAME!!! Perhaps I should rephrase that statement. This game is VERY addictive. I played it almost every night for nearly two weeks before I finally won a game. My wife got upset at me for ignoring her; my oldest boy wondered if I had become surgically attached to my computer and my youngest son (3 months) wondered who the stranger was that kissed him good-bye in the morning!

This game is easy to play. Simple rules; relatively few commands to memorize; joystick and keyboard control; yet there is something mesmerizing about this simplicity...

The object of the game is age-old - to take back your kingdoms and protect them from the enemy. The game begins on a medium resolution screen depicting your realm divided into 7 kingdoms. But, unfortunately, the enemy has invaded and now occupies 6 of them. You have a small army at the Abbey of Avon and three allies who, although they never take part in the actual fighting, supply you with fresh troops whenever you cross their borders and enter their castles.

Some of the options allowed are <I> to "inventory" your holdings. You can select a certain kingdom and create an army from the men in the castle there. After you have created an army, if you so desire, you use the <C> key to activate it (blinking dot) and use the joystick to maneuver it around the screen. You can re-man a castle this way or invade an occupied kingdom or attack an invading army. You can also check the status of an army by activating it and pressing <A> to see how many knights, light cavalry, men-at-arms and archers you have. When you attack you always have the option of retreating if the enemies forces are superior to yours.

As you re-take your kingdoms the enemy will send out armies to attack the castles you now occupy. It is a good idea to keep a substantial force in each of the castles for defensive purposes. It is also a good idea to go to your allies for fresh troops every now and then; you'll need them! The enemy's armies get larger as the game progresses.

When you have re-occupied all of your kingdoms the enemy will send a random number of armies at you (up to three) as a last ditch resort. If you successfully fend these off you win the game! As I mentioned earlier it took me almost two weeks to win the game and I was playing on the lowest level. Did I mention that there were 50 levels to this game? So don't get cocky when you finally win that first one on level one!!!

The game is written in basic and that is probably the only major fault I could find with the game. A machine language game would operate a little faster. Still, I LIKED the game very much and it will one of the ones I will go back to time and time again to be humbled. The documentation is three well-written pages and leaves no question as to how the game operates.

The game is from Mitchell Software, Box 194, Tomahawk WI 54487. There was no price with the game so I can't rate the value. It is available both on tape and disk. On the Infamous Scale of One to Ten I rate this game an 8.75. I based this rating on a reasonable price. If the price is high the rating goes down.

Disk Catalog

KEEP TRACK OF YOUR PROGRAMS ON DISK BY DISK NUMBER. LOADS PROGRAM NAMES FROM YOUR DISK DIRECTORY. THEN YOU MAY ADD TO THE FILE THE TYPE OF PROGRAM AND REMARKS ABOUT IT. WILL SORT & PRINT OUT TO A NEAT PRINT OUT. HOLDS 500 NAMES PER FILENAME AND WILL SEARCH, AND SORT BY PROGRAM NAMES FOR EASY LOOK UP. 32K DISK ONLY. TX add .06125 % tax

\$9.95 PP

P D SOFTWARE PO BOX 13124 HOUSTON, TX 77219

INVOICE

PRINT OUT THOSE INVOICES YOU ALWAYS WANTED TO. JUST ENTER THE INFORMATION YOU WANT PRINTED, WILL KEEP NICE RECORDS OF ALL YOUR SALES ALSO.

```

10 'THIS PROGRAM REQUIRES 32K.
15 'WITH 2 DISK AND INVENTORY
20 CLEAR 1100
25 FILES 3,520
30 DIM O$(19),O1$(19)
35 GOSUB 840: 'OPEN & DEFINE FILE

40 CLS:PRINT@11,"MENU"
45 PRINT@100,"1. ENTER TICKET"
50 PRINT@132,"2. SEARCH FOR TICKET"
55 PRINT@164,"3. SET UP NEW DISK"
60 PRINT@196,"4. END PROGRAM"
65 PRINT@300:INPUT"ENTER YOUR CHOICE";Z
70 IF Z<1 OR Z>4 THEN 40
75 ON Z GOTO 80,345,875,1000
80 REM ENTER INVOICE
85 CLS:INPUT"ENTER INVOICE # ";A
90 LINEINPUT"SALESMAN'S INITIALS: ";B1$
95 INPUT"ENTER INVOICE DATE: ";D1$
100 INPUT"ENTER DATE SHIPPED: ";C1$
105 CLS:PRINT"INVOICE# ";A1:PRINT"SALESMAN: ";B1$:PRINT"INVOICE DATE: ";D1$:PRINT"DATE SHIPPED: ";C1$
110 GOSUB 1025:IF Z$="N" THEN 85
115 CLS:PRINT@43,"SHIP TO":PRINT
120 LINEINPUT"NAME: ";E1$
125 LINEINPUT"ADDRESS: ";F1$
130 LINEINPUT"CITY (ONLY): ";G1$
135 INPUT"STATE (ONLY USE 2 LETTERS): ";H1$
140 INPUT"ZIP CODE: ";I
145 INPUT"CUSTOMER'S PHONE #";J1$

```

```

150 CLS:PRINT"SHIP TO:":PRINT E1$:PRINT F1$:PRINT G1$;";";H1$;I:PRINT"PHONE ";J1$
155 GOSUB 1025:IF Z$="N" THEN 115
160 CLS:PRINT@43,"BILL TO":PRINT@66,"IF SAME AS SHIP TO, HIT ENTER"
165 LINEINPUT"NAME: ";K1$
170 IF K1$="" THEN K1$=E1$:L1$=F1$:M1$=G1$:N1$=H1$:O=I:GOTO 205
175 LINEINPUT"ADDRESS: ";L1$
180 LINEINPUT"CITY (ONLY): ";M1$
185 LINEINPUT"STATE (ONLY: USE 2 LETTERS): ";N1$
190 INPUT"ZIP CODE: ";O
195 CLS:PRINT@64,"BILL TO:":PRINT K1$:PRINT L1$:PRINT M1$;";";N1$;O
200 GOSUB 1025:IF Z$="N" THEN 160
205 CLS:PRINT@100,"1. CHECK":PRINT@132,"2. CASH OR MONEY ORDER"
210 PRINT@164,"3. C.O.D.":PRINT@196,"4. CHARGE CARD"
215 PRINT@228,"5. 30 DAY ACC."
220 PRINT@388,"ENTER PAYMENT TYPE":INPUT"1,2,3,4 OR 5";P
225 IF P=3 THEN INPUT"ENTER COD CHARGES";COD
230 IF P=4 THEN INPUT"CARD TYPE (AMEX, MC, VISA, ETC. ";CD$:INPUT"ENTER CARD NUMBER: ";CN:INPUT"ENTER EXPIRATION DATE: ";EP$
235 IF P=5 THEN INPUT"ENTER ACCOUNT NUMBER: ";AC
240 GOSUB 1005:CLS:PRINT"PAYMENT TYPE";P1$
245 INPUT"IS THIS SALE TAXABLE";T1$:IF LEFT$(T1$,1)="N" THEN T1$="E" ELSE T1$="T"
250 IF T1$="E" THEN INPUT"ENTER REASON FOR EXEMPTION: ";U1$ ELSE U1$="NONE"
255 GOSUB 1025:IF Z$="N" THEN 205
260 GOSUB 905: 'GO FIND ROOM ON DISK
265 GOSUB 680: 'GO PUT DATA ON DISK
270 CLOSE#3:CLOSE#2:CLOSE#1
275 YY=Y:CLS:FOR X=1 TO 16
280 INPUT"ENTER ITEM NUMBER: (IF THERE IS NO MORE JUST HIT ENTER: ";O1$(X)
285 IF O1$(X)="" THEN CLS:GOTO 315
290 INPUT"ENTER QUANTITY";O2

```



```

295 QL$=LEFT$(Q1$(X),1):Q=VAL(QL
$):X2=(Q*162)+1:X3=(Q*162)+162
300 B4$=Q1$(X):GOSUB 920:GOSUB 9
50:CLOSE#3
305 Q1$(X)=STR$(Q2)+CHR$(255)+Q1
$(X)
310 NEXT X
315 FOR TK=1 TO X-1:PRINT"# ";Q1
$(TK):PRINTP1$(TK):PRINT"PRICE $
";Q1(TK):Q2=Q2+Q1(TK):NEXT TK
320 IF T1$<>"E" THEN PRINT" TAX
$";:PRINTUSINGU$;Q2*.05
325 PRINT"TOTAL ITEMS $";Q2:PRIN
T:INPUT"IS ALL INFO CORRECT";Z$:
IF LEFT$(Z$,1)="N" THEN 275
330 GOSUB 840:GOSUB 800
335 CLS:PRINT@230:INPUT"DO YOU H
AVE MORE TO ENTER";Z$
340 IF LEFT$(Z$,1)="Y" THEN GOSU
B 675:Y=Y+1:GOTO 85 ELSE GOTO 40

345 REM SEARCH FOR INVOICE NUMBE
R
350 CLS:PRINT@230:INPUT"ENTER IN
VOICE NUMBER YOU ARE SEA
RCHING FOR";A9:IF A9=0 THEN 40
355 INPUT "DO YOU WANT A HARDCOP
Y";Z$:IF LEFT$(Z$,1)="Y" THEN KT
=-2 ELSE KT=0
360 FOR Y=1 TO 350:GET #1,Y:GOSU
B 630
365 IF A9=A1 THEN 385
370 NEXT Y
375 CLS:PRINT@232,"NUMBER NOT IN
FILE":PRINT@400:INPUT"WOULD YOU
LIKE TO TRY ANOTHER";Z$
380 IF LEFT$(Z$,1)="Y" THEN 345
ELSE 40
385 NT=20-(LEN(NM$)/2):AT=40-(LE
N(AD$)/2):CT=40-(LEN(CT$)/2)
390 PRINT#KT,CHR$(31);TAB(NT);NM
$
395 PRINT#KT,CHR$(30);TAB(AT);AD
$
400 PRINT#KT,TAB(CT);CT$
405 PRINT#KT,STRING$(2,10);STRIN
G$(78,"*");CHR$(10)
410 CLS:PRINT"INVOICE# ";A1:PRIN
T"SALESMAN: ";B1$:PRINT"INVOICE
DATE: ";D1$:PRINT"DATE SHIPPED:
";C1$
415 IF KT=-2 THEN PRINT#KT,"INVO
ICE# ";A1:TAB(20);"SALESMAN ";B1
$:TAB(35);"INVOICE DATE: ";D1$:T
AB(55);"DATE SHIPPED: ";C1$
420 CLS:PRINT"SHIP TO:":PRINTE1$
:PRINTF1$:PRINTG1$;",";H1$;I:PR
INT"PHONE ";J1$

```

```

425 PRINT:PRINT"BILL TO:":PRINTK
1$:PRINTL1$:PRINTM1$;",";N1$;0
430 IF KT<>-2 THEN 455
435 PRINT#-2,"SHIP TO:":TAB(38);
"BILL TO:"
440 PRINT#-2,E1$;TAB(38);K1$:PRI
NT#-2,F1$;TAB(38);L1$
445 PRINT#-2,G1$;",";H1$;I;TAB(
38);M1$;",";N1$;0
450 PRINT#-2,"PHONE ";J1$
455 PRINT"METHOD OF PAYMENT: ";P
$
460 PRINT#KT,CHR$(10):PRINT#KT,S
TRING$(75,"*");CHR$(10)
465 PRINT#KT:PRINT#KT,"ITEM #";T
AB(40);"QUAN.":TAB(51);"EACH";TA
B(61);"EXTENCION":PRINT#KT,CHR$(
10)
470 GET #2,Y:GOSUB 650
475 FOR X=1 TO 16:IF Q1$(X)="" O
R LEFT$(Q1$(X),5)="XXXXX" THEN 5
70
480 Q=INSTR(Q1$(X),CHR$(255))
485 L=LEN(Q1$(X))
490 IF Q<>0 THEN Q2$=LEFT$(Q1$(X
),Q-1)
495 Q3$(X)=RIGHT$(Q1$(X),L-Q)
500 QA=LEN(Q3$(X)):IF RIGHT$(Q3$
(X),1)=CHR$(32) THEN Q3$(X)=LEFT
$(Q3$(X),QA-1):GOTO 500
505 QL$=LEFT$(Q3$(X),1):Q=VAL(QL
$):X2=(Q*162)+1:X3=(Q*162)+162
510 CLOSE#3:CLOSE#2:CLOSE#1
515 GOSUB 920:GOSUB 600
520 CLOSE#4
525 PRINT"ITEM# ";Q3$(X)
530 PRINT"QUANTITY: ";Q2$
535 PRINT"PRICE EACH: ";:PRINTUS
INGU$;Q3
540 TS=TS+(Q3*VAL(Q2$))
545 PRINT"EXTENCION : ";Q3*VAL(Q
2$)
550 PRINT
555 IF KT=-2 THEN PRINT#-2,Q3$(X
);TAB(15);P1$(X);TAB(40);Q2$;TAB
(45);:PRINT#-2,USING"$$$###.##"
;Q3;:PRINT#-2,TAB(60);:PRINT#-2,
USING"$$$###.##";Q3*VAL(Q2$)
560 GOSUB 840
565 NEXT X
570 IF KT=-2 THEN PRINT#-2,TAB(2
5);"** TOTAL FOR ITEMS **";TAB(
60);:PRINT#-2,USING"$$$###.##";
TS:PRINT#-2
575 IF LEFT$(U1$,4)="NONE" THEN
PRINT#KT,TAB(35);"TAX";TAB(64);:
PRINT#KT,USING"$$$###.##";TS*.05:TS
=TS+(TS*.05)

```

```

580 IF LEFT$(U1$,4)<>"NONE" THEN
  PRINT#KT,U1$;V1
585 PRINT#KT,TAB(25);"TOTAL DUE"
;TAB(60);:PRINT#KT,USING"###,###
.##";TS
590 PRINT:PRINT:INPUT"DO YOU WAN
T ANOTHER";Z$:IF LEFT$(Z$,1)="Y"
  THEN 345
595 GOTO 40
600 GET#3,X2:B9$=B2$:O3=CVN(H2$)
:IF LEFT$(A2$,8)="NOT USED" THEN
  620
605 UV=LEN(B9$):IF RIGHT$(B9$,1)
=CHR$(32) THEN B9$=LEFT$(B9$,UV-
1):GOTO 605
610 IF B9$=O3$(X) THEN RETURN
615 IF X2<X3 THEN X2=X2+1:GOTO 6
00
620 CLS:PRINT@232,"NUMBER NOT IN
FILE":PRINT@400:INPUT"HIT ENTER
TO RETURN";Z:CLOSE#3:GOSUB 840:
GOTO 345
625 S=0:GOTO 40
630 REM CONVERT VARIABLES
635 A1=CVN(A$):B1$=B$:D1$=D$:E1$
=E$:F1$=F$:G1$=G$:H1$=H$
640 I=CVN(I$):J1$=J$:K1$=K$:L1$=
L$:M1$=M$:N1$=N$
645 RETURN
650 FOR X=1 TO 16:O1$(X)=O$(X):N
EXT X
655 RETURN
660 REM
665 T1$=T$:T1=CVN(TX$):U1$=U$:V1
=CVN(V$)
670 RETURN
675 REM PUT ON DISK
680 LSET A$=MKN$(A1):'INVOICE#
685 LSET B$=B1$:'SALESMAN
690 LSET C$=C1$:'DATE SHIPPED
695 LSET D$=D1$:'INVOICE DATE
700 LSET E$=E1$:'SHIPPED TO NAME

705 LSET F$=F1$:'ADDRESS
710 LSET G$=G1$:'CITY'
715 LSET H$=H1$:'STATE
720 LSET I$=MKN$(I):'ZIP CODE
725 LSET J$=J1$:'PHONE#
730 LSET K$=K1$:'NAME BILLED TO
735 LSET L$=L1$:'ADDRESS
740 LSET M$=M1$:'CITY
745 LSET N$=N1$:'STATE
750 LSET O$=MKN$(O):'ZIP CODE
755 PK$=STR$(P):PK$=RIGHT$(PK$,1
)
760 LSET P$=PK$:'PAYMENT TYPE
765 LSET Q$=MKN$(AC):'ACCOUNT #
770 LSET R$=EP$:'C.C. EXP. DATE
775 LSET S$=MKN$(CN):'C.C. #

```

```

780 LSET T$=MKN$(COD)
785 LSET TX$=T1$:'TAXABLE?
790 LSET U$=U1$:'REASON NOT
795 PUT#1,Y:RETURN
800 FOR X=1 TO 16:LSET O$(X)=O1$
(X):NEXT X
805 PUT#2,Y:RETURN
810 REM FIND AN OPEN SPACE ON DI
SK
815 FOR Y=1 TO 400
820 GET#1,Y:IF LEFT$(E$,8)="NOT
USED" THEN RETURN ELSE NEXT Y
825 CLS:PRINT@232,"DISK FULL"
830 PRINT@400:INPUT"HIT ENTER TO
CONTINUE";Z
835 RETURN
840 REM OPEN & DEFINE FILE
845 OPEN"D",#1,"DATA",189
850 FIELD#1,5 AS A$,2 AS B$,8 AS
C$,8 AS D$,20 AS E$,20 AS F$,12
AS G$,2 AS H$,5 AS I$,8 AS J$,2
0 AS K$,20 AS L$,12 AS M$,2 AS N
$,5 AS O$,1 AS P$,5 AS Q$,8 AS R
$,5 AS S$,5 AS T$,1 AS TX$,15 AS
U$
855 OPEN"D",#2,"DATA2",256
860 FOR XX=1 TO 16
865 FIELD#2,((XX-1)*16) AS QV$,1
6 AS O$(XX):NEXT XX
870 RETURN
875 REM SET UP NEW DISK
880 A1=0:B1$="NN":C1$="NOT USED"
:D1$="NOT USED":E1$="NOT USED":F
1$="NOT USED":G1$="XX":H1$="XX":
I1=11111:J1$="NOT USED":K1$="NOT
USED":L1$="NOT USED":M1$="NOT U
SED":N1=11111:FOR X=1 TO 16:O1$(
X)="XXXXX":NEXT X
885 FOR X=1 TO 5:R1$(X)="NOT USE
D":S1(X)=000:NEXT X
890 T1$="N":T1=00:U1$="NOT USED"
:V1=00
895 CLS:PRINT@230,"WAIT FOR NUMB
ER 332"
900 FOR Y=1 TO 332:PRINT@265,Y;:
GOSUB 675:GOSUB 800:NEXT Y:GOTO 4
0
905 FOR Y=1 TO 332:GET#1,Y:IF LE
FT$(E$,8)="NOT USED" THEN RETURN
ELSE NEXT Y
910 CLS:PRINT@224," SORRY, OUT O
F ROOM ON THIS DISK. PLEASE
FORMAT A NEW ONE."
915 PRINT@384:INPUT"HIT ENTER TO
RETURN TO MENU";Z:GOTO 40
920 OPEN"D",#3,"INV/DAT:1",84
925 FIELD #3,23AS A2$,13 AS B2$,
5 AS C2$,5AS D2$,5AS E2$,5AS F2$,
5AS G2$,5AS H2$,5AS I2$,8AS DA$,
5 AS YS$

```

```

930 RETURN
935 CLS:PRINT@230,"NUMBER NOT IN
FILE":PRINT:PRINT:INPUT"HIT ENT
ER TO CONTINUE";Z:RETURN
940 LSET A2$=A4$:LSET B2$=B5$:LS
ET C2$=MKN$(C4):LSET D2$=MKN$(D4
):LSET E2$=MKN$(E4):LSET F2$=MKN
$(F4):LSET G2$=MKN$(G4):LSET H2$
=MKN$(H4):LSET I2$=MKN$(I4):LSET
DA$=D5$:LSET YS$=MKN$(Y4)
945 PUT#4,X2:RETURN
950 REM FIND ITEM & UPDATE INV.
DISK
955 GET#4,X2
960 A4$=A2$:B5$=B2$:C4=CVN(C2$):
D4=CVN(D2$):E4=CVN(E2$):F4=CVN(F
2$):G4=CVN(G2$):H4=CVN(H2$):I4=C
VN(I2$):D5$=DA$:Y4=CVN(YS$)
965 B=LEN(B5$):IF RIGHT$(B5$,1)=
CHR$(32) THEN B5$=LEFT$(B5$,B-1)
:GOTO 965
970 IF B4$=B5$ AND O2<=E4 THEN P
RINT B4$:A4$:PRINT"IN FILE";E4:E
4=E4-O2:D5$=TD$:I4=I4+O2:Y4=Y4+O
2:P1$(X)=A4$:Q1(X)=H4:GOTO 940
975 IF B4$=LEFT$(B5$,B) AND O2>E
4 THEN 990
980 IF X2<X3 THEN X2=X2+1:GOTO 9
55
985 GOSUB 935:RETURN
990 CLS:PRINT@228,"YOU CAN NOT S
ELL MORE OF      THESE THAN YO
U HAVE.          PLEASE RECHEC
K YOUR DATA."
995 PRINT:PRINT:INPUT"HIT ENTER
TO RETURN";Z:RETURN
1000 CLOSE#2:CLOSE#1:CLOSE:END
1005 IF P=1 THEN P1$="CHECK" ELS
E IF P=2 THEN P1$="CASH" ELSE IF
P=3 THEN P1$="C.O.D."
1010 IF P=4 THEN P1$=" CREDIT CA
RD "+CD$+"      CARD# "+CN$+"
      EXPIRATION DATE "+E
P$
1015 IF P=5 THEN P1$=": CHARGE T
O ACCOUNT # "+AC$
1020 RETURN
1025 PRINT:PRINT:INPUT"IS ALL TH
E ABOVE CORRECT?      IF SO JUS
T HIT ENTER ";Z$
1030 Z$=LEFT$(Z$,1):RETURN

```

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CERTON PRINTER RIBBONS

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HOUSTON, TX 77219

USE ORDER FROM ON PAGE 37

INTRODUCTION TO MIDI

MIDI is an acronym for Musical Instrument Digital Interface. It is a standard protocol designed to allow appropriately equipped musical instruments to talk to each other and to computers.

MIDI information is just fast serial communication. It is a real time protocol. The connectors used are generally 5 pin DIN type, and each device generally has both an IN and a OUT. Some devices also include a THRU jack, this simply echos the the information appearing at the IN jack. It operates with one start bit, 8 data bits, one stop bit, and no parity. The baud rate is 31.25 kilobaud. Information is set as several byte messages, and there are 16 basic channels of information. This allows synthesizers to be daisy chained together, but not all play the same information. Each synthesizer is set to receive on a give channel, or if in OMNI mode, respond to all information regardless of channel. Because of the high baud rate, most computers need a special MIDI interface. These fall into two basic catagories.

The first is what is called a dumb interface. All the Color Computer interfaces fall into this type. It is basically a UART chip set to the right speed and mapped into I/O and usually interruppt generating. Most interfaces use the Motorola 6850 chip. They use this chip because unlike most UART's the chip's baud rate is set by an external clock.

The second type of interface is an intelligent interface. The Roland MPU-401 is a good example of this. Since MIDI is a real time protocol, there is no hand shaking, the computer must constantly poll a dumb interface to see if there is any data. An intelligent interface does this work for the Host computer by packeting the data and then sending it to the computer. This lets the host computer go on and do other things while the interface is sending or receiving the next packet. The Roland MPU-401 has the routines built in for a complete 8-track sequencer. The host computer only needs to send commands to the MPU-401 and it takes care of all the timing of the information and the packeting of it.

Other features found on some MIDI interfaces are click outs, tape sync, and multiple outs. Click outs are just the audio signal from a metronome. Tape sync is a very handy feature, it allows the computer to generate and then follow a tone recorded onto a tape track on a multi-track tape recorder. This allows the computer tracks of MIDI information to follow the tape recorder thus acting just like 'extra' tape tracks. The common form of this is called FSK. Multiple outs fall into 2 catagories, both of them being handy. The first is just extra outs all tied together in parallel. This is handy for people with multiple keyboards. The second type is 2 or more separate outputs, addresses separately. Since MIDI has 16 channels per cable, the limit of different parts played by different keyboards on one cable is 16. With 2 separate outs we can addresses 32 keyboards by routing like; Channel 1, Out 1, or Channel 1, Out 2.

More specific in depth information on MIDI can be obtained from:

IMA
8426 Vine Valley Drive
Sun Valley, CA 91352
(213) 768-7448

I HATE EPROMS!
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INFORMATION.

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-- HINTS --

FIRST PART

All right, we know that The CoCo III initializes in RAM, but what about the earlier machines? There are a lot of nice POKES around to change the screen, cursor, and different functions like printer BAUD rates and disk step rate. These all need us to be in the RAM mode before they will take effect, and then, just when we are in RAM and get everything set up just the way we want it, a RESET wipes it all out and we're back to zero again.

So here's a little RAM boot with reset protection.....

```
10 FOR I=32382 TO 32407
20 READ X
30 POKE I,X
40 NEXT
50 EXEC 32382
60 CLS:PRINT"RAM"
70 DATA 26,80,142,128,0,166,132,
183
80 DATA 255,223,167,128,183,255,
222,140
90 DATA 255,0,38,241,183,255,223
,28
100 DATA 175,57
110 'RESET PROTECTION
120 POKE &H3FE,PEEK(&H72):POKE&H
3FF,PEEK(&H73)
130 POKE &H72,3:POKE&H73,&HF9
140 FOR I=&H3F9 TO &H3FD:READ P$
:POKE I,VAL("&H"+P$):NEXT
150 DATA 12,7F,FF,DF,7E
```

And then.....

POKE 44014,0:POKE41384,95:POKE41381,134

```
1 GOSUB12
2
   SCRPT5/BAS
   COPYRIGHT (C) 1986

3 PCLS1:CLS0:SCREEN1,1:GOSUB11:P
RINT@32,"THIS PROGRAM IS PLACED
IN THE PUBLIC DOMAIN TO ALLOW
USERS OF THE R.S. DMP-105 PRINTE
R TO MAKEHARDCOPIES OF THEIR PMO
DE 4,1(5)GRAPHIC SCREENS."
4 PRINT:PRINT:PRINT"          COPYR
IGHT (C) 1986"
5 PRINT" THIS PROGRAM IS NOT FOR
RESALE      all RIGHTS ARE RESER
VED!":PRINT
6 SCREEN0,1:FORDN=0T05000:NEXTDN
:PRINT@480,"";
7 CLS0:GOSUB11:PRINT@32,"PLACE "
;CHR$(34);"SCRPT5";CHR$(34);" D
ISK IN DRIVE 0"
8 INPUT"DIRECTORY OF WHICH DRIVE
(0-3) ";D:IFD>3THENSOUND1,1:GO
T07ELSE DRIVED:CLS0:DIR
9 PRINT"  FILENAME/EXT":INPUTF$:
IF F$=""THEN7ELSE'PMODE4,1:SCREE
N1,1:LOADMF$:LOADM"SCRPT5:0":EX
EC&H7600
10 END
11 PRINT@448,"  DUKE'S DMP-105
SCREEN DUMP":PRINT@489," 317/392
-2769 ";:RETURN
12 PCLEARB:PCLS:CLEAR300,&H6E00:
GOTO3
```

RETURN TO PAGE 15

PHONE HELP

THE FOLLOWING INFORMATION WAS SUPPLIED TO ME BY BELL OF PA. CONCERNING THAT NASTY BEEP FROM CALL WAITING THAT WILL THROW YOU OFF THE COMPUSEVE NETWORK, OR ANY OTHER COMPUTER NETWORK.

HERE IT IS:

TONE BLOCK.

TONE * BLOCK HAS BEEN ADDED AS AN ENHANCEMENT TO YOUR CALL WAITING SERVICE. THIS FEATURE GIVES YOU THE OPTION OF TEMPORARILY BLOCKING THE CALL WAITING ON YOUR LINE. THE CALL YOU MAKE AFTER ACTIVATING TONE * BLOCK WILL NOT BE INTERRUPTED BY THE SPECIAL TONE THAT SIGNALS IN INCOMING CALL.

+++ HERE'S HOW IT WORKS:
//FOR OUTGOING CALLS//

* IF YOU HAVE A 12-BUTTON TOUCH-TONE SET, PUSH THE [*] (STAR) BUTTON AND THEN [7] [0]. IF YOU HAVE A ROTARY OR PULSE-DIALING PHONE, SIMPLY DIAL 1-1-7-0.

* LISTEN FOR THE DIAL TONE, THEN DIAL THE NUMBER OF THE PERSON WITH WHOM YOU WISH TO SPEAK. TONE * BLOCK IS NOW IN EFFECT FOR THAT CALL ONLY.

TONE BLOCK MUST BE ACTIVATED BEFORE YOU MAKE EACH CALL, AND WORKS ONLY ON OUTGOING CALLS, UNLESS YOU HAVE THREE-WAY CALLING.

//WITH THREE-WAY CALLING//

IF YOU HAVE THREE-WAY CALLING IN ADDITION TO CALL WAITING, THE TONE * BLOCK FEATURE CAN BE ACTIVATED BEFORE YOU MAKE A CALL (AS DESCRIBED ABOVE) OR WHILE YOUR CALL IS IN PROGRESS. TO INITIATE TONE * BLOCK WITH THREE WAY CALLING WHILE A CALL IS IN PROGRESS:

* DEPRESS THE SWITCHHOOK BRIEFLY. THIS PUTS THE CALLING PARTY ON HOLD.

* LISTEN FOR THREE SHORT TONES AND THEN DIAL TONE.

* IF YOU HAVE A 12-BUTTON TOUCH-TONE SET, PUSH THE [*] (STAR) BUTTON AND THEN DIAL [7][0]. IF YOU HAVE A ROTARY OR PULSE-DIALING PHONE, SIMPLY DIAL 1-1-7-0.

* LISTEN FOR DIAL TONE, THEN RETURN TO THE CALL IN PROGRESS BY DEPRESSING THE SWITCHHOOK. TONE * BLOCK IS NOW IN EFFECT FOR THAT CALL ONLY.

+++ TO REACTIVATE CALL WAITING:

CALL WAITING IS AUTOMATICALLY REACTIVATED WHEN YOU HANG UP.

+++ ANY QUESTIONS:

Q: IF I'M USING TONE * BLOCK ON A CALL, WHAT HAPPENS IF SOMEONE ELSE TRIES TO CALL ME?

A: THE PARTY THAT IS TRYING TO CALL YOU WILL GET A BUSY SIGNAL.

Q: CAN I ADD TONE * BLOCK ON AN INCOMING CALL?

A: ONLY IF YOU ALSO HAVE THREE-WAY CALLING.

Q: DO I HAVE TO USE TONE * BLOCK? CAN'T I JUST LEAVE CALL WAITING AS IT IS NOW?

A: YOU CHOOSE WHEN AND IF YOU WANT TO USE TONE * BLOCK -- THE REMAINDER OF THE TIME CALL WAITING WILL BE IN EFFECT.

Q: IF I USE MY PERSONAL COMPUTER TO TRANSMIT DATA OVER MY PHONE LINE, SHOULD I USE TONE * BLOCK?

A: YES. YOU SHOULD ACTIVATE TONE * BLOCK TO ELIMINATE POTENTIAL TRANSMISSION INTERRUPTIONS.

THE ABOVE INFORMATION WAS SUPPLIED TO ME IN A BROCHURE WHICH I REQUESTED FROM BELL OF PENNSYLVANIA. I HAVE COPIED IT EXACTLY AS IT READS SO THAT OTHERS WHO HAVE THE BEEP PROBLEM, AND HAVE BELL OF PA, WILL HAVE THIS KNOWLEDGE. IF YOU HAVE THIS PROBLEM, BUT DO NOT HAVE BELL OF PA, YOU SHOULD CONSULT YOUR TELEPHONE SERVICE REPRESENTATIVE TO SEE IF SOME TYPE OF "TONE * BLOCK" IS AVAILABLE TO YOU.

W A N T E D



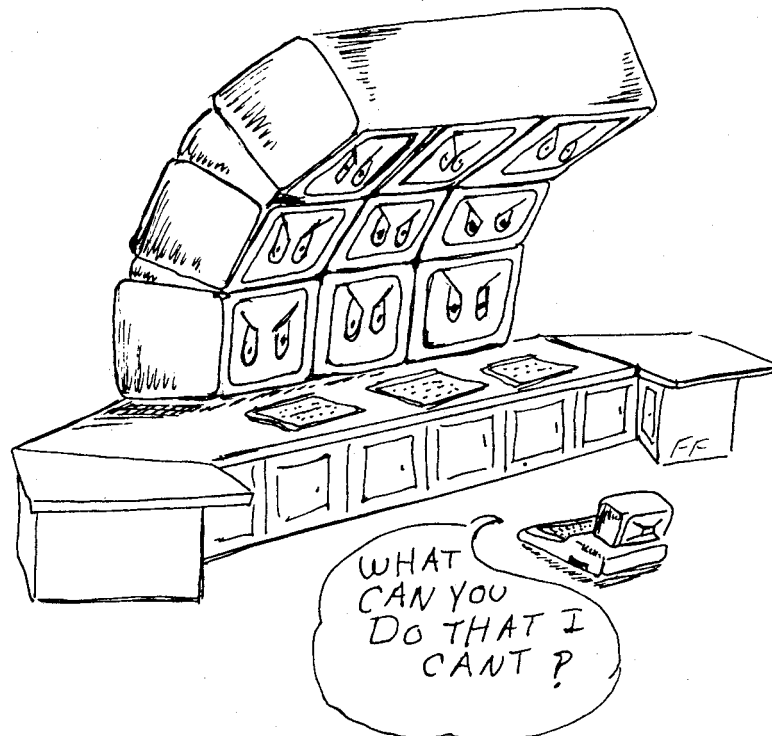
YOUR PROGRAM TO MARKET
IF YOU HAVE WRITTEN ANY GOOD
PROGRAMS THAT WOULD BE WORTH
MARKETING, WE WOULD LIKE TO HELP.

SEND US A COPY OF YOUR PROGRAM
WITH ANY TEXT OF HOW TO USE YOUR
PROGRAM. WE WILL REVIEW IT, AND
IF IT LOOKS GOOD, WE WILL SEND A
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SEND ALL MATERIAL TO:

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ALL MATERIAL WILL BE RETURNED TO YOU.





INTERNATIONAL COLOR COMPUTER CLUB

17710 MOSS POINT DR SPRING, TX 77379

The (all new) International Color Computer Club was formed to help people get to know the Color Computer and how it operates, to make available to it's members all the information about the Color Computer that we can find, including information which Radio Shack isn't willing to give you. To make programs available so you may extend your library.

Programming is difficult to learn, and the club is a place you can turn to for help with problems you might have in writing a program or adapting a piece of hardware. We can-not solve all problems, but with hundreds of other members with expertise in every aspect of the Color Computer, we can solve most on them.

New members will receive a new member kit which contains all the programs which are in the current library of programs (165 programs to date), data on the CoCo, and a poke & peek book, all to help you along with your programming.

New members will receive a subscription to COCO ADS, (if you now have one, it will be extended) which is the clubs newsletter to its members. Members may place unlimited FREE classified ads in COCO ADS (one per month) and a discount on all display ads.

You are asked to donate some of your programs you wrote to help increase the library. These programs are available to you FREE, with a small charge for postage and blank tape or disk cost. You also may download programs from the clubs own BBS.

A list of other COCO members will be furnished to you that are in your area.

I hope you have found this informative and decide to join our club. We would really like to have you. I'm sure that you will find the benefits of the club worthwhile. All this for only \$30.00 per year.

A P P L I C A T I O N F O R M E M B E R S H I P (PLEASE PRINT)

Please fill out the below. All files will be kept confident.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE # _____ - _____ - _____ DATE _____

AGE
(0-10) _____ (11-15) _____ (16-20) _____ (21-30) _____ (31-40) _____ (40+) _____

TYPE OF COCO YOU OWN _____ MEMORY SIZE _____

EXT BASIC _____ DO YOU HAVE A - PRINTER _____ MODEM _____

DISK _____ CASSETTE _____ OTHER _____



HAVE YOU WRITTEN ANY PROGRAMS ? _____

WOULD YOU SHARE THEM WITH OTHER MEMBERS ? _____

WHAT IS YOUR PRIMARY REASON FOR YOUR COCO? _____

GAMES _____ BUSINESS _____ BOTH _____

We welcome

Visa/Master Charge  

MEMBERSHIP FEE OF \$30.00 MUST ACOMPANY THIS APPLICATION.