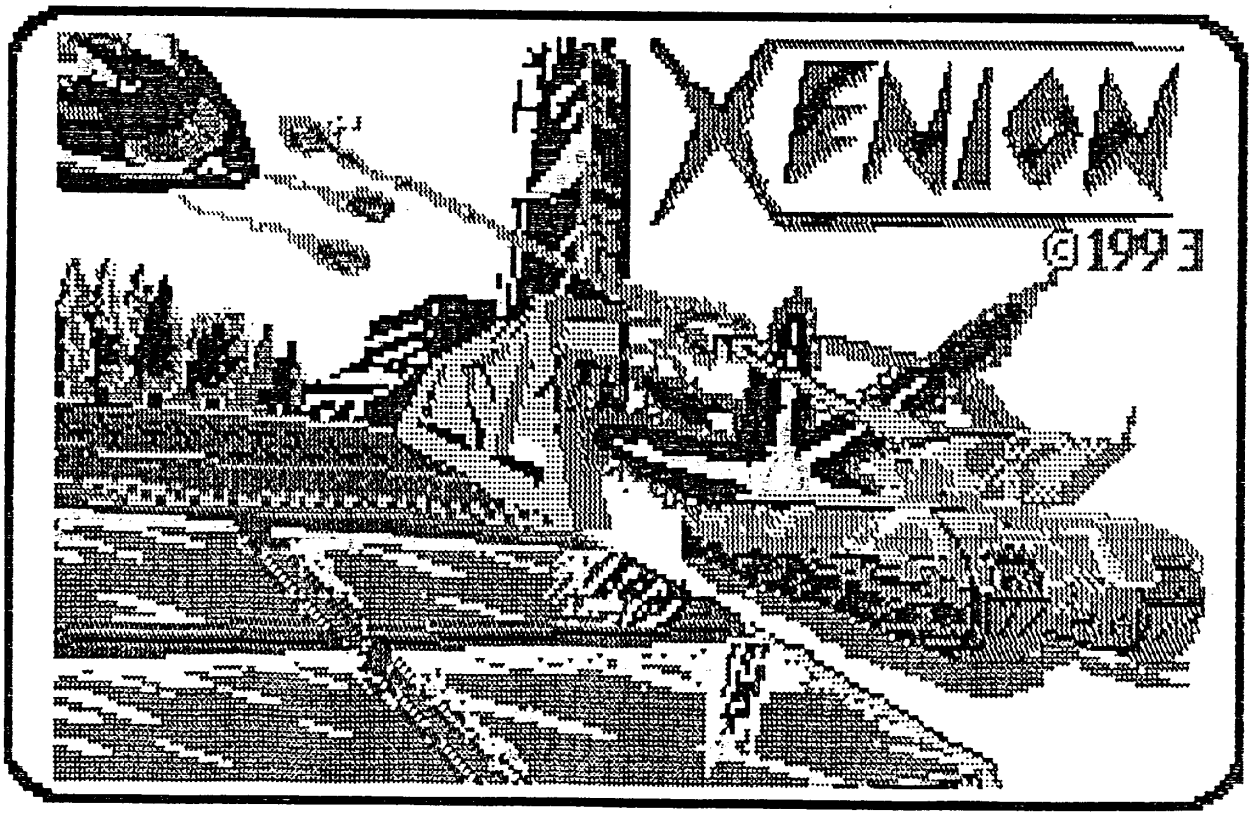
Vol 2 Issue 1 Jan/Feb 94

COCO LINK

* A NEW LOOK FOR THE FUTURE *

THE COLOUR COMPUTER MAGAZINE



THIS ISSUE

REMCOMS

REMIN COMPUTER SOFTWARE

WE HAVE THE FOLLOWING STOCK ON HAND FOR IMMEDIATE DELIVERY:

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CFDM DISKS	$9 SINGLE ISSUE OR $45 FOR 6 ISSUES		
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COCO FAMILY RECORDER	$40	OMEGA FILE	$40
LITTLE BLACK BOOK	$20	VTO (VIDEO DATABASE)	$20
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FROM ALPHA SOFTWARE:

COCO MAX III	$55	MAX-10	$50
MAX-10 FONTS	$25	MAX-10 DICTIONARY	$20
COLOUR PRINTER DRIVERS	$20	PRINTER TOOL KIT	$20
MAX FONTS	$45 COMPLETE SET (4 DISKS) OR $15 EACH DISK		

AUSTRALIAN PRODUCED SOFTWARE:

CROSS-ROADS	$20	MIND GAMES	$20
DIGITECH	$35	XENION	$30
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BOOKS:

500 PEEKS, POKES & EXECS	$25	300 PEEKS, POKES & EXECS	$25
SUPPLEMENT TO ABOVE	$15	TANDY'S LITTLE WONDER	$30

FROM JWT ENTERPRISES:

OPTIMIZE SET 1	$45	OPTIMIZE SET 2	$35
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WE ARE ALSO AGENTS FOR MOST USA COMPANIES, INCLUDING SUNDOG, DAYTON ASSOCIATES AND BURKE & BURKE. WE CAN ALSO OBTAIN SOFTWARE AND HARDWARE FROM OTHER AGENCIES IN THE STATES, CALL FOR INFORMATION.

WHEN ORDERING PRODUCTS WHICH MUST BE OBTAINED FROM THE USA, PLEASE ALLOW A MINIMUM OF 21 DAYS FOR DELIVERY.

TO ORDER RING: (077) 734 884 OR WRITE TO:

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(09) 397-5928

(LEAVE MESSAGE ON ANSWERING MACHINE IF OFFICE UNATTENDED)

Postage is $5 for software and actual charges for hardware, tapes are also available for the coco 1, 2 and 3.

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HAPPY NEW YEAR

Firstly, from my wife Roslyn, my kids Andrew and Daniel and myself, we wish you all a very happy new year and hope that you all had an enjoyable christmas with your family and friends.

Reflections

As I look back on 1993, I am amazed that this magazine has not only survived 12 months but is in fact growing rapidly. We started this time last year, a little apprehensively I must admit, with a small magazine of about 20 pages. Since then we have grown to average between 35 and 40 pages per issue and have incorporated selected articles from '68 micro' as well. Over the last twelve months we have given you reviews on a number of programmes and products, catered for the novice with short programmes and the more advanced cocoist as well with longer ones, we have given you a number of hints and tips, introduced some of you to OS-9 and wet your appetites with a number of hardware and software enhancements for the CoCo.

I will admit that we have made mistakes along the way and these have been pointed out to us (sometimes rather forcefully), but we have learned from these and fully intend not to make them again (touch wood). In reading back through the last six issues you would find that at all times we have called a spade a spade and a shovel a shovel, some of you may not particularly like this straight forward approach but I am not a politician up for re-election so I will not sugar coat something simply to please a minority, if it needs to be said, then I will say it, without beating around the bush.

The Future

What does the future hold for CoCo-Link and more importantly we the CoCo users? Well from where I am sitting and looking at what is available now compared to 12 months ago, and what is in the wind for this little machine that was supposed to be a home games machine, the future looks quite bright. The CoCo 1's and 2's still amaze people with their versatility and capabilities and the CoCo 3 is building into a machine to rival the more mega expensive IBM's and their clones. As an example for the CoCo 3 there is now the Hitachi 63B09E chip which greatly enhances and increases the speed of the machine, there is now the TWO Meg upgrade which coupled with OS-9 makes the CoCo, in my opinion, one of the most powerful home based computers available anywhere. Accomplished programmers like Nicholas Marentes as an example are again releasing software and hardware for our machine, (Rupert Rhythm, Donut Dillema and Space Invaders to name just a few).

CoCo-Link is smack-bang in the middle of all these enhancements, it is our intention to keep you informed of what is happening, what is coming and while doing so, helping all those that ask for help. It is my intention to make CoCo-Link the catalyst for CoCo users wherever they may be, from the cities on the coast of Australia east, west, north and south, from the mines of Mt Isa to the rural areas of the Riverina, from the cities of Europe and America to the higlands of New Zealand and New Guinea.Wherever there is a CoCoist who needs help or information, then CoCo-Link is here for you.

COCO-LINK WILL CONTINUE WHILE THERE ARE STILL COCO USERS!!

In order to achieve all the above and more, I need your help. Send in your programming master pieces, subscribe instead of "borrowing" CoCo-Link, because without your input, then CoCo-Link will die, no matter how much I put into it.

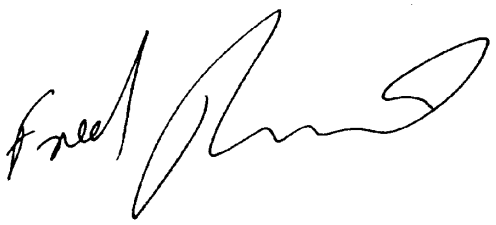
If you all send just one submission to the magazine over the next twelve months, then this will ensure that CoCo-Link survives another twelve months. In fact the following subscribers have had some of their submissions reprinted in the '68 micro' magazine in 1993; Sam Thompson, Ted Beamish, Kieran Kenny and Desmond Rae, (well done fellas).

Magazine Format

You would have also noticed that I am trying a different format for the layout of the magazine. Basically what I am trying to do is give you as much information as possible in each issue but at the same time reduce the size/weight of each issue to save on postage costs. I would be most interested in your feed back on this subject, please let me know if this new format is acceptable or would you like for me to go back to the larger print size and two columns. The over riding factor is cost, with the new format I should be able to maintain the price of subscription at $18 a year but with the old two column, larger print format I would more than likely be forced to increase the subscription price by $1 per issue up to $24 a year. I look forward to your responses to this question.

The design of the new cover and a number of other enhancements in the format of the magazine are the work of Peter Morgan of Cooyar in QLD. Thanks mate, your suggestions,hints and tips have been invaluable, we look forward to more of the same.

In closing, let me say that I hope to see a heap of submissions from all of you, because without them CoCo-Link will die and your support will be NIL.



CoCo Max™ III

CoCo Max III is absolutely the best drawing package available for the CoCo 3, and it does more than just let you draw. **CoCo Max III** includes animation, text, color mixing and more features than you would think possible. It combines incredible speed with dazzling graphics and it is a joy to use even its most powerful features.

Pictures, graphs, flyers, cards, signs, school projects, labels, buttons and anything else you might dream of creating is now possible with **CoCo Max III**. Is it any wonder that the majority of CoCo Gallery pictures in the last five months were created with **CoCo Max**?

Thousands of CoCo users have found that you don't have to be an artist to have fun with **CoCo Max**. You'll wonder why you waited so long to get the incredible **CoCo Max III**.

CoCo Max III is the best because it includes:
- a huge picture area (*two* full hi-res 320x192 screens) - a large editing window - Zoom mode for detail work - 28 drawing tools which you just point and click on - shrink and stretch - rotation at any angle (1.5 degree steps) - 512K memory support (*all* features work with 128K too) - an Undo feature to correct mistakes - you can even Undo an "Undo" - Animation - special effects - color sequencing (8 colors, variable speed) - thirteen fonts (more available) - each font has eight different sizes - five style options (bold, italic, 3D, etc.) for thousands of font/size/style combination possibilities. - the CoCo Show "slide show" program - color editing of patterns - automatic pattern alignment - prints in single and double size - smart lasso (move text over a background...) - advanced tools: arc, ray, cube, etc. - select 16 of the 64 colors (all 64 colors are displayed at once for selection!) - picture converter (CoCo Max II, MGE, BASIC) - extensive prompting - "glyphic" clipbook of rubber stamps - double click shortcuts - color mixing (additive/subtractive/none) - money back guarantee - sophisticated data compression saves disk space - pull down menus (no commands to remember) - forty paintbrush shapes - two color lettering - spray can - scrapbooks of pictures - error free - Y-cable or multipack not required - high speed hi-res interface included (plugs into joystick port) - disk is not copy protected - amazing "flowbrush" - RGB and composite monitor support - replace color - printing on black and white printers in five shades of gray - full color printing with optional drivers for the NX-1000 Rainbow and CGP220 - entirely rewritten for the CoCo 3

*There are no limits to what you can do with this fabulous program. Speed, ease, animation, power and color, all in one package. **CoCo Max III** is the ultimate program for the CoCo 3. -Rainbow review 4/88*

CoCo Max III: $55

System Requirements:
CoCo 3 disk system and a Joystick or Mouse

Printer drivers included:
IBM/Epson and compatibles, GEMINI, DMP105/106/130,OKI182/192, CGP220 (B&W), DMP110, DMP200

Color printer drivers (prints 125 different colors) Star NX-1000, CGP-220, or Okimate 20 **$20**

For all CoCo Max Versions

Max Edit Font Editor: A font is a set of characters of a particular style. With Max Edit you can create new fonts or modify the existing ones.

Max Font disks (send for list) each $15

Max Font Set (95 fonts on 4 disks) $45

+ Postage $5

COLORWARE
A division of Sigma Industries, Inc

COMPETITION WINNERS

Last year CoCo-Link ran a competition for all would be programmers in three catagories, these being, Graphics, Applications and Games.

The idea was to again generate some interest in programming on the CoCo by all, that is from the absolute novice to the accomplished programmer, judging by the number of enquiries about the competition and the number of subscribers to the magazine, I would have thought there would have been more submissions than those that we ultimatley received.

In any case our congratulations to the winners in each category and the winner of the encouragement award. They are;

GRAPHICS G.Elphick with VOYAGE

APPLICATION J.McGrath with SPARKS

GAMES J.McNabb with MCTRIVIA

The encouragement award goes to G.Donges for his submission of the game DARTS.

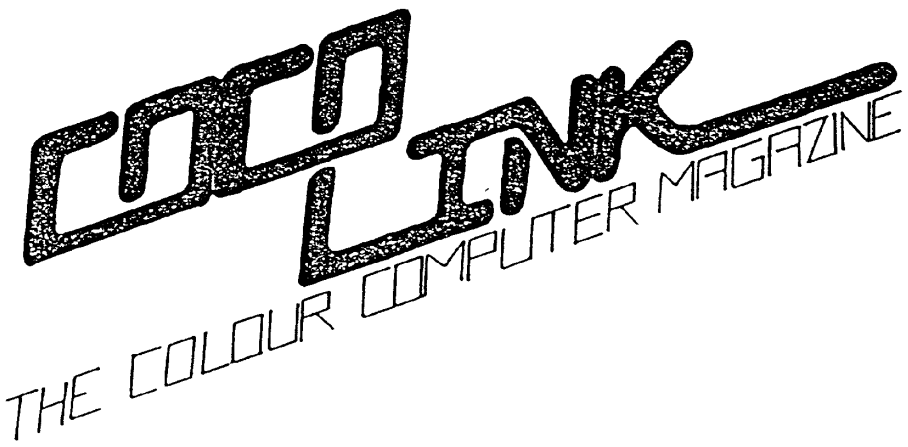
Each of the winners of each category may select any individual product from REMCOMS to the value of $50 and Geoff Donges may select any individual product up to the value of $25.

Again congratulations to the four of you.

Also as promised I am printing the submissions in the magazine for all to see and use, starting with Geoff's submission DARTS.

```
0 '
10 POKE65497,0
20 HSCREEN2: HCLS1Ø:
A$="********************************
*******": B$="*          *":
HPRINT(2,Ø),A$:FOR
X=1TO22:HPRINT(2,X),B$:NEXT:
HPRINT(2,23),A$: FOR X=1TO5:SOUND
RND(255),1:NEXT
3Ø ON BRK GOTO 121Ø
4Ø HPRINT(15,1Ø),"PROGRAMED
BY":HPRINT(14,12),"GEOFF
DONGES":HPRINT(19,14),"1988":FOR
X=1TO5:SOUND RND(255),1:NEXT X:FOR
Q=1TO5ØØ:NEXT
5Ø HBUFF1,3ØØ: HBUFF2,3ØØ:
HBUFF3,3ØØ: HBUFF4,8ØØ: HBUFF5,3ØØ:
HBUFF6,3ØØ: HBUFF7,3ØØ
6Ø HSCREEN0:WIDTH32:CLS
7Ø CLS:PRINT:PRINT:PRINT" WORLD
CHAMPIONSHIP DARTS": PRINT: PRINT:
PRINT"TOURNAMENT": PRINT@357,"DO
YOU WANT INSTRUCTIONS"
8Ø INPUT O$
9Ø IF O$="YES"THEN 11Ø
92 IF O$="Y"THEN 11Ø
1ØØ IF O$="NO"THEN 15Ø
1Ø2 IF O$="N"THEN 15Ø
11Ø CLS:PRINT" INSTRUCTIONS"
12Ø PRINT:PRINT"IN THIS GAME OF
DARTS YOU PLAY A SINGLE GAME OF
[1Ø1],WITH A TALLY OF HOW MANY
GAMES YOU HAVE WON PER SESSION.IT'S
A STRAIGHT START/FINISH GAME(NO
DOUBLES REQUIRED).EACH PLAYER HAS
THREE THROWS EVEN IF HE THROWS SUCH
A"
13Ø PRINT"BIG SCORE THAT HE
[BUSTS]. THE GAME FINISHES WHEN A
PLAYER HITS HIS CORRECT
FINISH.":PRINT:PRINT:INPUT" PRESS
<ENTER> TO PLAY";S$
14Ø S$=INKEY$:IF S$=""THEN15Ø
15Ø HSCREEN2: HCLS1Ø: HCOLOR1:
HCIRCLE(8Ø,1ØØ),2Ø:
HPAINT(8Ø,1ØØ),7,1:
HCIRCLE(95,1ØØ),1Ø,1,1,.25,.5Ø:
HCIRCLE(93,93),3:
HPAINT(93,93),1Ø,1:
HDRAW"BM1ØØ,1ØØ;R2;H2":
HDRAW"BM75,95L5D1ØR5"
16Ø FOR C=66TO83: HCIRCLE(C,88),5:
NEXT:FOR C=9ØTO98: HCIRCLE(8Ø,C),2:
NEXT:FOR C=9ØTO98: HCIRCLE(65,C),3:
HCIRCLE(63,C),3: NEXT C:
HLINE(7Ø,115)-(65,12Ø),PSET:
HLINE-(85,125),PSET:
HLINE-(9Ø,115),PSET
17Ø HLINE(65,12Ø)-(63,125),PSET:
HDRAW"BM63,125D5ØR32D16L32U16BR32BD
5L32":HCIRCLE(95,16Ø),15,1,1,.75,
.25:HDRAW"BM95,145U1ØR3ØU1ØL4Ø":
HPAINT(75,19Ø),2,1:HDRAW"BM125,133R
5U2L2R2U2L2R2U2L2R2U2L5R3":HPAINT(1
26,132),7,1
18Ø HLINE(32Ø,Ø)-(32Ø,192),PSET:
HLINE-(Ø,192),PSET:
HCIRCLE(5ØØ,85),1Ø,,4:
HLINE(315,53)-(315,112),PSET:
HPAINT(318,6Ø),4,1:
HPAINT(313,9Ø),3,1
19Ø HPRINT(4,Ø),"WORLD CHAMPIONSHIP
DARTS TOURNAMENT":
HPRINT(2Ø,17),"PLAYER 1 PLAYER 2":
HLINE(161,15Ø)-(216,178),PSET,B:
HLINE(241,15Ø)-(293,178),PSET,B
2ØØ HPRINT(22,2Ø),"1Ø1":
HPRINT(32,2Ø),"1Ø1"
21Ø C=1Ø1:F=1Ø1
22Ø '
23Ø HPRINT(5,5),"PLAYER No 1 TO
THROW":HPRINT(5,7),"PRESS <ENTER>
TO THROW"
24Ø FOR T=1TO3:GOSUB26Ø:NEXT T
25Ø GOTO68Ø
26Ø INPUT A$:IF A$<>""THEN27Ø
27Ø HGET(135,1ØØ)-(165,115),1:
HGET(75,14Ø)-(85,165),2:
HPUT(1Ø5,125)-(135,14Ø),1,PSET:
HPUT(1Ø5,11Ø)-(115,135),2,PSET
28Ø HDRAW"BM11Ø,1ØØE5H5D1ØE5R4U1
R5D1R5L5D1L5U1": FOR X=1TO1ØØ: NEXT
29Ø FOR X=1TO1ØØ:NEXT
3ØØ FOR X=1Ø5TO12Ø STEP 5:
HPUT(1Ø5,X)-(115,X+25),1,PSET: NEXT
X: HGET(8Ø,14Ø)-(9Ø,16Ø),3:
HPUT(1Ø5,125)-(125,135),3, PSET:
HDRAW"BM1ØØ,125R25D1ØL25BR25U1R5U2L
2R2U2L2R2U2L2R2U2L5"
31Ø HGET(1Ø5,9Ø)-(13Ø,1Ø5),4
32Ø HGET(1Ø5,9Ø)-(13Ø,1Ø5),4:FOR
X=1Ø5 TO 283 STEP2:
HPUT(X,9Ø)-(X+25,1Ø5),4,PSET:NEXT
33Ø SOUND25,134Ø B=RND(6Ø)
35Ø IF C<11 THEN B=RND(1Ø)
36Ø IF B=59 THEN 34Ø
37Ø IF B=58 THEN 34Ø
38Ø IF B=56 THEN 34Ø
39Ø IF B=55 THEN 34Ø
4ØØ IF B=53 THEN 34Ø
41Ø IF B=52 THEN 34Ø
42Ø IF B=52 THEN 34Ø
43Ø IF B=49 THEN 34Ø
44Ø IF B=47 THEN 34Ø
45Ø IF B=46 THEN 34Ø
46Ø IF B=44 THEN 34Ø
47Ø IF B=43 THEN 34Ø
48Ø IF B=41 THEN 34Ø
49Ø IF B=37 THEN 34Ø
5ØØ IF B=35 THEN 34Ø
51Ø IF B=31 THEN 34Ø
52Ø IF B=29 THEN 34Ø
53Ø IF B=23 THEN 34Ø
54Ø HPRINT(35,8),B
55Ø FOR X=282TO3Ø4:FOR
Y=62TO72:HSET(X,Y,8):NEXT Y,X
56Ø C=(C-B)57Ø IF C=Ø THEN 11ØØ
58Ø IF C>Ø THEN 64Ø
59Ø HPRINT(32,7)," BUST"PSET:
```

```
600 FOR L=1TO100:NEXT
610 FOR X=260TO304:FOR
Y=55TO65:HSET(X,Y,8):NEXT Y,X
620 C=(C+B)630 GOTO660
640 FOR X=177TO200:FOR
Y=160TO175:HSET(X,Y,8):NEXT Y,X
650 HPRINT(21,20),C
660 RETURN
670 GOTO670
680 FOR M=283TO308:FOR N=90TO105:
HSET(M,N,8): NEXT N,M:FOR
X=120TO130: FOR Y=40TO50:
HSET(X,Y,8): NEXT Y,X:
HPAINT(75,174),0,1:
HPAINT(85,119),0,1:
HPRINT(15,5),"2": SOUND200,5
690 FOR T=1TO3:GOSUB710:NEXT T
700 GOTO220
710 INPUT A$:IF A$<>""THEN720
720 HGET(135,100)-(165,115),5:
HGET(75,140)-(85,165),6:
HPUT(105,125)-(135,140),5,PSET:HPUT
(105,110)-(115,135),6,PSET
730 HDRAW"BM110,100E5H5D10E5
R4U1R5D1R5L5D1L5U1"
740 FOR X=1TO100:NEXT
750 FOR X=105 TO 120 STEP 5:
HPUT(105,X)-(115,X+25),5,PSET: NEXT
X: HGET(80,140)-(90,160),7:
HPUT(105,125)-(125,135),7,PSET:
HDRAW"BM100,125R25D10L25BR25U1R5U2L
2R2U2L2R2U2L2R2U2L5"
760 FOR X=105 TO 283 STEP 2:
HPUT(X,90)-(X+25,105),4,PSET:
NEXT770 SOUND25,1
780 G=RND(60)
790 IF F<11 THEN G=RND(10)
800 IF G=59 THEN 780
810 IF G=58 THEN 780
820 IF G=56 THEN 780
830 IF G=55 THEN 780
840 IF G=53 THEN 780
850 IF G=52 THEN 780
860 IF G=49 THEN 780
870 IF G=47 THEN 780
880 IF G=46 THEN 780
890 IF G=44 THEN 780
900 IF G=43 THEN 780
910 IF G=41 THEN 780
920 IF G=37 THEN 780
930 IF G=35 THEN 780
940 IF G=31 THEN 780
950 IF G=29 THEN 780
960 IF G=23 THEN 780
970 HPRINT(35,8),G
980 FOR X=282TO304:FOR Y=62TO72:
HSET(X,Y,8): NEXT Y,X
990 F=(F-G)
1000 IF F=0 THEN 1160
1010 IF F>0 THEN 1070
1020 HPRINT(32,7)," BUST"
1030 FOR L=1TO100:NEXT
1040 FOR X=260TO304:FOR Y=55TO65:
HSET(X,Y,8): NEXT Y,X
1050 F=(F+G)
1060 GOTO1090
1070 FOR X=256 TO 278: FOR Y=160 TO
175: HSET(X,Y,8): NEXT Y,X
1080 HPRINT(31,20),F
1090 RETURN
1100 HCLS7: HPRINT(8,5),
"CONGRATULATIONS No1 YOU ARE":
HPRINT(15,8),"THE WINNER"
1110 R=(R+1): PLAY"GAFAEADACABA"
1120 HPRINT(12,12),"YOU HAVE NOW
WON":HPRINT(19,14),R:
HPRINT(18,16), "GAMES"
1130 HPRINT(5,22),"DO YOU WANT TO
PLAY AGAIN ? (Y/N)"
1140 INPUT V$:IF V$="Y"THEN150: IF
V$="N"THEN 1210:GOTO1140
1150 END
1160 HCLS2: HPRINT(8,5),
"CONGRATULATIONS No 2 YOU ARE":
HPRINT(15,8),"THE WINNER"
1170 U=(U+1): PLAY"GAFAEADACABA"
1180 HPRINT(12,12)," YOU HAVE NOW
WON": HPRINT(19,14),U:
HPRINT(18,16), "GAMES"
1190 HPRINT(5,22),"DO YOU WANT TO
PLAY AGAIN ? (Y/N)"
1200 INPUT P$:IF P$="Y"THEN150
1210 HSCREEN0: PALETTECMP:
PALETTE12,54: PALETTE13,0: WIDTH32:
CLS
1220 PRINT" THANK YOU FOR PLAYING
** D A R T S **"
1230 PRINT:PRINT:END
```

CASTLE by Graham Elphick

Here is another of Graham Elphick's drawings. These are of particular interest to novice programmers.

By using Graham's drawing programmes and having the manual open beside you, you will learn a great deal about your CoCo.

```
1 '** CASTLE DRAWN BY *
2 '** GRAHAM ELPHICK *
3 '** 8TH NOVEMBER 1993*
10 HSCREEN2:PALETTERGB
20 HCOLOR8:HCLS11
50 HDRAW"BM0,191R255"
60 HLINE(32,191)-(32,163),PSET
70 HLINE(223,191)-(223,163),PSET
80 HLINE(32,163)-(36,158),PSET
90 HLINE(36,158)-(36,103),PSET
100 HLINE(223,163)-(218,158),PSET
110 HLINE(218,158)-(218,103),PSET
120 HDRAW"BM218,103R5U20L5D5L5U5
L5D5L5U5L5D5L5U5L5D5L5U5L5D5L5U5
L5D20"
130 HLINE(168,103)-(218,103),PSET
140 HLINE(173,103)-(173,158),PSET
150 HLINE(173,158)-(168,163),PSET
160 HLINE(168,163)-(168,191),PSET
170 HDRAW"BM27,103R25U30L25D30"
180 HDRAW"BM76,103R25U30L25D30"
190 HLINE(148,61)-(168,83),PSET
200 HLINE(101,73)-(89,50),PSET
210 HLINE(89,50)-(76,73),PSET
220 HLINE(51,73)-(41,50),PSET
230 HLINE(41,50)-(27,73),PSET
240 HDRAW"BM52,85R3D3R3U3R3D3
R3U3R3D3R3U3R3D3R3"
250 HLINE(173,83)-(197,51),PSET
260 HLINE(197,51)-(218,83),PSET
270 HLINE(101,82)-(121,61),PSET
280 HLINE(121,61)-(148,61),PSET
300 HLINE(152,191)-(152,140),PSET
310 HLINE(152,140)-(141,128),PSET
320 HLINE(141,128)-(117,128),PSET
330 HLINE(117,128)-(106,139),PSET
340 HLINE(106,139)-(106,191),PSET
350 HLINE(168,84)-(102,84),PSET
360 HDRAW"BM147,84F10D15L40U15E10"
370 HDRAW"BM117,95R40"
380 HDRAW"BM117,99R40BM117,
103R40BM117,107R40"
390 HDRAW"BM121,95D15BM124,95D15
BM127,95D15BM130,95D15BM133,95D
15BM136,95D15BM139,95D15BM142,
95D15BM145,95D15BM149,95D15BM153,
95D15"M145,95D15BM149,95D15BM153,
400 HLINE(147,191)-(147,141),PSET
410 HLINE(147,141)-(138,132),PSET
420 HLINE(138,132)-(119,132),PSET
430 HLINE(119,132)-(112,139),PSET
440 HLINE(112,139)-(112,191),PSET
450 HLINE(36,158)-(106,158),PSET
460 HLINE(32,164)-(106,164),PSET
470 HLINE(152,164)-(223,164),PSET
480 HLINE(218,158)-(152,158),PSET
490 HLINE(129,191)-(129,134),PSET
500 HLINE(116,147)-(143,147),PSET
510 HDRAW"BM51,147R12U10H6G6D10
BM54,145R6U7H3G3D7"
520 HDRAW"BM81,147R12U10H6G6D10
BM84,144R6U7H3G3D7"
530 HDRAW"BM81,120R12U10H6G6D10
BM84,117R6U7H3G3D7"
540 HDRAW"BM52,120R12U10H6G6D10
BM55,117R6U7H3G3D7"
550 HDRAW"BM35,97R12U16H6G6D16BM38,
94R6U13H3G3D13"
560 HDRAW"BM85,97R12U16H6G6D16BM88,
94R6U13H3G3D13"
570 HDRAW"BM178,147R12U10H6G6D10
BM181,144R6U7H3G3D7"
580 HDRAW"BM203,147R12U10H6G6D10
BM206,144R6U7H3G3D7"
590 HDRAW"BM178,120R12U10H6G6D10
BM181,117R6U7H3G3D7"
600 HDRAW"BM203,120R12U10H6G6D10
BM206,117R6U7H3G3D7"
610 HDRAW"BM89,51U16BM40,50U16
BM197,51U16"
620 HDRAW"BM40,36F6G6BM89,36F6G6
BM197,36F6G6"
630 HPAINT(43,69),3,8
640 HPAINT(87,69),3,8
650 HPAINT(121,69),3,8
660 HPAINT(189,69),3,8
670 HPAINT(142,89),3,8
680 HPAINT(91,89),8,8
690 HPAINT(41,89),8,8
700 HPAINT(58,113),8,8
710 HPAINT(87,113),8,8
720 HPAINT(186,113),8,8
730 HPAINT(209,113),8,8
740 HPAINT(209,139),8,8
750 HPAINT(184,139),8,8
760 HPAINT(148,139),8,8
770 HPAINT(87,139),8,8
780 HPAINT(56,139),8,8
790 HPAINT(139,139),7,8
810 HPAINT(43,42),2,8
820 HPAINT(92,42),2,8
830 HPAINT(201,42),2,8
840 HPAINT(5,5),5,8
850 HPAINT(260,5),5,8
860 GOTO 860
```

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The above software is available in Australia through REMCOMS

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5566 Ricochet Avenue
Las Vegas, NV 89110
702-452-0632

NEIGHBOURS
The Search For Scott & Charlene

16K COCO2/3 DISK/TAPE

This is a small text adventure I wrote on the COCO 2 it should work on the standard 16k.It is based on the TV SHOW and requires you to visit each house to find clues. All you need is in the program. VERY EASY!

Peter Morgan.

```
5 '(C) 1990 PM SOFTWARE
10 POKE&H95C9,&H39: POKE
&HFF22,&H34:CLS: PRINT@230,"...PM
SOFTWARE...";: PLAY"P1": LS:
PLAY"P4": PRINT@230,"
..PRESENTS..";: PLAY"P1": LS:
PLAY"P4"
11 SET(0,2,4): SET(0,3,4):
SET(0,4,4): SET(0,5,4): SET(0,6,4):
SET(1,2,4): SET(1,3,4)
12 SET(2,4,4): SET(3,5,4):
SET(3,6,4): SET(4,2,4): SET(4,3,4):
SET(4,4,4): SET(4,5,4): SET(4,6,4):
SET(6,2,3): SET(6,3,3): SET(6,4,3):
SET(6,5,3): SET(6,6,3): SET(7,2,3):
SET(7,4,3): SET(7,6,3)
14 SET(8,2,3): SET(8,4,3):
SET(8,6,3): SET(10,2,2):
SET(10,3,2): SET(10,4,2):
SET(10,5,2): SET(10,6,2)
16 SET(12,2,5): SET(12,3,5):
SET(12,4,5): SET(12,5,5):
SET(12,6,5): SET(13,2,5):
SET(13,6,5): SET(14,2,5):
SET(14,4,5): SET(14,6,5):
SET(15,2,5): SET(15,4,5):
SET(15,5,5): SET(15,6,5)
18 SET(17,2,6): SET(17,3,6):
SET(17,4,6): SET(17,5,6):
SET(17,6,6): SET(18,4,6):
SET(19,4,6): SET(20,2,6):
SET(20,3,6): SET(20,4,6):
SET(20,5,6): SET(20,6,6)
20 SET(22,2,7): SET(22,3,7):
SET(22,4,7): SET(22,5,7):
SET(22,6,7): SET(23,2,7):
SET(23,4,7): SET(23,6,7):
SET(24,2,7): SET(24,3,7):
SET(24,4,7): SET(24,6,7):
SET(25,4,7): SET(25,5,7):
SET(25,6,7): SET(27,2,1)
22 SET(27,3,1): SET(27,4,1):
SET(27,5,1): SET(27,6,1):
SET(28,2,1): SET(28,6,1):
SET(29,2,1): SET(29,6,8)
23 SET(35,2,8): SET(35,3,8):
SET(35,4,8): SET(35,5,8):
SET(35,6,8): SET(37,2,6):
SET(37,3,6): SET(37,4,6):
SET(37,5,6): SET(37,6,6):
SET(38,2,6): SET(38,4,6)
24 SET(39,2,6): SET(39,4,6):
SET(39,5,6): SET(40,2,6):
SET(40,3,6): SET(40,4,6):
SET(40,6,6): SET(42,2,3):
SET(42,3,3): SET(42,4,3):
SET(42,6,3): SET(43,4,3):
SET(43,2,3): SET(43,6,3):
SET(44,2,3): SET(44,4,3):
SET(44,6,3)
25 SET(45,2,3): SET(45,4,3):
SET(45,5,3): SET(45,6,3)
30 PLAY"P4"
31 PRINT@224, "THE SEARCH FOR SCOTT
& CHARLENE";: PLAY"P1"
249 PRINT@416,"(C) 1991 PM
SOFTWARE"250 PLAY"P1;P1;P1"
270 CLS: PLAY"P1"
300 SOUND1,2: PRINT@4,"N"
301 SOUND1,2: PRINT@5,"E"
302 SOUND1,2: PRINT@6,"I"
303 SOUND1,2: PRINT@7,"G"
304 SOUND1,2: PRINT@8,"H"
305 SOUND1,2: PRINT@9,"B"
306 SOUND1,2: PRINT@10,"O"
307 SOUND1,2: PRINT@11,"U"
308 SOUND1,2: PRINT@12,"R"
309 SOUND1,2: PRINT@13,"S"
310 SOUND1,2: PRINT@15,"A"
311 SOUND1,2: PRINT@16,"D"
312 SOUND1,2: PRINT@17,"V"
313 SOUND1,2: PRINT@18,"E"
314 SOUND1,2: PRINT@19,"N"
315 SOUND1,2: PRINT@20,"T"
316 SOUND1,2: PRINT@21,"U"
317 SOUND1,2: PRINT@22,"R"
318 SOUND1,2: PRINT@23,"E"
320 PRINT@64," This program is
based on the tv stars and Ramsey
St. the aim of the game is to find
your way around the street
collecting clues to find the
address of Scott & Charline using
the houses of Ramsey St and a map"
321 PRINT"is added for your
convenience. GOOD LUCK! NAME: MIN
4LET MAX8)"
330 PRINT@479," TYPE YOUR NAME AND
ENTER";: INPUTB$
332 CLS
335 CLS: PRINTB$" Your in Ramsey St
which house would you like to
enter? (1ST 4 LET)"
336 PRINT" BISHOPS J ROBINSONS H
RiOBINSONS CLARKES TWINS MANGELS
MAP OR END (ANSWER)"
337 INPUT C$: LS:
PRINT@224,"TRAVELING TO "C$
338 FOR X=100 TO 120 : SOUND X,1339
NEXT X : CLS: GOTO341
340 CLS: PRINT"TRY AGAIN":
PLAY"P1": GOTO332
341 IF C$="" THEN 340
342 IF C$="H ROB" THEN 600
343 IF C$="BISH" THEN 400
344 IF C$="J ROB" THEN 500
345 IF C$="CLAR" THEN 700
346 IF C$="TWIN" THEN 800
347 IF C$="MANG" THEN 1000
348 IF C$="MAP" THEN 900
349 IF C$="END" THEN 1100 ELSE 335
400 PRINT"Welcome to the BISHOPS"
401 PRINT@64,"You knock on the
door"
402 PLAY"P9": SOUND1,5: SOUND1,5:
SOUND1,5
403 PRINT@96,"There is no answer so
you see if the door is
unlocked....."
404 PRINT@484," PRESS ENTER";
405 INPUT Z$
406 CLS
407 SOUND10,2: PRINT" It is so you
enter. When you enter you see a
Pavlova on the cupboard do you want
to try it (E=eat N=no)";: INPUT D$
409 IF D$="E" THEN415
410 IF D$="N" THEN419
415 CLS
416 PRINT" Ah! Charlene's favourite
food": GOTO420
419 CLS
420 PRINT@64,"I suppose your
looking for Scott & Charlene? "B$"
' says Madge ' Well i'll give you a
clue"
421 PRINT@484,"PRESS ENTER";: INPUT
X$
424 CLS: PRINT@32," CLUE No1"
425 PRINT@72," THEY'RE NOT
SOUTH,EAST OR WEST. SO THERE'S ONLY
ONE LEFT FOR YOU TO GUESS"
426 PLAY"P1;P1": PRINT@448," You
examine further and find no more
clues PRESS ENTER": INPUT W$
427 CLS
428 GOTO 335
500 CLS: PRINT" Welcome to JIM'S"
501 PRINT@64,"You knock on the door
Jim answers it. HI! "B$" I hear
your looking for Scott & Charlene
```

```
well hear this might help. Jim
hands you a note you put it in your
pocket"
502 PRINT" He then asks you if you
would like to stay for dinner
(Y=yes N=no)";: INPUT V$
503 IF V$="Y" THEN505: IF V$=" "
THEN 502
504 IF V$="N" THEN509
505 CLS
506 PRINT" Mmmm.... That was great
you sure are a good cook Helen"
507 PRINT@484," PRESS ENTER";:
INPUT U$
509 CLS
510 PRINT" You leave Robinson's
with the note. Do you wish to read
it (R=read C=cont);: INPUT F$
514 IF F$=" " THEN 509: IF F$="R"
THEN 516
515 IF F$="N" THEN 335
516 CLS
517 PRINTB$" You read the note
PRESS ENTER";: INPUT G$
520 CLS: PRINT"CLUE No4 The name of
the City is easy I'm the capital of
the sunshine state."
522 PRINT@484,"PRESS ENTER";
523 INPUT H$: GOTO 335
600 CLS: PRINT" WELCOME TO
HILARY'S"
601 PRINT: PRINT" You walk up the
path when you get to the front door
you see a piece of paper you pick
it up it reads"
602 PRINT@484,"PRESS ENTER";: INPUT
I$
607 CLS: PRINT"CLUE No2."
608 PRINT: PRINT" I'M THE STREET
NAME I RHYME WITH GAMES AND I'M A
BOYS NAME ; DO YOU KNOW WANT IT
IS?"
609 PRINT@484,"PRESS ENTER";: INPUT
J$
612 GOTO335
700 CLS: PRINT" Welcome to the
CLARKE'S"
701 PRINT@64,"Hi! "B$" Here is
another clue."
702 PRINT@484,"PRESS ENTER";: INPUT
K$
705 CLS: PRINT"CLUE No3."
706 PRINT@128," ADD THIS SUM AND
YOU WILL HAVE THE STREET NUM.
4+9*6/2-16+30=?"
708 PRINT@484," PRESS ENTER";:
INPUT L$
711 GOTO 335
800 CLS: PRINT "WELCOME TO CAROLINE
& CHRISTINA'S"
801 PRINT: PRINT" Sorry but we were
not living here when Scott &
Charlene lived here so we have no
idea."
802 PRINT@484,"PRESS ENTER";: INPUT
M$
805 GOTO 335
900 CLS
901 SET(28,2,4): SET(28,3,4):
SET(28,4,4): SET(28,5,4):
SET(28,6,4): SET(29,3,4):
SET(30,4,4): SET(31,3,4):
SET(32,2,4): SET(32,3,4):
SET(32,4,4): SET(32,5,4):
SET(32,6,4)
902 SET(34,30,6): SET(34,29,6):
SET(34,28,6): SET(34,27,6):
SET(34,26,6): SET(34,25,6):
SET(34,24,6): SET(33,24,6):
SET(35,24,6): SET(33,23,6):
SET(35,23,6): SET(35,23,6):
SET(36,23,6): SET(32,23,6):
SET(32,22,6): SET(33,22,6):
SET(34,22,6): SET(35,22,6)
903 SET(36,22,6): SET(33,20,1):
SET(37,27,2): SET(30,23,3):
SET(38,24,4): SET(31,26,7)
905 SET(0,8,1): SET(0,10,2):
SET(0,12,3): SET(0,14,4):
SET(0,16,7)
906 PRINT@130,"CLARKES"
907 PRINT@162,"J ROBINSON'S"
908 PRINT@194,"H ROBINSON'S"
909 PRINT@226,"RAMSEY'S"
910 PRINT@258,"THE TWIN'S"
911 PRINT@ 49,"AP";: PRINT@0,"ENTER
to continue";: INPUT Y$: GOTO335
1000 PRINT"Welcome to the MANGELLs"
1001 PRINT@128,"Here is clue No5
right in front of you."
1002 PRINT@484," Press ENTER";:
INPUT N$
1004 CLS
1005 PRINT" CLUE No5"
1006 PRINT@128," HOW LONG WILL IT
TAKE FOR YOU TO COUNT 4000 BLADES
OF GRASS?"
1007 PRINT@484,"Press ENTER";:
INPUT O$
1008 GOTO 335
1100 PRINT B$" You have decided to
answer"
1101 PRINT@32,"To get the answer
you should have the following: :
PRINT: PRINT: PRINT" No-STREET
NAME-CITY-STATE- POSTCODE"
1102 PRINT@228,"Remember this story
is based in VICTORIA"
1103 PRINT"EG: 6 BRIDGE ST MAITLAND
NSW 2320 (Please use no
punctuation)"
1104 PRINT@484,"Press ENTER";:
INPUT Q$
1105 CLS: PRINT@0,"TYPE YOUR GUESS
AND PRESS ENTER": PRINT: INPUT P$
1107 IF P$="53 JAMES ST BRISBANE
QLD 4000" THEN 1200 ELSE 1108
1108 IF P$="53 JAMES ST BRISBANE
QUEENSLAND 4000" THEN1200 ELSE 1111
1109 IF P$=" " THEN 1105
1111 CLS
1112 SOUND 5,10
1113 PRINT@0,"(C) 1991 PM SOFTWARE
COOYAR Q"
1114 PRINT@224," SORRY TRY AGAIN
TYPE RUN"
1115 PLAY"P1;P1": END
1200 CLS: SOUND95,2
1201 CLS(4): SOUND103,2
1202 CLS(1): SOUND105,2
1203 CLS(5): SOUND100,2
1204 CLS(2): SOUND90,2
1205 CLS(6): SOUND108,2
1206 CLS(3): SOUND98,2
1207 CLS(7): SOUND113,2
1208 CLS(8): SOUND118,2
1209 CLS: PRINT@224,"*
CONGRATULATIONS YOU ARE CORRECT*"
1210 PRINT@0,"(C) 1991 PM SOFTWARE
COOYAR Q"
1211 PRINT@416," NEIGHBOURS IS A
GRUNDY TELEVISION PRODUCTION"
```

P. C. C. C.
Peninsular Colour Computer Club

The PCCC is a user group which could arguably be the longest running CoCo user group in Australia. The club has been going strong for 11 years that I know of and is still a plethora of information on the CoCo.

They are based on the Mornington peninsular in Melbourne and can be contacted by phoneing:

Greg MacKenzie (059) 838 991

Bob Charleston (059) 791 922

Stan Blazejewski (03) 580 4605

'The Contras'
A Game Review
by
Desmond Rae

Requirements:-
Disk Drive, 2 Button Joystick, 512k CoCo3 with a 1987 Gimme Chip Installed. If you do not have the the 1987 GIME chip the game will not work. The reason is because the 1986 GIME chip has flaws in it and will not support hardware scrolling, and this game uses hardware scrolling all the time.

The game setting is as follows. Earth, circa 2100. An unmaned enemy, one known only as the Red Falcn, has invaded. His minions were extremely swift in capturing all important Terra military targets. The Earth Defence Coalition was taken by complete surprise, and quickly paralyzed by the powerful army.Only a few loose rebels remain. Two of you have managed to learn the specific strategic focuses of the Red Falcon's power. If you could only capture these locations, perhaps they would lead you to the stronghold of the enemy, the headquarters of the leader.Only with the Red Flacon safely in his grave can Earth breathe easy once again.

This is where you come in. You need a Deluxe Joystick with two buttons. Sorry but those of you with one fre button will have to add another button. There are no keystrokes you can use to play with only one fire button. A bit disappointing, but there is no provisons given for single button joysticks.Anyway, after the game has loaded in three disks of information, you can select your monitor type. Then, scrolling in from the right is the title screen.Simply Select how many players you want and you are away.

The game is fantastic, it plays a repetitive background music score and the sounds are all digitized. The scroll of the background is something to see to be believed. The game play and speed are brilliant. After you have sucessfully managed to complete level one, you are moved to level two.This level is very graphics intensive and in one section, there is that much animation happeing the CPU really gets bogged down and the game almost stops! Level Three is harder still, with claws dropping from the ceiling. Plus you have the normal stuff like guns shooting at you, plus men chasing you also with guards shooting at you, and avoiding flame throwers, plus many other things.

The game has a nice feature I like. It gives you 3 Credits each time you play with 4 men to each credit. So if you get half way through a level and you are completely wiped out, you can continue the game (from the start of that level), or you may wish to end the game.For those of you that like shoot'em up games this is for sure a definate for your collection. The resolution and music with the scroll are a must!This is definately not an easy game to play. I have only managed to get up to level three and attain a score of about 73,000.But those of you who enjoy a good challenge, then the Contras is for you!

(Available from REMCOMS)

'PowerBoost'
A Review
by
Desmond Rae

PowerBoost consists of a Hitachi HD63B09EP CMOS CPU, 40 PIN IC Socket, Disk, and Manual (4 pages). PowerBoost requires a CoCo 3 and some very good knowledge of soldering (or someone you know who does). PowerBoost increases the speed of execution of instructions in your CoCo. This is done by installing the new CPU in to the CoCo. It can be achieved by two methods. The two methods described in the instructions are OK providing you do not have a One Megabyte upgrade by DISTO like I do. (If you do, take a look at my article located elsewhere in this magazine)The two choices for upgrade are as follows. First you can desolder the origional Motorola 68B09EP and install the IC socket and then place the new HD63B09E in, or, you can leave the original 68B09E in and modify the IC socket, slder the IC socket to the original 68B09E then place the HD63B09EP in to the socket. (Both techniques are diescribed fully in the instructions).

After you have done this, you may now utilize the CPU and experience some Real power. When you first turn the CoCo on, it will still operate as a standard 68B09EP but a lot cooler. But when run in its Native Mode things really start to happen. The reason being is that when in the Native Mode, almost every instruction has been reduced by at least one cycle and some by two cycles. It also has more instructions and operations as well as 16 and 32 bit registers. To see more about this see CoColink March/April Issue 1993 on page 7).

The upgrade is useable by both RS-DOS and OS9 users, but more beneficial to OS9 users. For RS-DOS users to use the faster execution speed of the CPU, its as easy as installing the disk supplied and typing RUN"PBOOST". This will load and run an M/L files that will patch Basic to use the new processor instructions and slightly speed up internal operations. The speed increase happens when executing Basic from RAM; it does not improve performance during ROM calls. A bigger increase is available by typing in RUN"NATIVE". The Native program will patch Basic to use the new high speed native mode which executes instructions 20 to 30 percent faster. Please note that the native mode changes they way that the CPU responds to interrupts (such as software interrupts and the NMI disk interrupt). The Native utility may crash non-patched programs that

have their own disk I/O routines. The PBOOST utility seems to work fine on both Basic and M/L Programs fine, but the Native utility hangs up a few M/L programs. I have found it goes particually bad with copy protected software.

For those of you that are OS9 users, you folks will get the most benefit from this upgrade. Once you have upgraded your copy of OS9 the instructions will be executed anywhere between 115 and 400 percent faster!! This is done by replacing about 25 commonly used ØS9 subroutines with new high speed HD63B09EP instructions. You can either make up a new OS9 boot with the patches installed or you can modify the system in memory. To make the changes permanent you need a bootable disk and then follow the instructions in the manual. Its not very long to do, but I will not mention it here as there is six different methods and commands you can use. The manual explains all operations of installing the CPU and how to go about using the patches in both Basic and OS9 and it also briefy gives an explination of the modifications it does and how they work. I have had the CPU installed for a few days now, and it is working just fine and Im very happy with the results its giving. If you are a serious OS9 user, I do seriously recommend you think about getting a PowerBoost as it makes a world of difference to OS9.

Now that my CoCo has got that extra little bit of go in it, OS9 eats my Amiga for breakfast!

(PowerBoost is available from REMCOMS)

'PowerBoost and the One Meg'
'An upgrade for the CoCo 3'
Compiled, Written and Tested
by

Desmond Rae

I WILL NOT BE HELD RESPONSIBLE FOR ANY DAMAGES INCURRED TO YOUR SYSTEM SHOULD ANYTHING GO WRONG.

For those of us that own a Disto One Megabyte Upgrade and the PowerBoost Package, some forethought had to go into interfacing the two together as there is nothing in the Powerboost instructions about this. That's why I'm writing this article, I have succesfully done it and I'm now going to tell the rest of you how I did it as you may wish to do the same.

You will need two pieces of 20 core Flexable Ribbon about 10 centimeters long, the IC Header that connects to the One meg satellite board, some insullation tape, 40 pin IC socket (DO NOT USE THE ONE SUPPLIED WITH POWERBOOST), the power boost package, a Disto One Megabyte RAM upgrade, a good quality soldering iron, patience, and SOLDERING SKILLS (a must for this project!).

Ok, in the instruction manual for PowerBoost it tells you how to completly de-solder and remove the 6809 from the CoCo 3. After you have removed the 6809 you can now continue on with what I have to say here. Ok. You need to solder one piece of the 20 core ribbon along one side of the IC WireWrap socket. If you have a wirewrap tool, now is the time tio get it out and put it to use. When you solder the ribbon to the IC pins, solder them no less than about 10 millimeters from the botton of the socket. The reason is because if you do not, you will never get it in to the CoCos Motherboard! If you do not have a Wirewrap tool (I do not) there is no reason why you can not solder the wire directly on to the legs of the Socket (I did). After you have done both sides of the Socket, you now need to solder the other ends of the Ribbon cable to the IC Header that connects in to the Satellite Board.

Solder the ribbon cable straight though to the Header. Remember to remove the header from the Satellite Board. This will stop the heat being transfered to the board. (From pin one on the IC Wirewrap socket, to pin one on the header and so on). Now you need to check all the pins with an Ohm meter to check that none of the pins are shorted together. This procedure is outlined in the One Meg manual. If any of the oins are shorted together, then use some de-solder braid to remove the solder joining the two pins. Ok, You may now put some insulation around the header. I used some electrical tape. This is to prevent the pins from shorting on to components and help stop shorting together. Now that is over and done with, you may now solder the IC WireWrap socket in to the MotherBoard.

Ok, now you can insert the new HD63B09EP in to the Wirewrap socket you installed. Now disconnect the top bank of 512k from the One Meg board, and connect the wire from the One Meg board to pin 3 on the Satellite board. Now turn the CoCo On. If all is well you should see a flashing cursor with the usual Extended Basic Message. If not, turn the CoCo off IMMEDIATLY. Recheck your soldering work and make sure that none of the pins are shorted together, and try again. Ok, now disconnect the CoCo from the power again and put your top 512k board back in and shift the pin on the Satellite board to pin 2. Ok, turn the power back on and you should once again, have a flashing cursor and the Extended Basic Message. Now that all is well, disconnect power and reconnect all perhiperals and you are right for the final test. Turn the power back on and run the

Memory Test program that came with your One Megabyte Upgrade. If all is well and true, it will test 128 blocks and say "One Megabyte of RAM Good!". Now you may wish to put the top cover back on, but I reccomend that you leave it off while operating the machine. The reason is that it gets VERY hot. You may also wish to add a fan to keep it cool. If so, I have included an article on how to do it including all parts required.

Give yourself a pat on the back, you have now achieved interfacing the HD63B09EP with the One Meg upgrade.

'Cooler CoCo'
'A Hardware Project for your'
'CoCo's'
Written by

Desmond Rae

I WILL NOT BE HELD RESPONSIBLE FOR ANY DAMAGES INCURRED TO YOUR SYSTEM SHOULD ANYTHING GO WRONG. DO SO AT YOUR OWN RISK! YOU HAVE BEEN WARNED!! I WILL ALSO ASSUME YOU HAVE SOME ELECTRONICS KNOWLEDGE.

This is a very simple project for any of your CoCo's and will help to keep your CoCo cool in Summer Time. Especially those of us out here in the West where it can easily reach 41 Degrees C. Ok, to build this Cooler, you will need a 12 volt DC Brushless Fan. I use a Panaflo Fan. Model Number FBP-08B12H. Rated at 0.32 Amps. I took it from a power Supply for an IBM PC. If you are near to a Disk Smith or Tandy store, you can get one similar. You could use a 12VDC 0.16A fan from Tandy. Part Number 273-243. About $30. You will also need a power supply. Im using a Tandy Power Supply. Part Number 273-9651. About $35.

Now all we need to do is connect the power from the Power supply to the fan. If you have bought the above power supply like I did, then may like to cut the connector of the end of the cable. The strip the wire on the cable and fan about 5 millimetres each. Then slide some heat shrink over the cables. Now solder the cables together, remembering to connect positive to positive, or the fan will either not turn or spin backwards. Now slide the heatshrink over the solder joints and heat it. Preferabley not by using a flame such as one from a lighter, but something a little more safer. I use a tool called an "Arlec - Heat and Strip", set to the LOW position.

Now connect the powersupply to the mains and set the supply to 12 Volts and turn it on. If all is well, it should be spining quite happily. You can now either sit it on top of the CoCo's case and let it blow over the 512k Bank of RAM or remove the cover, and sit the fan behind the CoCo blowing across the RAM and over you. Your CoCo will now run a lot cooler and prevent crashes when the RAM gets so hot you can cook eggs on top of it.

NATIONAL OS-9 USER GROUP

The National OS-9 User Group is based in Brisbane Queensland and caters for those CoCo users who are well into OS-9/OSK. They produce a monthly newsletter and have an extensive library for the use of members.

Subscriptions to the newsletter are $18 per year (the same as CoCo-Link, and at this price is well worth it if you wish to keep up to date in the world of OS-9.

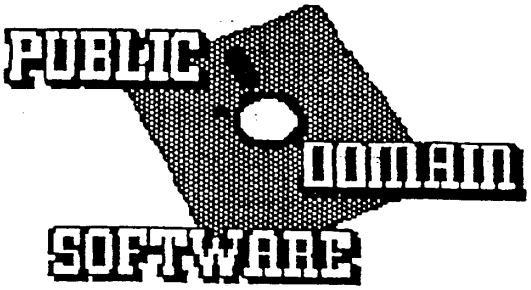
The National OS-9 User Group can be contacted by phone or mail as follows:

Gordon Bentzen (07) 344 3881

Don Berrie (07) 375 1284

The Editor

Gordon Bentzen
8 Odin St
SUNNYBANK QLD 4109



PUBLIC DOMAIN LIBRARY
=====================

This issue sees the addition of 3 new disks to the library. These disks cover three entirely separate subjects. ie Business, Graphics and Games.

APPLICATIONS DISK 036 BUSINESS
========== ======== ========

On this disk are gathered a compendium of programmes for the business orientated. They cover a wide range of areas from receipts and invoices to help in writing a personal resume. There are programmes to help the small builder or do-it-yourselfer calculate the cost and materials needed for small building projects such as room extensions. Bricks, mortar and beams etc. can be calculated.
The programmes include everything from addressing envelopes to surveying a job. In fact everything except the manual work.
The programmes on this disk are:

ADRSBOOK	BRICKS	CASHFLOW
DEPRSCHD	DIR	ENVELOPE
FINANCE	INT RATE	INVOICE
LABOUR	METCONV	RECEIPT
REPTGENR	RESUME	STOCKS
TIMES	WF-DOC	WORDSCAR

GAMES DISK 019 GAMES PACK 5
===== ======== ==========

This disk contains 18 Basic games. You will surely find something to amuse you from:

ABOUT	BEARING	BLACKJK
CHESS	DRAG	HORSE
NAUSEA	NUKEATTK	PUZZLE
ROCKS	RUBIC	SAUCER
SPINNIT	SUBCHASE	TRADERS
YANCC	YTZCARD	

GRAPHICS DISK 049
======== ========

GFX CARTOON/CHARACTERS
======================

This is the second of our MAC graphic picture disks. Again there are two sides of pictures to view. These are:

BLOOM	GARFIELD	HITCH
IBMPIC	OPUS	WEIRD
WOLVERIN	WIFE	BILLCAT
BREETA	DONATELO	DOCTORS
GLOVAL	HE-MAN	MMOUSE
ROY	ROBOCLIP	

These and all the disks in our FREE catalogue are available for $5.00 inc.P&P from:

Robbie Dalzell
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Pt. Noarlunga Sth.
S.A. 5167

(Please make out cheques/money orders to R.DALZELL)

BACK TO BASICS by Fred Remin

Due to my request to write a series of articles to assist those of you just starting out with the CoCo falling on deaf ears, I have decided to tackle the task myself.

It is my intention to start at the very beginning and work through to where I am at the moment, that is my limited knowledge of the Colour Computer System. During the course of these articles if any of you have any questions on the subjects I wwill be covering, please drop me a line, I will print your question and an answer in the next issue. This way everyone will learn from the exercise.

WHAT IS A COCO?

CoCo is the affectionate name given to the Colour Computer by Tandy and encompasses the Colour Computers 1, 2 and 3.

The CoCo 1 was the first in the series of Colour Computers produced by Tandy, these were grey in colour and contained 8K of RAM and were expandable to 16K. The CoCo 2 was next, this was a white, short cased system with 16K and capable of expansion to 32, 64 and 128K of RAM. The last of the CoCo series was the CoCo 3, this came with 128K of RAM and is expandable to 512, 1 Meg and now 2 Meg of RAM.

One question often asked of me is, "how can I tell how much memory my system has?". A quick way of doing this is, once booting (turning on) your system, type in the following:

PRINT MEM <ENTER>

The result shown on the screen will give you a ROUGH indication of the amount of RAM that you have, eg;

Around 4,000 ==== 8K machine
Around 8,000 ====16K machine
Around 16-18,000=32K machine
Around 24-28,000=64K machine

If you have a CoCo 3 (written on top of the machine next to the logo), look inside the system through the slots at the top left corner of the CoCo, you will see either, some empty white slots or a board containing computer chips. If you see the empty white slots then you have a 128K machine and if you see the board with chips then you have 512K of RAM. The expansion of each of these machines will be covered in a later article, for now lets just stick to the basics.

SETTING UP YOUR SYSTEM.

The first thing to do is to determine where you are going to have the system set up, for example, when I first started I used the family TV but this became a real nuisance when the kids wanted to watch TV or a video, so now I have a seperate area for my system. Some of the things that you should consider are;

a. POWER POINTS
How many power points will you need for your system, taking into account the keyboard, tape, disk, TV/Monitor, printer, multipak and any other periphals that you may have or get in the near future.

b. DISTRACTIONS
Is the system in the main path between the front door and the kids bedrooms, is it in full view and earshot of the TV or stereo or is it where there are a minimum of distractions so that you can get on with enjoying your computer time.

c. VENTILATION
As your system grows and while it is operating, it will generate heat. Do you have adequate ventilation (an open window for example) or are you going to be stuck in a small corner somewhere as if in a sweat box.

d. SPACE
Is the area you have selected going to allow you to expand, for example room for such additions as printer, modem, disk drive, tape boxes, disk boxes, magazines, books and a myriad of other bits and pieces.

e. PHONE
Is the system close to a phone, this will come in handy for when you have a problem and you want to ring the closest person from the contact list in CoCo-Link or myself for help. It will also come in handy for when you get a modem added to your system.

f. LIGHTING
Unless you want to do damage to your eyes I would suggest that you have adequate lighting in the area of your system. At the same time ensure that any light is not directly on your screen, this can be a real distraction and can make it hard for you to properly see the contents of the screen.

By taking the above into consideration and a few more that you may think of yourself, you will ensure that you have many enjoyable hours at your computer. Whether you are using tapes or disks you MUST be aware of any magnetic field. DO NOT place your disk or tapes next to or on top of any electrical motors (disk drives etc), the magnetic field around these will destroy the information on your tapes or disks rendering them inoperative, (a common complaint with new users particularly with disks).

The next step is to READ THE INSTRUCTIONS that came with your system on how to connect everything up. Once you have read the instructions, then set up your system, check everything is connected properly, then and only then turn everything on.

If everything was correct you should be now looking at a green screen with black writing. At the top should be the copyright and system information followed by the word OK on the left hand side of the screen underneath which should be a flashing cursor.

MEMORY AND OPERATING SYSTEM
The amount of memory available to you I have already discussed above, this will determine what programmes

will or will not work on your machine, for example a game which requires 32K to operate will not work on a 16K CoCo1. Another area which may pose a problem particularly with the earlier CoCo 1's and 2's, is the operating system installed in your machine. By looking at the sign on message (when you first boot up), you will be able to tell whether you have a "Colour Basic" or "Extended Colour Basic" system. Again this will determine what will or will not work on your system, for example a programme which requires "Extended Colour Basic" will not operate on a machine with only "Colour Basic".

TAPE VERSUS DISK
You should be aware that the CoCo can use tape, disk or both as a means of information storage and retrieval. If a disk system is attached to your CoCo then you will lose about 4K of memory (this is used by the disk operating system itself) andbecause of this some tape based programmes will not work with a disk attached. There are thousands of programmes available for the CoCo but do not expect everyone of them to work on your machine. Some are tape based only and some are disk only, still others will require a minimum of memory or the high resolution screens only available on the CoCo 3. The instructions with the programme should tell you what the minimum requirements are and from this you can determine if the programme will work on your machine or not.

CONCLUSION
In this first article I have covered the step 1 basics of the CoCo and how and where to get set up for more enjoyable computing. If you have been computing for some time but have not taken these thing into consideration why not do so, you might be pleasantly surprised at the outcome.

Next issue I will go into step 2 with the CoCo, until then, remember, READ THE INSTRUCTIONS and happy cocoing.

PS.
For all you "rookies" out there, during this lesson I have taught you the safety precautions, characteristics and assembly of the Colour Computer System. Your next period on this subject will be in the next issue of CoCo-Link and your next period on the syllabus is "Have some fun with your CoCo".

"SQUAD" - duty student take charge - march off!!

In order to help just a little more, I thought I might give you a list of computer terms so that you know what people are talking about. The list is not exhaustive but it will put you on the right track.

ABORT
To stop or cancel a procedure or selection in process.

ACCESS TIME
The time it takes for information to become available once it has been called for through a control signal.

ADDRESS
An identification, represented by a name, label or number, for a register or location in storage.

ANSI
American National Standards Institute. A committee that establishes standards for data processing and computers.

ASCII
American Standard Code for Information Interchange (pronounced "askee"). This standard for data transmission asigns individual 7-bit codes to represent each specific set of 128 numerals, letters and special controls.

ASSEMBLER
A computer programme that traanslates assembly language instructions (binary object code) so they can be executed by the hardware on a step-by-step basis.

ASSEMBLY LANGUAGE
A programming language, unique to each computer on which it is used, and which is more advanced than machine language but less advanced than high level languages in terms of ease of use. This machine-dependant, low level language requires an assembler in order to translate the assembly language into machine language for execution.

BACK UP
Duplication of a programme or file onto a seperate storage medium so that a copy will be preserved against possible loss or damage to the original.

BASIC
Beginners All-Purpose Symbolic Instruction Code. A high level language developed at Dartmouth College that is among the most popular languages used for micro computers.

BAUD RATE
A measure for the speed at which transmission is sent from one computer to a periphal or from one device to another. In most systems it is the number of bits per second that are transmitted.

BOOTING or BOOT
The process of initializing the computer for use by automatically clearing memory and loading the first instructions, which call other instructions etc. Basically it means starting your computer or programme.

BUG
A mistake, malfunction or defect in any part of the computer, the programme or the system.

CENTRAL PROCESSING UNIT
(CPU). The main part of a computer system which contains the arithmetic and logic unit (ALU) and control unit (CU).

DATA
Information that is input into a computer system and is then processed by the system.

DEBUGGING
Troubleshooting, isolating and removing errors or malfunctions (bugs) from a computer or a computer programme.

DIRECTORY
The list of files which is itself a file on a computer storage medium for the users easy reference.

DISK
A flat, circular storage medium capable of storing digital information.

DISK OPERATING SYSTEM
(DOS). An operating system that uses disk for its secondary storage device.

FORMAT
Preparing a disk to store information. All disks must be formatted before they can be used.

HARDWARE
The physical components of a computer system: computer, disk drives, printer etc.

MODEM
A device that connects computers over the phone lines to allow transmission of data.

PERIPHAL
A device, usually for input/output such as storge or printing, connected to a computer and under it's control to some degree.

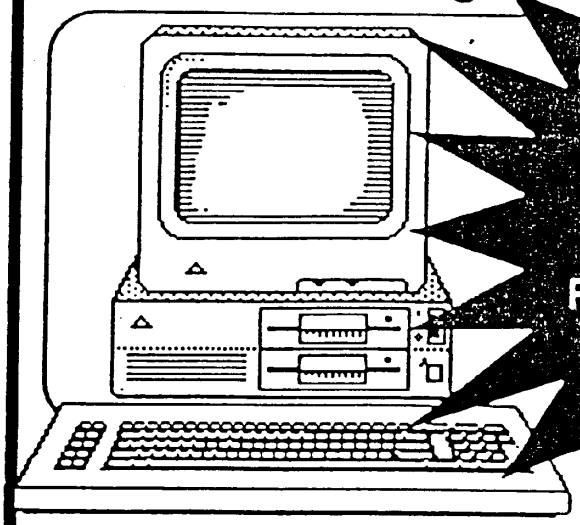
RAM
Random Access Memory. The memory syorage area available for programmes and use by the user.

ROM
Read Only Memory. Memory within the computer system which is not available to the user but hold the system information.

I hope the above list is of some use to the novices, if there is any other term that you are unsure of, then drop me a line and I will see what I can do for you.

COCO FRIENDS DISK MAGAZINE

"The most exciting new product for the CoCo Since....?"



COCO FRIENDS DISK MAGAZINE (CFDM) is devoted exclusively to those who still enjoy running under RS Dos. The standard system needed to use CFDM is CoCo 3, RGB monitor, at least one disk drive, and the RS Dos which came with your CoCo 3.

CFDM is a monthly disk based publication which is produced on a "flippie" disk. When you "Run" the "magazine" side of CFDM, you'll be greeted with a beautiful cover picture by CoCo Friend James Gibbons. Pressing any key takes you to the magazine's colorful Main Menu. There you'll find 14 sections which are filled with entries. Sections included are: About CFDM; About this Issue; Active CoCo; Advertisements; CoCo Friends Art Gallery; Articles of the Month; Family Tree; Forum; From the Editor; Letters to the Editor; Potpourri; Programs of the Month; Reviews; and Question & Answers.

Next you will enter a Section and find a number of entries written by our CoCo Friends from all over the world. Each issue of CFDM contains from 60 to 80 entries. Some sections contain documentation about the many programs and graphics found on the "flip-side" of CFDM.

The "flip-side" or "program" side of CFDM is filled with contributions of wonderful programs and graphics from our many CoCo Friends! Each issue has from 2 to 4 hi-res pics and from 8 to 15 never-before-seen programs.

8 to 15 never-before-seen programs

The above software is available in Australia through REMCOMS

RICK'S COMPUTER ENTERPRISE

(606) 787-5783
CODs Add $2.50
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LIBERTY, KY. 42539

On our way to the command line, lets review what we are up against. Under OS9, you don't command the machine. It's running along quite well thank you. What you command is a process, which grants you some RAM (64K limit in the CoCo) and some i/o paths. But a process is still a theoretical thing. You can't see it, except as a dead window.

Shell is OS9's command line interpreter, and you can see it, as your friendly local OS9 prompt. When you type a line here, shell proceeds to rip it apart and feed the pieces on as it sees fit. Besides it's power to censor everything you say, shell is also used to control the underlying process. They are tied so closely together many exchange the two terms. That being said, I'm going to do it.

A shell can be attached to any suitable device, for instance a window or serial port. In this case STDIN, STDOUT and STDERR are connected to that device and it looks for all the world like a separate computer, accepting user input, acting on it and reporting it's results - all to/from this device. Redirection can temporarily bend these connections to different devices, or a pipe can connect to a different process.

The problem is, none of this stuff rates one letter of text on the command line, just a few punctuation marks and the space character. So if you only study one thing in your manual, study shell.

The upside to learning the difference between a space and semi-colon (;) is it only needs to be done once. Since shell does all the 'front end' translation, all the OS9 utilities it drives act fairly similar.

SOME GENERAL RULES:

Spaces are used as separators. A leading slash (/) has special meaning, telling shell to start with a physical device. Further slashes sub-divide this device.

The first word is the name of a programme or utility. Given alone, the programme is started without a data file and with no options (This may only result in an error message from the programme, hopefully with startup info).

If there are options available, they go next. This area is completely optional and not rigidly defined. Many utilities use a dash (-) to mark an option, but some (including some from MicroWare), use the dash to remove an option ... Time to crack the book. First try -?, which often results in a help file.

Next there is generally a pathlist. It can be assumed (just filename), assigned (/d0/DIR/file), or extended (SUBDIR/file). Note the lack of an opening slash when extending beyond the current data directory (chd). This relates to the, any slash is a device rule. Obviously, disk utilities use this spot to identify the first file. What's not so obvious is many programmes will accept a data file path here, and happily load that file from anyplace, despite the current data directory and the fancy runtime routines.

Next slot is usually another pathlist, but there are exceptions. See rename (below) for an example exception.

That's usually plenty for one utility, but shell will keep on passing chunks of stuff separated by spaces as long as it can getaway with it, or a return or separator pops up.

Gone is Microsofts colon (:). It has three replacements. The first, the semi -colon (;), is a direct replacement for the colon(:).An ampersand (&) allows concurrent execution with the next process - even if the next process is just your prompt back. So while, list mondobigfile >/p ties up a window for a full 15 minutes, list mondobigfile >/p& will only slow it down for 20. This provides OS9 with more than the equal of an MSDOS TSR - any utility can simply be left running by starting it with, utility&.

And last, pipe (!) says take all that, and send it over to this completely different thing. See dsave below for an example.

USING TANDY UTILITIES:

Using the above as a loose guide, the first things to address are the utilities presented in the Tandy release. I'm going to take a different slant, and present what's mainly a "Why To" column:

ATTR: About the only normal use for attr is making files donwloaded by a BBS executable, at least until your CoCo sprouts a second user. Note the manual bug in the 's' option .. file is no single-user and can serve only one user at a time. An interesting spin.

BACKUP: For indentical drive types only - makes it pretty useless on most OS9 CoCo's. See dsave.

BUILD: Completely useless. Edit can do this, AND edit.

CHD/CHX: So basic they seem to not need comment, but often overlooked - the main difference between DECB, these point to the specific disk, not disk drive.

CMP: Never used it much, but it you have two files and want to know if they are identical, this will tell you.

COBBLER: Copies OS-9 from ram to disk as a bootfile. Real handy for capturing patches done in memory or quickly re-producing your normal boot on a new disk, but cobbler has a big gotcha. Patches cannot be

easily extracted from a cobblered boot, so if one ever rebuilds from scratch, they can be easily lost.

CONFIG: A real piece of....software (Apologies to Al), config pretends to be easy to use while actually making things harder. It is usually used only once to get a bootable disk halfway setup.

COPY: Main problem is it barfs if the destination filename already exists - this can be aggravating. It's important to note copy is not limited to disk files - it's a good way to transfer data between devices with no added encoding. Unlike list, which adds linefeeds. Try copy textfile /p.

DATE: Not too much use on a stock CoCo, but date t is handy if you own a realtime clock.

DCHECK: Tells you more than you will ever want to know about a disk (similar to MS-DOS chkdsk). Some disk fixers actually use this utilities output. Important to note that ANY boot disk will report some clusters in allocation map but not in file structure (the boot track isn't a file). The opposite (in structure but not map) is cause to dsave then destroy the disk in question.

DELDIR: Should have been named chainsaw. Deldir removes everything from where it's set at to the end of that directory branch. At first, always type "1" when it asks list,delete,quit?

DIR: This stock directory lister is actually pretty useful, but there are many replacements, usually under the Unix name of ls.

DISPLAY: If familiar with BASIC, this commands underlying function will be old news - it's a CHR$ command. Here it accepts hex numbers and sends that code to the redirectable path STDOUT. So, display 41 prints an A on screen, Ho humm .. BUT, if you look in the window commands there are a series of hex codes! Take a look at the first 'general command' in the windows section of your OS-9 manual, BColour, OS-9 does not recognise this name, but it sure understands, display 1b 33 (for the palette slot) to get a complete command. Add arrows to send it elsewhere, if needed....so display 1b 33 01 >/w7 sets the background colour of window seven to palette one.

DSAVE: Gets a bum rap from the poor documentation supplied. DSave can be used to copy all or part of a directory structure to another directory structure. If that sounds pretty vague, it is. There is only one limit, both parties must have directories - nothing else matters.

Stone slow, but dsave uses no part of the original disks directories or structure, instead recreating it from scratch using copy and makdir. Good for damaged disks or mismatched backups.

As the manual states, dsave doesn't exactly do anything. Instead it sends copy and makdir commands to that wonderful place STDOUT. The manual says redirect this into a file and the book goes on about this file at length, I am sure having this file available to edit is handy at times. However, not all of us want the dang file!

Instead we connect dsave to shell with a pipe, like this: Chd to the directory to start copying from. For a whole disk, just chd /dx. Remember all the directories in this directory (ad infinitum) will be copied as well unless you specify "1". Parameters for the dsave command are first the DEVICE the above directory is on, then a pathlist(device and directories) to the destination. Last we add the pipe to a shell, and get;

```
Dsave /d0 /d1 ! shell
```

The list of commands will appear onscreen as they are sent to shell for execution. Errors are skipped over, so duplicate files already existing don't bring everything to a halt. This is a real handy thing to happen when merging disks together.

ECHO: Designed to post simple update messages while a script is running. Before you try it, formatting text by adding leading spaces doesn't work. You can use display to send window codes, then echo to send text string.

EDIT: Definetely not a contestant for worlds best editor, but it's small and will run any place - even a single line window. It has the advantage of being almost exactly like the interactive editor Basic09 has, which is the only way I can remember how to use it. Keep it in RAM for quick fixes. Makes a temp file called SCRATCH, so if anything blows up check for it.

EX: Allows running a procedure without an underlying shell. Nice to have for tiny or overstuffed machines, but if the new procedure doesn't stop gracefully you get one dead screen.

FORMAT: A lot nicer than I expected, can handle not only floppies but hard disks and RAM disks as well. Uses a massive chunk of system RAM so fat boots bulge here first.

FREE: Stock version is often replaced with one that reports bytes free rather than largest block. Rolls over every 16Megs or so, so what you see ain't always what you get on hard disks.

HELP: Sounds like a good idea, but it's slow and on floppy systems uses precious disk space. Many utilities duplicate this internally anyway. Try format without any option or parameters for an example of a built in help file. Third party utils also use internal help. Try -? as option.

IDENT: When comparing two executable files, this command is invaluable. Identical CRC generally means identical files. Since many

patches don't change the version # header, swapping CRC info is commonplace. CMP is similar, but compares byte for byte...means little for executable files.

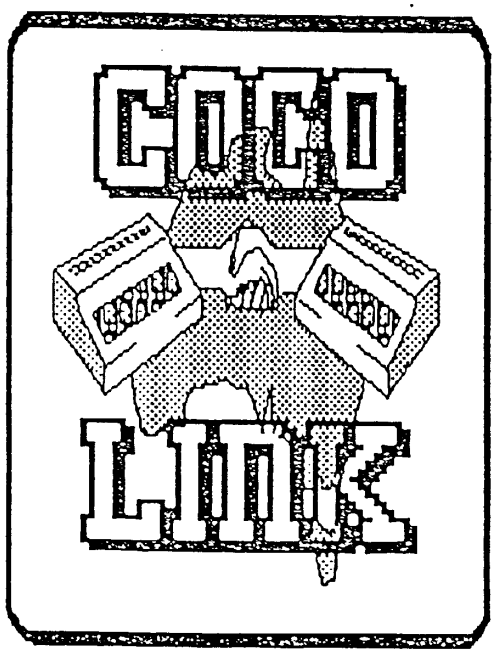
INIZ: Alternative to starting a device during boot.

KILL: A good way to get rid of a runaway process. The only bad part is getting the id number from procs - the stock procs isn't as helpful as it could be.

LINK: If one runs a programme simply by typing it's name, it disappears as soon as it's completed or you quit. To prevent this, catch a handy shell prompt and link programme.

It looks like I'd better chop this roughly in half. Here's half! Next month is (drum roll) the other half.

(Reprinted by permission from '68 micros' Vol 1 number 3)



XENION

****

XENION IS AN ARCADE TYPE GAME FOR THE COCO 3

This time YOU are the attacking pilot, you will have a number of worlds to attack, but, remember that these worlds will not give up without a fight.

You must pilot your space ship through the enemies defences, destroying them as you go. To do this you have limited armaments and you will require all your accumulated flight and combat skills.

Do you have what it takes to be a XENION fighter pilot?

Price: $30

****

RUPERT RYTHM

****

"Rupert! Wake up!" cries Rupert's manager, Bill Boombox frantically.

"Hardrock Harry, manager of 'Music Box Records' has stolen all your musical manuscripts and plans to release YOUR song under HIS name!! Your entire future is at stake! Get those manuscripts back! Fast!!" CLICK!

Rupert stumbles to his feet wearily, quickly rubs a pinch of gel into his hair, and proceeds to the task at hand

Are you good enough to help Rupert infiltrate "Music Box Records" and collect his stolen notes? This is an arcade style game that will give hours of fun to young and old alike.

Price: $20

****

ASSEMBLY BEGINNINGS by Val Stephen

Up to a few weeks ago, I was totally ignorant about how assembly and machine language works.

I've had the EDTASM book and ROMPAK and read the Radio Shack book backwards and forwards.

I may as well have been reading Egyptian Hieroglyphics. They told me absolutely nothing! In fact, absolutely ZILCH!!! The more I read the less I learned! I suspect that Tandy deliberately does not want anyone to learn the secrets of assembly and machine language.

Recently I wrote a letter to the editor mentioning my ignorance of ML (yes that editor was you Fred). You published the letter and lo and behold I received a reply in beautifully written script offering me help. Certainly a friend in need.

After three or four afternoons of listening and watching demonstrations, John Gough had me absolutely confused, amazed, astounded and even stunned mulletish as they say!!

I slowly began to see a spot of light at the end of a long, long tunnel. I learned about hexadecimals, decimals and ordinary numbers, about operands, registers and odd things like LDA followed by 400. I also learned that you can count by going 1, 2, 3, 4, 5, 6, 7, 8, A, B, C, D, E, F!! Horrors!!

Last Sunday I produced my first assembly language programme, what's more I assembled it in a fraction of a second by typing A/IM and suddenly I had my first machine language programme called 'FIRSTVAL/BIN'.

All it did was write VAL in the centre of a blue screen, but I was ecstatic!! I know I could have done it by CLS3 and a PRINT @ - but I DID IT MY WAY as they say in the song. I did it in assembly language then assembled it in machine language - binary.

I know to a few of you out there it is a mere bagatelle, but I have tried and tried to make sense of the Tandy books to no avail.

I would like to thank John Gough for showing me the seemingly impossible and making the way easier.

For the benefit of those of you who do not know how. Insert your EDTASM+ rompak, go into the editor (*) press (I) <ENTER> and start typing, type in the following opposite the numbers that apper starting with 00100 :-

This is the SOURCE CODE:

```
LDX (R/Arrow) #400
LDA (R/Arrow) #0AF
CMPX (R/Arrow) #5FF
BEQ (R/Arrow) 100E
STA (R/Arrow) ,X+
BRA (R/Arrow) 1005
LDA (R/Arrow) #56
STA (R/Arrow) >50E
LDA (R/Arrow) #41
STA (R/Arrow) >510
LDA (R/Arrow) #4C
STA (R/Arrow) >512
NOP
NOP
BRA (R/Arrow) 101D
END
```

After typing this, type in A/IM and <ENTER>. The screen rolls and the programme is assembled with the errors noted. BLOODY MAGIC!!

EDTASM only saves to cassette not to disk, you need a Disk EDTASM+ to save to disk.

Keep tuned I'll do some more later when I learn some more.

Val.

Your small article demonstrates what CoCo-Link and the CoCo community is all about, that is cocoists helping each other.

I personally know John Gough to be a very knowledgeable man in the area of assembly and very helpful. I am sure that he, if anyone, will be able to lift the fog so to speak for you in this area.

I look forward to your subsequent articles, I am sure that a number of cocoists will appreciate learning assembly with your help through the pages of this magazine.

SUBMISSION INFO:

WHAT TO SUBMIT:
Anything to do with the Colour Computer. A review of your favourite programme, either commercial or from any other source. Your own programmes written in any language available to the CoCo, these can be anything from a simple one line routine through to a massive adventure or arcade game.

HOW TO SUBMIT:
Send them on either tape or disk with at least TWO saves on the tape/disk PLUS AT LEAST ONE OTHER SAVE IN ASCII FORMAT. You should also send a small descriptive passage on a word processor giving such information as what it does, how to load and run it and any changes that may be required for such things as different printers or other CoCo's ie, 16K, 32K etc.

The word processors that we have available to us are;

VIP Writer,
Simply Better,
TeleWriter 64,
Word Power 3.3
Max 10 and for OS-9 we have,
Window Writer, and
ED.

If you do not have a word processor a hand written letter will suffice BUT please make it legible.

THE COCO FLEA MARKET

The following items have been posted for sale by the respective subscribers:

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COCO 3 512K with a free CoCo 2 plus a cassette player and 2 Tandy Joysticks.

Price: $150 ONO

Wilf Dixon
27 Glenthorn Cres
O'HALLORAN HILL SA 5158

Phone: (08) 322 3793

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CoCo 2 Extended Colour Basic
Cassette recorder CCR-82
Tandy Disk drive FD 500
FD 500 Controller
DMP 105 printer - including fanfold feeder
Dust covers for printer/keyboard
Joysticks
TEAC D/S disk drive for FD 550
All connecting cables + spares

MANUALS:
Introducing Your Colour Computer 2
Getting Started with Colour Basic
Getting Started with EXT Colour Basic
Colour Computer Disk System and programming guide
CoCo2 quick reference card
CoCo2 Ext Basic Quick reference card
DMP 105 Operation manual

MAGAZINES:
CoCo-Link; Dec 86: Jun, Aug, Oct, Dec 90: Feb, Apr, Jun 91
Sofgold: Apr - Sept 87, Nov 87 - Jan 88, May 88
Rainbow: Sept/Oct 85, Dec 85 - Feb 86, Apr 86, Sept - Dec 86, Feb 87
Aust CoCo: Sept - Dec 85, Mar 86, may 86, Nov 86 Feb - Sept 87, Nov 87 - Jul 88, Jun/Jul 88, Sept 88

PROGRAMMES:
VIP Writer - Tutorial, tape & disk
Tapes with games and utilities
Maths tutor
Pre-programmed word packages
Spelling list
100 commonly misspelled words

ROMPAKS:
Dinowars & shooting gallery

Computer table

PRICE: $500 the lot

Phillip & Gayle Mills
21 Green Ave
KINGSBURY VIC 3083
Phone: 03 360 9042
[]

ROMPAKS - No instructions:
Polaris —— Mega Bug
Monster Maze--Canyon Climber
Starblaze — Colour Scripsit
Spectaculator

PRICE: $5 each

ROMPAKS - With instructions
Reactoid —— Canyon Climber
Bridge Tutour

PRICE: $10 each

CASSETTES - With instructions
Buzzard Bait—Chambers
Safras ——Cuthbert in the Mines
Speed Racer—Ice Castles
Zaxxon ——Draconian
Mud Pies——Time Bandit
Storm Arrows--Sea Search
Galagon——Pyramid 2000
Space Escape--Spelling

PRICE: $10 each

DISK - CoCo 2 only
Kidwriter (childs word processor)

PRICE: $10

Ron & Jane Lidgard
P O Box 237
CLEVELAND QLD 4163
Phone: 07 286 2776
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WANTED

I have the Super Voice speech synthesizer. I would like to buy some other speech synthesizer suitable for the CoCo III.

I have the 'ART GALLERY' on disk, but any programme made can only be saved on a cassette tape. Does anyone know how to save it on disk?

I also want the DATA TAPE for the Art Gallery.

Jim Eadsforth
Goolwa Caravan Park
Rivers End Resort
GOOLWA SA 5214
Phone: 085 551 066
[]

If you have any software, hardware, books or magazines that you would like to sell, or, there is something that you are looking for, then send the information to us and we will include it in this section of the magazine.

Please be realistic in your asking price, also be aware that SOMETIMES it is more beneficial to sell items individualy rather than as a package.

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COCO CONTACTS

The following is a list of subscribers who have decided to make themselves available to the CoCo community for assistance to those who need it.

I would ask you to have a look at the time BEFORE you ring one of these contacts.

Name	Street	Town/State/Post Code	Phone
Alway Peter	PO Box 821	Boronia Park/NSW 211	02 816 2130
Barker Bob	PO Box 223	Glenfield/NSW 2167	
Bentzen Gordon	8 Odin St	Sunnybank/QLD 4109	07 344 3881
Blazejwski Stan		Mordiallic/VIC	03 580 4605
Boardman William	10 Eltham Ave	Pt Lincoln/SA 5306	086 82 2385
Bye Graham	9 Airlie Bank Rd	Morwell/VIC 3840	051 34 5954
Cameron William	2/22 Warren St	St Lucia/QLD 4067	07 381 4736
Colls Jason	16 Clavus St	Geelong/VIC 3214	052 75 5450
Cooper Len & Shirley	223 Elswick St	Leichardt/NSW 2040	
Cosier W.F	32 Argyll St	Coffs Harbour/NSW 2450	066 524 056
Cunnigham Eric	7 Nuthatch St	Inala/QLD 4077	07 372 2980
Dalzell Robbie	31 Nedland Cres	Pt Noarlunga/SA 5167	08 386 1647
Devries Bob	21 Virgo St	Inala/QLD 4077	07 278 7209
Donges Geoff	PO Box 326	Kippax/ACT 2615	06 254 9354
Eadsforth Jim	PO Box 329	Goolwa/SA 5214	
Edwards Peter	40 Davison St	Litcham/VIC 3132	03 873 5249
Elphick Graham	26 Birch St	StMary's/NSW 2760	02 623 8141
Gall Brian	PO Box 131	Cooranbong/NSW 265	049 772 178
Hester Joseph	49 Truscott Rd	Moe/VIC 3825	051 271 158
Holder Garry	229 Esplanade	Seaford/SA 5161	08 386 1139
Hutchinson Simon	10 Ascot Crt	Nth Dandenong/VIC 3175	
Ikin John	42 Spruce Dve	Rowville/VIC 3178	03 759 6253
Johnson Fraser	35 Robson Ave	Gorokan/NSW 2263	043 923 298
Kenny Bob	3/14 Bellingen Rd	Coffs Harbour/NSW 2450	066 51 2205
Lidgard Ron	17 Acacia St	Thornlands/QLD 4164	07 286 2776
McGrath John	93 Lemon Gums Dve	Tamworth/NSW 2340	067 618 071
McLintock George	7 Logan St	Narrabundah/ACT 2604	06 295 6590
McNabb John	PO Box 109	Boronia/VIC 3155	03 758 9008
Morgan Peter		Cooyar/QLD 4402	076 926 249
Morris John	30/45 Lawernce Hargrave Rd	Warwick Farm 2170	02 822 4678
Munro John	91 Blackburn Rd	Elizabeth East/SA 5112	08 255 0405
Murrells Alan	5 Goulburn Ave	Corio/VIC 3214	052 75 3065
Quinn Stephen		Orange/NSW	063 62 0519
Rae Desmond	PO Box 2076	Mt Isa/QLD 4825	077 43 3486
Remin Fred	100 Whitsunday Dve	Kirwan/QLD 4187	077 734 884
Remin Fred(1)	3/1 Franklin St	East Doncaster/VIC	03 842 8545
Rosch Raymond	5 Euphrates Pl	Kearns/NSW 2558	02 820 7228
Schmidt Richard	5a Stephens Ave	Torrensville/SA 5031	06 354 0951
Steman John	PO Box 580	Windsor/NSW 2756	
Stephen Val	1 Mabel St	Camberwell/VIC 3124	03 830 5668
Stevens Darren	16 Hewitt St	Colac/VIC 3250	052 311 795
Vagg Johanna	9 Belah St	Forbes/NSW 2871	068 52 2943
Williams Arthur	67 High St	Harrington/NSW 2427	065 56 1517

If you would like your name included in the above list in order to help other cocoists and to maintain contact between us, then send the above information to me for inclusion.

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