DieHard
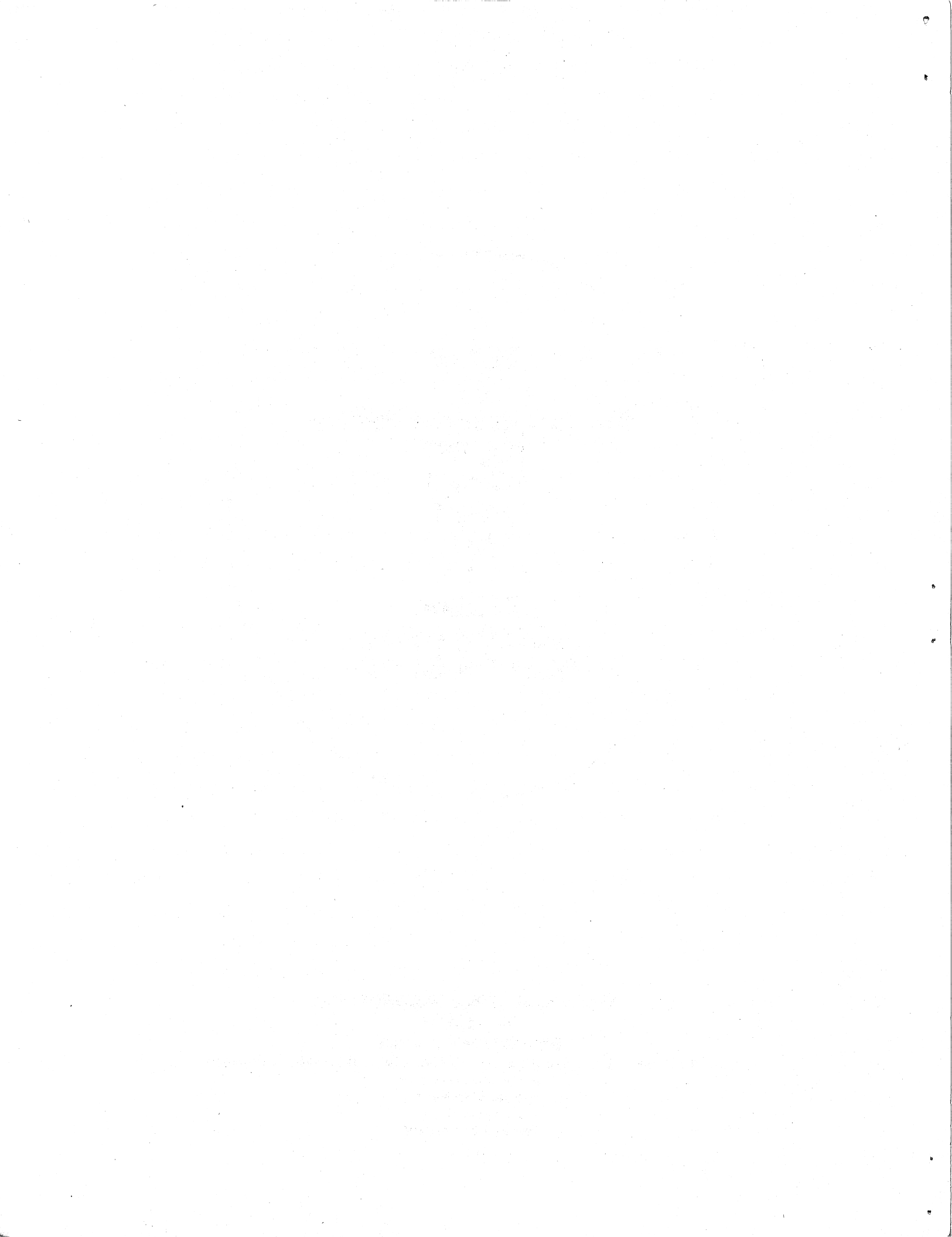the
flyer for commodore 8bitters
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1
HardCore
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This is issue one of what I hope to be a growing phenomena, and, as the **commodore 128**, and **commodore 128D** have long since vanished from the shelves of retail outlets (I bought Toys R Us' last (128D personaly) and the readily available software slowly dwindles for the 128 and 64, an inlet for the end-user. A reference to suppliers' addresses, what they carry, who fixes what, and who is in their basements writing the software of tomorrow. I don't want to strike paranoia in the hearts of the 8 bit-die-hards out there that the **commodore** universe as a whole will be swallowed into oblivion, but let's face it I can't think off hand where to get a copy of Abacus's CAD Pak 128. This will also be a place for *the People,* a soap box, high horse, so on and et cetera. A place for technical information. Is DieHard the final frontier? No, just a doorway to another frontier, and another and another and another....

This issue is named HardCore-- that's me, I started in 1983 on an **HP3000** mainframe, I've programmed **IBMs, Ataris, Texas Instruments, Timex Sinclairs, Lasers, Franklins, Apples** -you name it, I have probably done *something* on it. My personal favorite are the **commodore**s {look at

your equipment if it has a capital "C" It was made for the **Amiga**}. I program in BASIC primarily, and with cause-- you can list my program and alter it with ease. The days of the computer resident language are almost gone, however, who ever bought an **IBM** or **Kaypro** that didn't come with a copy of either GW Basic, Microsoft BASIC, or XXXBASIC? I have done Fortran and Fortran 77.
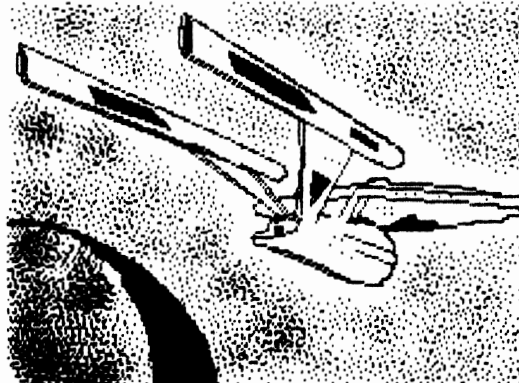
What computers does DieHard support--**commodore**. (I know that but which ones?) THESE: **VIC20**•
 commodore 64•,
 Eduator 64, SX64•,
 DX64
 commodore 16•
 Plus4
 commodore 128•, **C128D**•
 commodore B128,
 SuperPET, PET, CBM
 (desclaimer time-- I can't promise any more than if I hear something I'll print it. Only if it's factual).
 •these are the machines I own.

The home computer was a fad, or was it? The home computer is 15 years old this year, took the car over 45 years to catch on and another 30 to get improved on. How many people do you know personaly that own their own computer? Now, don't count your friends in your user group. Raise your had if you *don't* have a pocket protector, and let's not count those with their calculators strapped to their belts! Ok, you know someone from work who has an **Epson IBM** compatible, but he doesn't do much more than run Test drive on it, and once in a blue moon writes something with the wordprocessor he bought for his wife, who long ago forgot she had it. Now, I personaly think that GW Basic should be built into the machine and the so the user would have to make an effort to purge it from memory in order to boot anything other than DOS. {get used to it I insert my personal opinion in where ever the heck I feel like it even in the middle of my own personal opinions-- You know, speed is a factor, that's why you bought that TURBO cart., and sure the new **IBMs** are fast, after you boot the system, load DOS, internalize your drive and boot your OpSYS... ok, ok worst case scenario, but hay, all that stuff happens automatically when you turn on your **commodore**, even the **VIC-20** does that!}. Back to what I was trying to get at, if you turned your DOS machine on and you were in BASIC you might be tempted to program, seems to me if you were to lazy to load it up, it would be easier to just fool around with BASIC than purge the memory....
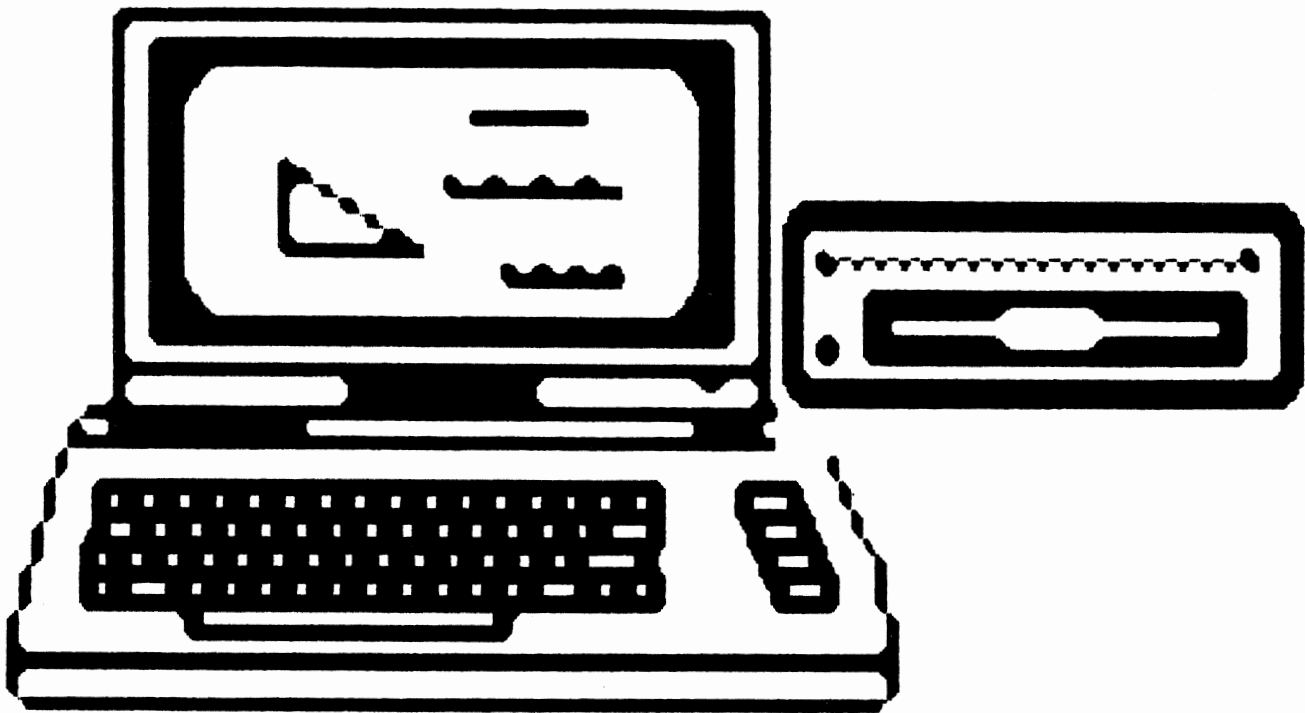
Over the years great hardware and software have come and gone-- *and* come again. I remember seeing the HEARSAY1000, after, I had bought the Currah speech 64 and the Voice Command Module from ENG. I wanted to use the two in concert but I was unsuccessful at relocating the ML of either to make it happen-- actually, now that I look back my method was one doomed from the start, as I had no way of executing both programs at the same time. Naturally when I saw the add for the HS1000 I wanted it. Let's face it both the HS1000 and the VCM are colossal pieces of garbage when it comes to speech recognition, both are inadequate in every facet of responding to anything I ever said. Now, the speech synthesis on the other hand, as far as the HS1000 goes, is great! There are no other programs to load to make it read text. That means there is a better chance that your computer *will* talk. I got mine from Tenex, by the way-- 29 bux or so.

Lot's of oldies but goodies are appearing almost every place that sells a fair amount of CBM software, remember the Visible Solar System? I'm waiting to find the electronic house stuff that Protecto used to carry. The voice box for the 128, the Chief 1571/20meg Hard drive combo, 4040, MSD 100I-- **commodore** computers had all the best goodies. That's what I want to find. Actually addresses and prices, of who has found an abandoned warehouse full of these things... ok, so maybe they really are gone forever. Just recently I bought a **VIC20**, a **VIC 1520**, an **MPS803**, a **C-16**, and an **SX-64**, from a junkshop, a mail order house, an inlaw, a computer store and the same inlaw, respectively.

Enough hoopla--
hears the list for May;
Creative Micro Designs
15 Benton Drive
P.O. Box 646
East Longmeadow, MA 01028
Q/Support: 1-413-525-0023
FAX: 1-413-525-0147
BBS: 1-413-525-0148

Montgomery Grant
Mail Order Department
33 34th Street Dept. A
Brooklyn, NY 11232

Rio Computers
3430 E.Tropicana Ave. #65
Las Vegas, NV 89121
1-702-454-7700

Software Support International
2700 N.E. Andresen Rd.
Suite A-10
Vancouver, WA 98661
1-800-356-1179

Tenex Computer Express
56800 Magnetic Drive
Mishawaka, IN 46545-7481
1-219-259-7051

LOADSTAR & LOADSTAR128
Softdisk Publishing
P.O. Box 30008
Shreveport, LA 71130-0008
FAX: 318-221-8870
1-800-831-2694

Software Hut
2534 S Broad St
Philadelphia, PA 19145
Info: 1-215-462-2268
FAX 1-215-339-5336

The Grapevine Group
3 Chestnut St.
Suffern, NY 10901
1-914-357-2424
FAX: 1-914-357-6243

Schnedler Systems
Dept A3
25 Eastwood Road
P.O. Box5964
Asheville, North Carolina 28813
1-704-274-4646

Briwall
P.O. Box129/58 Noble Street
Kutztown, PA 19530

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COMPILED BY BRIAN L CROSTHWAITE FOR ALL

Save @ And Die Fascist Scum!
Compiled By
Brian L Crosthwaite

Ah, yes the infamous SAVE@ bug, we've all heard of it and yet not everyone has gone the mile with it. Well kiddies, it's not just true, it's rumor-- what? Well, let's start at the beginning.

1541...
Incorrect:
SAVE"@filename",8-- unless you want the filename to be @filename.
SAVE"@:filename",8-- will replace the program, but you are taking a chance that it will mess up, because it's not the proper syntax, you see most disk drives are kind of snobbish and you have to talk right or you simply just can't be friends with them.
SAVE"@:0filename",8-- replaces the program with "0filename", if there is one already-- and with the bug. Other wise it just saves a program with that name.
Correct:
SAVE"@0:filename",8-- will replace the old program with the new one, and if there is no old one it will save the current one regardless. This is the one Commodore tells us to use.

1571
The same for newer ROMs like v04 on. C128D's have entirely different chips and just consider it v05, your cool. Now if you have an older drive, get new chips or stay away.

1581
Should work on all... {famous last words}.

And now the real and true way to do it, and you'll look so cool to your friends they'll worship you like the true hunk of throbbing programming God or Goddess you are-- er something.
CBM64/VIC20:
10000A$="filename":OPEN15,8,15,"s0:"+A$:CLOSE15:SAVEA$,8:VERIFYA$,8 :END
128/16/+4:
10000A$="filename":SCRATCH(A$):DSAVE(A$):DVERIFY(A$):END
(or use the CBM64 version, other wise you'll have to answer that annoying question-- "ARE YOU SURE?"-- No I'm a blithering idiot and every decision should be left to you, oh mighty computer. Actualy it's good to have safe guards.

And now the true reality and nature of things. I mean your doing this because your programming, and your paranoid. Just because you paid your power bill on time, doesn't mean they aren't going to discontinue your constant flow of hyperionic electrons for just one brief moment, long enough to make you take a swim in fresh cement. So here's what you really should do and why.

```
1A$="filename1"
1000BLAH:BLAH"program guts":BLAH:BLAH
1010SO ON:AND SO FORTH:ET CETERA
1020SOMETHINGABOUTASYNTAXERROR
1030IMSO=GOOD:IBLOW=MY/MIND:END
```

type:
LIST1

you see:
1A$="filename1"

move the cursor up over the "1" after filename and type <2><RETURN>, then what I do is list 1 again place the cursor over the 1 and press <SPACE> then cursor over to the spot after the last quote and type:
                    :sAa$,8:vEa$,8<RETURN>
the upper case A&E {often referred to as Asses and Elbows} are just the shifted/short hand of the commodore. {Don't forget the colon before the s}. Saving in increments, next file 3, then 4 and so on.

Also keyboard MACROs can also be used {function keys}, if you can define function keys on your machine, such as the 128,+4, or 16, or a 64 or VIC with a machine code program or cartridge that let's you define function keys. ie; SIMONS' BASIC, Super Expander, etc..
                    KEY1,"scR(a$):dS(a$):dV(a$)"+cH(13)

If, however, you find the SAVE@ to be too eloquent to pass up then one last bit of advice. Use it on a disk with only one file. When it messes up it writes over other programs and tends to move pointers in the directory around,if not lose track altogether, especially on disks near their total capacity. You load fileX and you get fileZ, even thought they both appear on the directory, and fileZ loads fileZ.

This command has acquired a mystic, mainly through the grapevine and rumor circuit. Murder has a similar mystic about it, but I don't suggest you use either on as a programming tool, after all Rome wasn't built in a day, and what are 25 or 6 to 4?!?

WORD PROCESSING TIPS
COMPILED BY
BRIAN L. CROSTHWAITE

1. Use the search feature to locate words that sound the same, but are spelled different and have different meanings, like there, their, and they're-- to, too, and two. Check the usage by reading the sentence then move on to the next.

2. Word processor as a data base. Write a list using a mode that makes columns or line the letters up up and down. Most word processors do this with the resident font of the given machine. WYSIWYG WPs are a little different, for instance GEOS you'd use the Commodore 10point font:

```
Cats        NA          water and feed daily
Flower      85in.       water daily
Tree        10ft.       water Tuesday
```

You get the idea, anyway using the search feature you can find info, update with insert mode, etc..

3. geoWrite got you down? here's a couple of things, first to stop horizontal scrolling move the right margin over to 5.1 or so and type in your stuff. After you're done select page or C= V and place it where you want final output to be. Secondly if you have an 80 column WP, such as Paperback Writer, then use it, convert the file with the text grabber, then reformat it with geoWrite. I've found it's easier to just do the margin move thing, because sometimes things just don't reformat smoothly.

4. Remember, embedding control codes is not only a time consumer, it's a pain in the rear. If you spent more than $30 for your WP then the computer should do all the dirty work for you and if you spent more than $50-- then it had better have not only a great spell checker, but a great thesaurus. Any more than $60 it had better do graphics. When I say do, I mean do. The computer does the dirty work, all I have to do to center text is hit an icon or menu-- what I'm trying to say and failing so miserably is, the computer remembers the codes so you don't have to. At the top of my screen at all times are pull down menus and justification and line spacing boxes. Every thing is right here. (I'm using geoWrite, by the way).

5. Always update your work, every five minutes or so-- no mater what you are doing, WPing, drawing, programming. Why? Ever heard of volatile memory? Unless you got a battery backed REU or computer, then the stuff your typing is at the mercy of your local power company. Even if you have battery backup, I strongly suggest updating routinely, as you well know things can happen. Don't rely on an REU.

6. This leads to my next point, GEOS users, put all your stuff in the REU except the document you're working on. I spent 30 minutes on a document and the power went off, some how the changes I made also were deleted from my brain as well, as I found I couldn't produce anything even half as good as the original changes.

7. Plan to spell check alot of letters? Add the state abbreviations to your dictionary, along with frequently use names and terminology. You might even just fill a document with these things and spell check it and add the stuff as you go. In the future your spell checking will go faster, the computer won't have to wait for you to SKIP.

8. When reformatting text under WYSIWYG conditions, start at the last page, select page and set up your fonts and justification, line spacing, margins, etc. Then go to the previous page, and so on until you have done the whole document. If you do it this way you won't have to overlap your work and everything will get done accordingly. If you start on the first page, going from a 12point to a 9point font, the 12point on the next page will come onto the first page and you have to do it again, and the 12point may come onto the page again. If you go to a larger font you'll push some of the first page onto the next and you will be formating only half a page the next time, because half (or however much moves over) the page is already formatted, on a large document you'll lose lots of ground this way. Anyway you look at it starting at the last page always saves time. (Now if all you want to do is change one paragraph, then just do that one paragraph, this is for when you type in Commodore 10point or BSW 9point at 5.1 to get info in quik and easy on GEOS [see tip 3]).

9. Use macros. In geoWrite, for instance, you can make a copy of X number of spaces and all you have to to to line up stuff, instead of typing in X spaces just hit C= T your spaces will take care of them selves. You can do any repeditive thing in this maner. See manuals for info and ideas.

10. Use unique marker, like "xvvx" or "marker" as markers, to come back to later, use search to locate them in order.

11. Hay, if you like typesetting the old fasioned way, use what you are comfortable with, it's easier for some people to do those long ago memorized key stokes to format a document. However, learning something new (and old also) can have lot's of advantages. Lot's.

Pokes and Peeks
compiled by
Brian L Crosthwaite

POKE is a BASIC statement used to place a decimal value into a given address; POKE 53280,0 places the value zero at address location 53280. (This will change the 64 boarder color to black). PEEK, on the other hand is a numeric function that returns the value in a given address. PRINTPEEK(53280) will return a zero, because we POKEd a 0 in this location. POKES and PEEKS are often use in conjunction with Boolean logic to place a value into a location with out changing what's there-- sorta--

```
POKEBY,PEEK(BY)OR(2↑BI)-- recognize this? essentially what you have is:
BY=address (on hires screen) formulated thus:
8192+INT(Y/8)*320+8*INT(X/8)+YAND7
BI=bit info 2↑7-(XAND7)
```

(Let's not get into this right now, it's not what I'm talking about and it's in your 64 Programmer's Reference Guide).

simply put;

take address BY, look into it to see what's there, combine it with new info BI...

```
1 0 0 1 0 0 0 1 or
0 0 0 1 0 1 0 0 =
1 0 0 1 0 1 0 1
```

```
0 OR 0 = 0        0 AND 0 = 0
0 OR 1 = 1        0 AND 1 = 0
1 OR 0 = 1        1 AND 0 = 0
1 OR 1 = 1        1 AND 1 = 1
```

ENOUGH ALREADY!

This is not an article about Boolean Logic-- Although if you can hold out there should be one next issue. I just wanted you to not be totally fogged when you see: POKE9000,PEEK(9000)OR128. (By the way if you have a choice between a straight POKE and a Boolean job, do the Boolean, it leaves things set up just the same as before the POKE and you look more professional when you have more control over your computer). Here they are:

Print at or PRINT@ or CHAR equivalent (VIC20 & CBM64)

```
1000PRINTCHR$(147):rem clear screen
1010POKE781,RO:rem ROw=0to22 (VIC) or 0to24 (64)
1020POKE782,CO:rem COlumn=0to21 (VIC) or 0to39 (64)
1030POKE783,48:rem clear carry
1040SYS65520:rem Kernal plot routine
1050PRINT"Printed at"RO","CO
in a subroutine:
1000POKE781,RO:POKE782,CO:POKE783,48:SYS65520:RETURN
```

```
------VIC20--+--+--+--+--CBM64--+--+--+--+--C128--+--+--+--+--C16&+4--+--+--+--
```

	VIC20	CBM64	C128	C16&+4
Disable RUN/STOP	POKE808,100	POKE808,239	POKE808,100 or POKE808,112	POKE806,103
Enable RUN/STOP	POKE808,112	POKE808,237	POKE808,110	POKE806,101
Disable RESTORE	POKE792,7	POKE792,193	POKE792,125 or POKE792,98	xxxxxxxxxxx
Enable RESTORE	POKE792,173	POKE792,71	POKE792,64	xxxxxxxxxxx
Disable LIST	POKE775,223	POKE775,191 (or 1) or POKE774,183	POKE775,139 or POKE774,139	POKE774,110
Enable LIST	POKE775,199	POKE775,167 or POKE774,26	POKE775,81 or POKE774,81	POKE774,110
Disable RUN/STOP, RESTORE keys & LIST (beware!)		POKE808,234		
Enable RUN/STOP, RESTORE keys & LIST		POKE808,237:POKE792,71		
Disable SAVE	POKE818,73	POKE819,246 (or32)	POKE818,180 (or50)	POKE816,136
Enable SAVE	POKE818,133	POKE819,245 (or237)	POKE818,78	POKE816,164
Disable LOAD	POKE816,103	POKE816,157	POKE816,0	POKE814,239
Enable LOAD	POKE816,73	POKE816,165	POKE816,108	POKE814,74
Disable keyboard	POKE649,0	POKE649,0	POKE2592,0	POKE1343,0
Disables keyboard buffer		POKE649,1		
Enable keyboard & buffer	POKE649,10	POKE649,10	POKE2592,10	POKE1343,10
No keys repeat	POKE650,64	POKE650,64	POKE2594,64	POKE1344,64
All keys repeat	POKE650,128	POKE650,128	POKE2594,255	POKE1344,128
Enable repeating keys (space, delete and cursor keys)	POKE650,0	POKE650,0	POKE2594,0	POKE1344,0
Clear keyboard buffer	POKE198,0	POKE198,0	POKE208,0	POKE239,0
Character color (x=0-7 on VIC, x=0-15 the rest)	POKE646,x	POKE648,x	POKE241,x	POKE1394,x
Screen color	POKE36879,x	POKE53281,x	40col POKE53281,x 88col POKE ,x	POKE65301,x
Boarder color	POKE36879,x	POKE53280,x	40col POKE53280,x 88col POKE ,x	background POKE65305,x
Remove line numbers during LIST	POKE22,35	POKE22,35	POKE24,37	POKE22,35
Enable line numbers during LIST	POKE22,25	POKE2,25	POKE24,27	POKE22,25

	VIC20	CBM64	C128	C16&+4
Change keyboard buffer size (x=0to10)	POKE198,x	POKE198,x	POKE208,x	POKE239,x
Change 128 f-keys into 64 f-keys			POKE828,183	
Reinstate default 128 f-keys			POKE828,173	
Read line no. of data statement on error (C64)		PRINTPEEK(63)+256*PEEK(64)		
Reset 64 or 128		SYSPEEK(65532)+256*PEEK(65533)		
Move cursor to line x (x=1-25)		POKE214,x	POKE235,x	
Bit map start (x=0 @ 0,8 @ 8192)		POKE53272,(PEEK(53272)AND240)ORx	POKE2605,(PEEK(2605)AND240)ORx	
Enable high-resolution graphics		POKE53265,59		
Disable high-resolution graphics		POKE53265,155		
Enable multi-color graphics		POKE53270,216		
Disable multi-color graphics		POKE53270,8		
Enable standard bit map mode (must follow one of above)		POKE53265,PEEK(53265)ORR32	POKE216,PEEK(216)OR32	
Disable standard bit map mode		POKE53265,PEEK(53265)AND223	POKE216,PEEK(216)AND223	
Enable multi-color bit map mode		POKE53265,PEEK(53265)OR32:POKE53270,PEEK(53270)OR16	POKE216,PEEK(216)OR160	
Disable multi-color bit map mode		POKE53265,PEEK(53265)AND223:POKE53270,PEEK(53270)AND239	POKE216,PEEK(216)AND95	
Plot standard bit map (all)	POKEBY,PEEK(BY)OR(2↑BI)			
Unplot standard bit map (all)	IFPEEK(BY)=(PEEK(BY)OR(2↑BI))THENPOKEBY,(PEEK(BY)-(2↑BI))			
Redefine RUN key & HELP key 128			BANK15:SYSDEC("60EC"),,8,,,"RUN"	
			BANK15:SYSDEC("60EC"),,9,,,"HELP"	
Load directory without disturbing program in memory		POKE44,PEEK(46)+1:LOAD"$",8:LIST		
Remove directory and retrieve program		POKE46,PEEK(44)-1:POKE44,8		
Poke 128 windows			POKE228,x bottom (x=0 to 24)	
			POKE229,x top (x=0 to 24)	
			POKE230,x left (x=0-79,(39 40col))	
			POKE231,x right (x=0-79(39 40col))	

```
-----VIC20--+--+--+--+--CBM64--+--+--+--+--C128--+--+--+--+--C16&+4--+--+--+--
Enable FAST mode on 128 in 64 mode
                    POKE53296,255
Disable FAST mode on 128 in 64 mode
                    POKE53296,0
Enable multi-color character mode
                    POKE53270,PEEK(53270)OR16
Disable multi-color character mode
                    POKE53270,PEEK(53270)AND239
Enable extended color mode
                    POKE53265,PEEK(53265)OR64
Disable extended color mode
                    POKE53265,PEEK(53265)AND191
Scroll left or right (x=0-7)
                    POKE53270,(PEEK(53270)AND248)+x
Scroll up or down (y=0-7)
                    POKE53265,(PEEK(53265)AND248)+y
Sprites on (n=0-7)
                    POKE53269,PEEK(53269)OR(2↑n)
Sprites off (n=0-7)
                    POKE53269,PEEK(53269)AND(255-2↑n)
Blank the screen
                    POKE53265,PEEK(53265)AND239
                or POKE53265,11
Move cursor to x=0-39, y=0-24
                    POKE211,x:POKE214,y:PRINT
Reset computer with LIST
                    POKE774,226:POKE775,252
                                        POKE774,61:POKE775,255
Disable question mark on INPUT
                    POKE19,65
Enable question mark on INPUT
                    POKE19,0
Cursor speed (0=fastest, 255=slowest)
                    POKE56325,x
Set video bank
                    POKE56576,(PEEK(56576)AND252)ORx
Character memory location change (a=0, 2, 4, 6, 8, 10, 12 or 14)
                    POKE53272,(PEEK(53272)AND240)ORa
Set screen memory
                    POKE53272,(PEEK(53272)AND15)ORy
Disable ROM
                                        POKE217,4
Enable ROM
                                        POKE217,0
Read key press
                    PEEK(197)           PEEK(212)
Wait for keypress
                    POKE198,0:WAIT198,1
                                        POKE208,0:WAIT208,1
Disable shift/Commodore key combination
                                        POKE247,64
Enable shift/Commodore key combination
                                        POKE247,0
```

Set text screen character memory

                                 POKE2604,(PEEK(2604)AND240)OR1

Return to text screen

                                 POKE2604,(PEEK(2604)AND240)OR4

Set bit map character memory screen (x=0 to 255)

                                 POKE2605,(PEEK(2605)AND240)ORx

Set video bank (x=0 to 6)

                                 POKE56576,(PEEK(56576)AND252)ORx

Set text screen memory (y=0 to 255)

                                 POKE2604,(PEEK(2604)AND15)ORy

Set bit map screen memory (y=0 to 255)

                                 POKE2605,(PEEK(2605)AND15)ORy

Change the look of the 128's 80 column characters

                                 POKE54784,9:POKE54785,232
                                          (or 231 or 233)

Append a program to one in memory on 128
    BLOAD"filename",B0,P(PEEK(4624)+256*PEEK(4625)-2):DELETE2-1

Restore f-keys, tabs & clear screen

                                 BANK15:SYS49425

Find out name of last file loaded

                SYS62913   SYS62753

C16&+4 title screen
Clear cress, set normal window

— 10000 SYS55432 — — — —

Print title

— 10010 PRINT"title" — — —

Set screen window below title

                                            10020 SYS56926

Disable Epyx Fast Load cartridge

                POKE770,131:POKE771,164

Re-enable Epyx Fast Load cartridge

                POKE770,106:POKE771,223
              or SYS57194

Redimension arrays (will not clear other variables)

                POKE49,PEEK(47):POKE50,PEEK(48)

Disable VIC Super-expander upon power up, leaves 3k of RAM expand intact
    SYS64818

Enable Turbo Load and Save cartridge from DISABLE
                SYS57254

Enable Turbo Load and Save cartridge from <RUN/STOP><RESTORE>
                SYS57297

Turn cursor on

                                 SYS52591

Turn cursor off

                                 SYS52639

Switch to lower case mode
                POKE53272,23

Switch to upper case mode
                POKE53272,21

Turn off screen display
                POKE53265,PEEK(53265)AND239

Turn on screen display
                POKE53265,PEEK(53265)OR16

-----VIC20--+--+--+--+--CBM64--+--+--+--+--C128--+--+--+--+--C16&+4--+--+--+--

Clear screen

                              SYS59296
_____

Home cursor

                              SYS58726
_____

Move cursor down

                              SYS59516
_____

Scroll screen up

                              SYS59626
_____

Scroll screen down (beware!)

                              SYS59848
_____

Insert a line

                              SYS59749
_____

Print startup message, clear BASIC

                              SYS58266
_____

Cold reset (erases program)

                              SYS64738
_____

Warm reset (erases screen)

                              SYS65126
_____

Cursor blink rate (r=0-255, 58=normal)

                              POKE56325,r
_____

Keyboard input
Wait for key press

_ _ _ _ _ _ _ _ _ _ _ _WAIT197,63 _

Wait for key release

_ _ _ _ _ _ _ _ _ _ _ _WAIT197,64 _

Wait for SHIFT key

_ _ _ _ _ _ _ _ _ _ _ _WAIT653,1[,1 (for_release)]_ _ _ _ _ _ _ _ _ _ _ _ _

Wait for COMMODORE key

_ _ _ _ _ _ _ _ _ _ _ _WAIT653,2[,1 (for_release)]_ _ _ _ _ _ _ _ _ _ _ _ _

Wait for CONTROL key

                              WAIT653,4[,1 (for release)]

Well there's this issue's listing of POKEs & PEEKs (SYSs & WAITs). You can see thousands of empty spaces for various computers. Sorry to all PET, SuperPET, and CBMers out there. At this point I have no information-- if anyone has any info of any kind to share let me know. I go to TYBUG meetings and right now that's the only way to get a hold of me. I prefer geoWrite documents, Speedscript, Fleet system, The Writer (Easy Working), The Printed Word, Paperback Writer-- ok just about any format. If you want your disks back simply write something to that effect on the disk somewhere ledgible. Sorry, unless you give the $1.67 for postage plus a mailer, I can't mail it to you.

```
0 ESC$=CHR$(27):OPEN1,4:PRINT#1,ESCCHR$(64)ESCCHR$(126)"3"CHR$(2)ESC$"SO"ESC$C
HR$(65)CHR$(6);:CMD1:LIST:PRINT#1:CLOSE1:END
1 A$="TINY LIST"
2 ESC$=CHR$(27)                          :REM    ESCAPE
3 OPEN1,4                                :REM    OPEN CHANNEL 1 ON DEVICE 4
4 PRINT#1,ESC$CHR$(64);                  :REM    RESET PRINTER
5 PRINT#1,ESC$CHR$(126)"3"CHR$(2);       :REM    PICA COMPRESSED (17 CPI)
6 PRINT#1,ESC$"SO";                      :REM    SELECT SUBSCRIPT
7 PRINT#1,ESC$CHR$(65)CHR$(6);           :REM    LINE SPACING (6/17 INCH)
8 CMD1:LIST                              :REM    NEXT COMMAND TO PRINTER (LIST)
9 PRINT#1:CLOSE1                         :REM    CLOSE (EXIT CLEAN)
10 REM ***********************************************************************
20 REM *   ##     #  ##  ##  ##       BRIAN L CROSTHWAITE                    *
30 REM * #   #  ## # # # # #   #      SET UP FOR EPSON FX85 MODE ON AN MPS1270 *
40 REM * #         #  ##  ##     #    ESC$=CHR$(27)                          *
50 REM * #        #   #   #   #       ESC$CHR$(64)                      @     *
60 REM * #        #   #   #  #        ESC$CHR$(126)"3"CHR$(2)           PI    *
70 REM * # #      #   #   # #         ESC$"SO"                          SO    *
80 REM *   ##   ###   #   # ####      ESC$CHR$(65)CHR$(6)               A     *
90 REM ***********************************************************************
100 END:COPYRIGHT 1992 OK TO DISTRIBUTE BUT NOT SELL
110 BRIAN L CROSTHWAITE
120 908 N 7TH STREET
130 BOISE ID 83702
```

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