Commodore NETWORK
AUSTRALIA
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Supporting the Commodore range of 8 bit computers

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A NEW LOOK COMMODORE NETWORK

GORDON WORMALD'S AFTERTHOUGHTS

INSIDE THE 1541 AND 1570 DISK DRIVES

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NEWSWATCH

NORTH AMERICA HERE WE COME

This will be our first "official" North American edition of Commodore Network! No, it's still being edited and laid out here in Australia, it's just that copies are now being printed and distributed from our U.S. address in California's capital, Sacramento.

This will mean that Commodore Network is now available locally in three nations, Australia, New Zealand, and the United States, and we hope to at least add Britain to the list by years end, with a possibility of Germany (and anyone else that pops up) as well.

The advantages of this "global" expansion policy for an organisation like Commodore Network are many. It gives readers access to a much broader knowledge base, both for articles presented in "Network", and for programs carried on "Disk-Coverer". It means that no longer does the average Australian, New Zealander, Briton, or American have to wait months, even years, to hear of the latest developments on the other side of the world. And it means that C.N. can help make these items available to any Commodore user anywhere.

64 ON CD-ROM

Matias Matting, editor of 64er magazine in Germany will be visiting Australia during the Christmas break. He will be bringing with him one of the first CD-ROM's released with 100% C64 content.

Several Australian and foreign groups are currently working on C64 CD-ROMs including Fairlight and other demo groups. Commodore Network will be working to present an article in the near future on hooking a CD-ROM drive to your not-so-humble C64.

Editorial

Happy New Year (hic)! Well, I'm not quite that drunk, and I would have walked that straight chalk line the cops drew on the ground if they hadn't of kept moving it just as I lined myself up (hic!).

Seriously, though. I hope you all had a safe and enjoyable break over the Christmas/New Years period, and are all back reading this. There's still a lot of life left in the Commodore community, and hopefully we'll build on what we've achieved so far and continue to offer maximum support to those of us who choose to use the Commodore 8-bit machines.

AMERICA

This issue will be the first one to be published by our North American affiliate. As most of you know, arrangements for a U.S. version were made some time back, and it has taken till now to iron out the bugs, so to speak. Interest has been good, and our North American readers will be rewarded with cheaper prices and easier access to items offered in our merchandising, etc.

Commodore Network North America will be virtually the same as our version, but will include advertising and article inserts peculiar to the needs of the readers (an American "Micro-Mart", etc.).

ELSEWHERE

Many of you will realise that we have had a Commodore Network operating in New Zealand for some time. It is still a very small organisation, but we do feel it is essential to try and give as many Commodore owners as much support as we can in any way we can. Jim Mullen, our New Zealand link-man, is doing a marvellous job with very little help from myself at this stage, so I'd like to give him a very special thanks for his efforts over the past year. If anyone knows anyone in N.Z. that uses a Commodore 64/128, give 'em a stir. Remember, if you want support, you must also give it!

We have also had some interest in "localised" versions of C.N. from Britain and Germany, and are hopeful that we will be publishing in these countries in the near future.

AT HOME

Here in Australia subscriptions have remained reasonably static over the last six months or so. This has been especially highlighted by the growth in foreign subscriptions, particularly those in North America, despite what I consider the exorbitant costs I am forced to charge (a subscription to a North American address cost the applicant nearly twice as much as for an Australian - and it's all postage charges). This lack of local growth is disappointing, the more so when you consider that probably around 20% of the calls for help that I receive are from non-subscribers. In any case, I will be concentrating on getting our little publication a bit better known over coming months, and on recruiting more subscribers wherever possible. I will also be working on getting a little more professional with our production, and on encouraging our writers to do similar, especially when it comes to regular columns, etc.

SURVEY

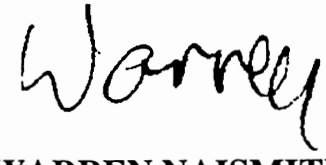
In this issue you should find a copy of our annual survey sheet. Please take the time to fill out and return it. This will give us a better idea of what YOU want in YOUR publication, what we are doing right or wrong, and of how you think we can improve things for you. There will also be room for your comments, please feel free to say what you think.

LAYOUT

Well, I think I've covered almost everything. Hope you like the new layout. Artie put a deal of time and effort into its design and implementation and I think it shows. We try to achieve a different look for each yearly "volume" of C.N.

THANKS

Lastly, many, many thanks to the following people who helped make C.N. happen over the past twelve months: Alastair Hay, Andrew Gormly, Andrew McCallum, Arthur Stevens, Bev Brown, Charles Williams, David Wolfe, Diane, Doreen Horne, E. Gordon Wormald, Euan Fry, Gaelyne Morenac, Glenn Thomson, Heath Kirby Miller, Jack Blewitt, Jack Vander White, Jane M. Jones, Jeff Carey, John Buckingham, Keith Moreton, Ken Smith, Kevin Power, Marc Walters, Mario Petrolati, May Street, Paul Williams, Peter Hunt, Rod Gasson, S.B. Enthusiast, Scott Roseboom, Ted Woodwell, and, above all, YOU, the reader!



WARREN NAISMITH

EDITOR

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The World of GEOS HandBook © and Disk

The World of GEOS HandBook II ©

The World of GEOS HandBook III ©

The HandBooks are available folded and saddle bound to A4 size, for AUD$15:00 each* {includes P&H}, from

JMV Grafix
P.O. Box 635
Blair Athol
South Australia 5084

Cheques Payable to Jane M. Jones *Overseas Orders add AUD$5:00

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GeoLabel & Superbox sampled

This month, we review GeoLabel and SuperBox by Roger Lawhorn USA, distributed in Australia by Malcolm Brumaley SA. We also check out the latest happenings on the GEnie BBS, courtesy of Rick Coleman USA.

– GeoLabel –

This program has the most difficult to understand documentation of all time. To be sure, it is complicated, but even I found this REALLY HARD to follow. After a while, I tossed aside the docs and proceeded much better 'winging it' through the menus and options. Later, when I went back to the docs, I was still shaking my head. Documentation aside, making a label is thankfully not as difficult as reading the instructions. With GeoLabel {testing the 128/80 column version}, you must have geoWrite {v1.1, 2.0 or 2.1} and a text file on your work disk, and this is where you enter your label data. Leave your geoWrite text in BSW without margins, tabs, and without styles {bold, italics, whatever}. One label will be one record terminated by an asterisk *. Each record can have up to 18 fields {lines of text}. The asterisk is a marker for the program, and will not be part of your label. GeoLabel also supports GeoMerge data files as your source. After exiting geoWrite, double-click on GeoLabel to get it up and running.

Making a Label

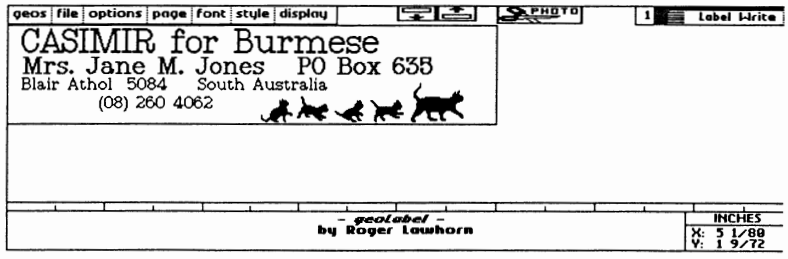
GeoLabel defaults with no pre-defined set-up, as you would expect. You are then prompted to select a data file {geoWrite that is} from a DBGetFiles Box, click on your file and then on Open, and you are in the deep-end. The first record in your geoWrite file is displayed in the Label window. The text is in BSW ready for you to begin. You can page through your records, using the page options from the main menu, or the up and down icons above the Label window {128 version, below on 64 version}.

Have a look at the sample label/window, that I made whilst testing the program. There are actually five fields. The second field was a return by itself, which is still treated as a text field, but cannot be seen on the label. After selecting {highlighting} the line of text you wish GeoLabel to act upon {using 1 - 18}, you can modify the BSW text with your own fonts and styles. The font in the example is Smith Corona. GeoLabel makes adding a photo scrap to your label very simple. But, you can only have one photo scrap on your work disk !. The scrap will appear in every single label in the position you first placed it. If you want to change the scrap in a label further down your list, it will be changed on all of them. If you move the scrap, it will be moved on all the labels.

Global Set-Up

You can save and load your 'set-up' options. This automatically records the position of your photo scrap {if used}, the size of your surrounding label frame if re-sized {also if toggled on}, the font sizes and styles used, the position of your lines of text, and any changes in field precedence. This set-up will affect all labels in your text, globally whether you want it to or not. GeoLabel automatically initialises itself to the standard set-up. If you don't save your set-up, you must go through the selection thing all over again next time you want to print labels off. The ability to re-size your labels frame, and toggle the border on or off, increases the flexibility of this program to suit most peoples tractor feed label kits. When you make the frame smaller, your fields must fit within this new size.

Your fonts, and the same photo scrap, must be on the work disk next time, or you are in for a nasty surprise. The scrap thing had me mystified for a while, after I had inadvertently changed my photo scrap and encountered some truly weird effects !. The photo scrap is not recorded as bitmap data like you might expect, rather it is read from disk each and every time !. What is toggled on for one label is on for all of them. Sometimes that did become annoying, especially when up to nine fonts are catered for, but they remain the same for each label. You only get to choose them for 'one' label.



You can page, or move from label to label, as defined by the asterisk, in your text file. You can rearrange the order of your text fields in the label, and set their precedence. You can toggle word wrap, enter additional text to the end of a field, even ignore fields, change the alignment ruler, and many other specialist features. But again, whatever you change will affect all labels in this file.

New Label Drivers

Four new printer drivers that don't print form feeds are a very thoughtful addition to this package. Double strike versions are also included. In fact, two of the new drivers will take advantage of GeoLabel 64's entire screen width, resulting in a much nicer output. An Epson FX-80 compatible printer is a must to use the new drivers though.

Aarrgghh !. I've had a hopeless time trying to go back through the docs to write this review. I think I'll put it away now.

– SuperBox –

This program {a separate version for GEOS64 and 128} is an Auto-Exec patch for the GEOS 2.0 Kernal DBGetFiles routine. GEOS normally restricts the user to accessing the first fifteen data files on a work disk. SuperBox will let you access up to 250 !. That just about speaks for itself and makes SuperBox an added bonus to the GeoLabel disk, but it delivers even more.

SuperBox scrolls through five files at a time, wraps the files from top to bottom, and vice versa. It supports continuous clicking, or smooth scrolling through filenames while the button remains depressed. You even have the option of setting the maximum number of files to be viewed for yourself !.

There are a few limitations and restrictions that are carefully documented, one that I must mention is the required presence of an REU. You should definitely read through ALL the docs on SuperBox prior to installing it to avoid some clashes in memory. Have I used it ?. Well, not exactly, but only because it won't let me work with GeoWizard {viz Jim Collette} installed. I will only deactivate GeoWizard to use GeoCanvas {viz Nate Fiedler}, and that's that, sorry.

Synopsis

GeoLabel brings some innovative new ideas to LABEL printing from GEOS. If you can follow seriously convoluted documentation easily {a tutorial is included, but it didn't help}, then you should have no troubles making some very neatly presented labels for your disks.

GeoPrint and GeoLabel - {now includes both versions for 64 & 128}, come together on the 1541 flippy disk for the one low price, which is now even lower !. The package is distributed in Australia for A$15:00 {overseas orders add A$2:00 S&H} by Malcolm Brumaley 4 Barbara Avenue Morphett Vale South Australia 5162. There has been a welcome price drop since I mentioned this package in the December column. Anyone who is interested in these programs should get their order in now !. The disk is very well presented, and is a bargain for any GEOS-o-holic.

So why the cats Jane ?, okay I'll give. Around Sep95 I will be officially breeding Burmese Cats under the name CASIMIR. CASIMIR is my registered Breeders prefix. Commodore computers are still my life, however. Now you all know :-)

More USA GEnie BBS Excerpts
About GEOS

Message 6 Sat May 28, 1994 B.MASSE [BIG BOB] at 23:29 EDT

I have heard a lot of good things about The Write Stuff. It sounds like a very good word processing program for the 64. I have never used it though. Geos is sooooo... slooooooow..... thooooough.... I have been known to fall asleep waiting for it to flip to the right side of the page. But Geos is worth the wait for the font quality. GeoWrite 64 has a very good spell checker too. A processor I have used a lot is Word Writer 6. Easy to use. No copy protection. Works off my RamLink. It has a 85,000 word spell checker and, get this, a 60,000 word thesaurus that is actually very fast in finding words. It is also easy to use. Good fonts also included. I think CMD sells it. Bob Masse

Message 10 Mon May 30, 1994 N.PHI [Toto] at 01:03 EDT

Big Bob : You and I both have experienced the annoying "side-flip" in geoWrite 64. This is one of the main reasons I bought two C-128's and switched to geoWrite 128. Of course, the 80-column word processor doesn't need to flip, AND it operates at 2 MHz...

Message 11 Mon May 30, 1994 GEOS-TIM at 02:42 EDT

I also have GeoWrite 128, but when I use GeoWrite 64 I usually set the margins so that I don't get the "side-flip", and then when I'm done with the document, I just use toolkit to set my rulers, etc. :) - Tim. BTW Toolkit is in our library : filenumber # 10527. The docs are in there too, but I don't have the file number.

Message 12 Mon May 30, 1994 J.BUTLER13 [JB] at 06:51 EDT

I believe the docs for Toolkit is the last file uploaded in GEOS application library #1. Unless someone has since added another file. At any rate, it will be close to the beginning of the browse. :) JB :)

Message 13 Mon May 30, 1994 B.MASSE [BIG BOB] at 11:12 EDT

> I was using WordWriter128 before getting The Write Stuff. I wasn't very impressed with it at all. The one drive limitation was a killer!

- WordWriter 64 is limited to drive 9 and drive 8, but works off the RamLink in swap mode. It has DOS commands that support switching partitions on CMD devices also. The program has a install program that defines what drive your spell checker and thesaurus can be found on. :}

> You and I both have experienced the annoying "side-flip" in geoWrite 64. - Ditto.

> I also have GeoWrite 128, but when I use GeoWrite 64 I usually set the margins so that I don't get the "side-flip", and then when I'm done with the document, I just use toolkit to set my rulers, etc. Tim..

- If I ever want to use GeoWrite 64 again I would write it with WordWriter 6 and

then convert it into a Geo Text Scrap and import it ! Even if the screen is only 40 col wide it takes forever to cursor down the page.... When I type letters in GeoWrite 64 I am usually a couple letters ahead of the program writing the characters to the screen. :} Bob ...if you can't dazzle them with brilliance, then dazzle them with BULLxxxT [Ed. Please this is a family Magazine - keep it down to a dull roar]

Message 17 Tue May 31, 1994
MRABOY at 22:10 EDT

I like geoWrite 128 with parallel printing from geoShell. This is easier to use then PaperClip III PaperClip has more features, but it is harder to use. I wrote a printer driver for the Kxp 1124, but geoWrite has better proportional printing. GeoShell makes geoWrite 128 the class word processor. end excerpts

Readers Three Wishes And All That ...

From Lance Bosanquet of McGraths Hill NSW, "Thanks for your great work in GEOSgenie, I know many people will benefit from your column. Questions : My REU is rated as 512K, but in GEOS we can only access 331K. From 'The HandBook of Commodore Disks' {**}, we are told that the directory takes up 19 blocks on each side of a 1571 disk, which in my reckoning is 9.5K (331+9.5 = 340.5).

When formatting the REU under KeyDos we are told we have 2013 blocks free (2013/4 = 503.25K [503+9 = 512]). This leaves 172K unaccounted for, is there any way that you know of to access this area, or is this area set aside for the DMA transfers and the RAM Reboot.

I have just acquired gateWay and have been having fun finding out how it works, most things are clear, but the manual does not mention some of the files on the disk, and the file information itself is not always there. Can you tell me what the file 'BorderCross' is for, and how it works. What does it mean to move files to 'border commons' ?".

Gg. Thanks Lance. Now, lets see. A 512K REU 'emulates' a virtual 1571 disk of 331K. The remainder, 181K, is indeed set aside for DMA transfers, RAM Reboot, and other business. From the section 'Configure Explained' in 'The World of GEOS HandBook III' we find that "when running GEOS with an REU, the Kernal will store all the drivers in it's [the REU] memory, {at memory locations $8300-$B8FF, in Bank 0} and swap in the proper one whenever the Application calls SetDevice ($C2B0)". So, your drivers are also held in the REU memory.

From the GEOS128 v2.0 Memory Map in the back of WOGHB III, we can see that the 'REU Bank 0' memory consists of the following KernalCopy-Bnk0 $3900-78FF, DiskVariable $7900-7DFF, ReBootCode $7E00-82FF, DrA-C-DOS $8300-B8FF, KernalCopyBnk1 $B900-FC3F. The remainder of the REU memory is used to emulate a virtual 1571 disk, to 331K. With the above, I am sure that you can see that "if you don't understand what you are trying to mess with, don't mess with it !". Which is a round-about way of saying, "No, you cannot access this area because it is not 'free' memory". [The figures above are given in hexadecimal. For more information on conversion from decimal to hexadecimal, refer to the sections 'Base Conversion Tutorial' in both 'The HandBook of the Commodore 128' and 'The HandBook of the Commodore 64'].

One thing to remember when calculating something like the directory, is that GEOS sets aside a 1K area on any disk, virtual or real, for the deskTop Border area {the Off-Page Directory Block}. You can read up about this in the section 'Examining GEOS Sectors' in 'The HandBook of Commodore Disks'.

Now, for GateWay, and a thing called 'BorderCross'. BorderCross is a BASIC program for starters. A printed addendum sheet came with my GateWay128 v2.5, and this is what it has to say about BorderCross. "This gateWay document allows users of CMD device Native partition sub-directories to place up to 8 files into the Off-Page Directory Block. This special directory block is automatically appended to any sub-directory viewed within that partition, thus giving access to those files no matter which sub-directory you are in". Which only shows that I can read printed text like any one else. Since I do not own a CMD device, FD or HD Series, and therefore haven't used the program, I consequently cannot be of much 'applied' help to you Lance. Sorry about that, but I hope it helps in some small way.

Next month in the column, I am going to show you how to go about modifying an icon that a program produces as a data file. The simplest description of what I mean, is the standard geoPaint data icon that the Paint Pages driver produces. To do this, we are going beyond the confines of GEOS that we are used to. Between now and then, try and imagine how I might do this. Until then, happy GEOSing.

Send in your comments, or great GEOS discoveries, and I will respond when I can in this column, unless you wish a private reply, in which case please send a SSA{Business}E and I will write you back. Special thanks to Rick Coleman {Photo Mover fame}, our USA GEnie BBS correspondent for your continued support, and to Michael Renz {Performance Peripherals Europe}, our German correspondent, for your continued support. Also, special thanks to Jeff Carey of C64/128 Public Domain Software {SA} for the temporary loan of a BBRTC for use with GEOS, on the number two C128D.

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Blair Athol
South Australia 5084

{**} The World of GEOS HandBook Series {I, II, III}, The HandBook of Commodore Disks, The HandBook of the Commodore 128, and The HandBook of the Commodore 64 are currently available from JMV Grafix

¶

128'er

INTRODUCING!

It is my pleasure to introduce a new writer to our pages this month in "128'er". He has had considerable experience in using and programming the 128 over the years, and I'm sure he will be a valuable acquisition to C.N. with his occasional articles. You never know, he may even take on the challenge of writing this page on a regular basis.

INTRODUCING THE 128

The 128, as a lot of people no doubt know, has the capability to access 16 banks of memory, although only a single bank at a time. Most have only the standard two memory banks available, like mine. Imagine the power we'd have if all these banks were available at one time. It's hard to imagine that the 128 "could" have a staggering 1,048,576 bytes of memory. That works out at 65,536 bytes per bank, multiplied by the 16 banks. Personally, I wouldn't know what to do with it all! However, I am sure someone could no doubt try and fill it! Big task!

If you do need to use massive amounts of data and you are concerned about running out of memory, you can just store it to disk in a file to be accessed as needed. I have yet to run out of memory on my standard set-up.

The two banks our 128's come equipped with serve two different purposes. The first bank holds your BASIC program/s, and the second bank holds any variables being used by the software.

I write my programs in BASIC, as, I must admit, I just can't get the hang of Machine Language. Even though ML leaves BASIC for dead in the speed department, a lot can be achieved using this language with a little thought and experimentation. BASIC 7.0 is easy to understand because the instructions (commands) are in "plain" English, and are fairly easy to comprehend. For example, a PRINT command will cause something to "print".

PROGRAMMING

When I write a program, I design it to be primarily functional, and I therefore tend to leave off all the "bells" and "whistles" that another programmer may well include. The program itself is made as simple as possible, without documentation. If some form of instruction is absolutely required, then I have the it presented on-screen as and when required.. Most of the little bits and pieces I use are of my own creation, and I therefore am familiar with their operation. However, if you were to be programming a routine for the use of others unfamiliar with the way the program was put together and is meant to be used, it is important to remember that they will be unfamiliar with your work of programming genius, and to supply ample information for them to be able to at least have some chance of a problem free session with your program. It's also worth remembering that it is just a little embarassing to have your best program, the one you've been telling everyone is "foolproof", and spent hours, days, perfecting, "fall over" just because someone decided to press "A" when they should have pressed "C". In other words, you shouldn't need to be sitting there, guiding the end user through each motion. You should be able to walk away and leave them to it! If they can't "drive" your program, then I bet they will soon tell you!

Probably the best way to "test" a program for its "user friendliness" is to locate someone to put your software through its paces. Quite often, if there is a fault in your program, these "test pilots" will find it! "Test pilots" are also a good way to generate "feedback", and can quite often give you ideas for improvement of functionality or user friendliness.

Our 128's have so many features that it is difficult to mention them all. Three computers in one, programmable function keys, excellent editing features, a top BASIC, and a built in ML Monitor available at start-up, and much more!

BASIC 7.0

The 128 has an extended vocabulary when compared to the C64, with some 170 commands being available in the native mode as compared to 70 in 64 mode. Naturally, this extended command set makes some tasks a lot easier in 128 mode. To illustrate the point, let's read a RELATIVE file from disk:

In 64 mode, it takes from seven to eleven lines of code, depending on whether the relative file uses fixed or variable length fields. In 128 mode it's:

```
RECORD#n,r,b
```

Where n is the logical file number, r is the record number, and b (optional) is the first byte from which to read. Lot of difference, eh!

Graphics production is also greatly

simplified. I can draw something on the 128's graphic screen, but just couldn't be bothered finding the peeks and pokes to draw the same thing in 64 mode! Sound and music is relatively easy on the 128, not that I use them much, and it is reasonably easy to create a noise or string together a few notes. But try it on the 64 and, well I can never remember those peeks and pokes, so the situation is similar to that with graphics. Here's a simple way to get your 128 to make a noise:

```
PRINT CHR$(7)
```

The CHR$(7) is the character code for the bell tone. Don't get me wrong, though. The 64 IS a terrific machine, but the 128 makes everything just that much simpler.

All your standard BASIC 2.0 commands, as used by the 64, are understood and are included in the 128's vocabulary. For this reason, a BASIC program written on the 64 will quite happily run on the 128 in its native mode, PROVIDED that it does NOT contain machine specific PEEK's and POKE's. It will be a bit slower, because the 128 has far more commands to "look" through. If you do have a 64 routine that works ok in 128 mode, try running it in 0 column mode after issuing a "FAST" command. This will kick your 128 into 2 mhz fast mode (normally the 64/128 operates at 1 mhz), and thus your program will run twice as fast.

The most annoying part about running these BASIC 2.0 programs in 128 80 column mode is the fact that they only use the left-most 40 columns of the display. It would be nice to have your routine run in the middle of the 80 column screen without having to alter output on the C64 or C128 40 column screen. Well, let's see what we can do!

We could use the WINDOW command, but this makes the program un-useable in the 128-40 column mode or, for that matter, in 64 mode. The C64 will come to an abrupt halt, reporting a SYNTAX ERROR when it encounters this new and exotic "WINDOW" command. In case you were wondering, a "SYNTAX ERROR" is issued by the computer when it encounters a command that it doesn't understand. this can be caused by a typing error, or, as in the above example, by the issuing of a command which doesn't exist in the computer's vocabulary (WINDOW is quite acceptable to the 128, but to the 64, it's something it's never seen before!). Anyhow, back on subject. Here is a line of code that will achieve what we want to do. It is invisible to our 128 in 64 or 128/40 column mode. All you need do is add it to the start of your program! The routine will still run in ALL modes, just as before, but the display will be centred in the 128's 80 column mode:

```
10 IF PEEK (231) = 79 THEN
SCNCLR: POKE 230,21: POKE
231,60: FAST
```

What this line does is actually disguise the performance of the WINDOW command. The 64 and 128 in 40 column mode are made to ignore the lines contents by performing a check on location 231. If the value stored here isn't 79, the program skips the rest of the line and proceeds as normal. If, however, the value IS 79, the rest of the line is read and acted apon. "79" is actually the right most part of an 80 column screen WINDOW (an 80 column screen contains locations 0 through to 79), and therefore, when operating in either 64 or 128/40 column mode, location 231 (which holds the rightmost screen location value - 39 on a 40 column display) can never hold the required content.

Once the computer has passed this first hurdle, a Screen clear is performed (SCNCLR). Without this everything outside of the WINDOW will remain, spoiling the display. This MUST be done BEFORE the other commands are issued. Location 230 is now filled with a 21, thus setting the leftmost column of our display, and location 231 is assigned a value of 60 to stipulate the rightmost edge of our window. We then, at least in this example, issue the FAST command. This is not necessary, and can be left off if so desired.

In effect, what we have done is set a "window" starting with its left margin at column 21, and its right edge at column 60. This gives us a centred 40 column display. And, in this example, we have also decided to take advantage of our 128's enhanced operating speed capabilities, and issued the FAST command.

Here is another way of tackling the task. What we do here is actually PEEK location 215 to see just what mode our 12 is operating in:

```
10 IF PEEK (215) = 128 THEN
SCNCLR: WINDOW 21, 0, 60, 24:
FAST
```

This line does exactly the same thing as the previous one, but in this case, we start off by looking at location 215 to ascertain the operating mode. In 40 column mode this holds a value of 0 (zero), in 64 mode, a value of 13 is held, and in 80 column mode we find a 128. Just as in the previous example, the rest of the line is ignored if the first argument is incorrect, that is, if either 0 or 13 are found in this location.

By the way, the 128 in 40 column mode can use the FAST mode, but the screen will go blank as the VIC chip just can't keep up at 2 mhz. If your 40 column program has to do a lot of calculations or whatever, then issue a FAST command. Then, when the work is complete, issue the SLOW command to switch back to 1 mhz and get your display back. For example, if your 40 column program has to draw a complex graphics screen that takes some time to complete, issue FAST. When the "drawing" is complete, use SLOW to see the picture.

ADDENDUM

I don't know where I picked up that first multi-screen mode trick, but I was experimenting after I wrote this article and came up with the alternative. You can never stop learning, can you?

And of course, those who have compilers can compile any program containing either of these lines, as a compiler just treats it as a normal BASIC line. Of course, if you choose to compile a program, it will then only run on the machine type it was compiled on (no 64 mode if compiled in 128 mode, no 128 40/80 if compiled in 64 mode).

¶

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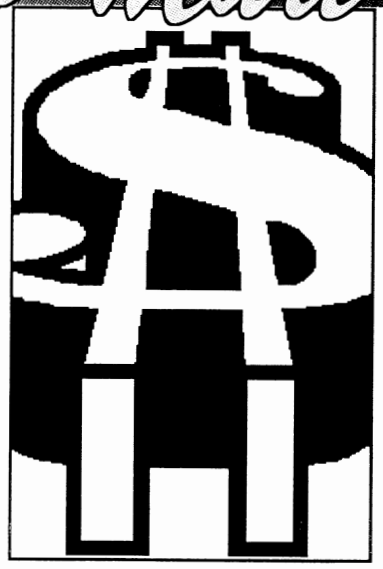

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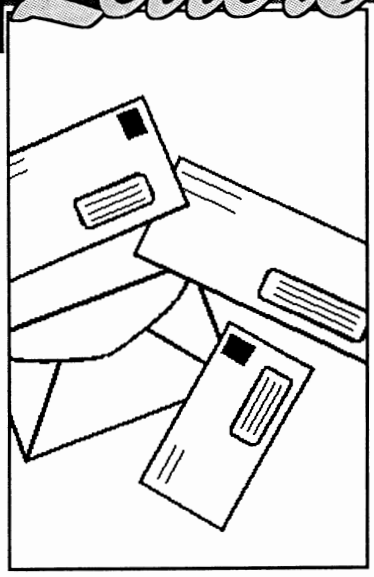

HELP FOR GEOS USERS

First off this month we have a letter from Jeff Gale of Unanderra in N.S.W., who writes:

Just a note to let you know that I have started a small business dealing in help with problems in GEOS.

My main reason for starting this venture is not so much to help the committed GEOS user, but to help the newcomer, the person who does not know which printer driver to use with their GeoCable, which third party program (P.D. or shareware) to complement their application.

So, for a small fee (we all have to eat), I hope that I will be able to be of srvice to GEOS users on the east coast of our great land!

Thanks, Jeff. I hope newcomers to GEOS will make use of your services. All the best in your enterprise.

POSTAL WRAPPER

Still in the Premier state, and Les Fletcher has this to say:

On one or two previous occasions, the only thing holding the wrapper and the magazine together was a genuine Australia Post issue rubber band. Have you had any other comments about the way the magazine is packaged for posting? It may be that you need to make some changes to the method of binding the wrapper.

I can't remember having received any other complaints re wrapping, but that is not to say that problems don't exist. I do rely on input from other readers here, so if anyone else has had problems with the postal wrapping, please let me know.

STAPLE DIET

Since I like the place so much, let's stick to N.S.W. for a while yet! Bodo Schwarz is our next correspondant, and he writes:

I have received the November issue of Commodore Network yesterday. Your concerns in regards to the staples prompted me to sit down and write a few lines. As far as I'm concerned, you can forget about the staples, and I would quite happily receive C.N. without them.

I'd like to congratulate you for what you and your helpers have achieved with Commodore Network, I certainly look forward to each issue.

I consider News Watch, GEOgenie, Clublink, damn, the whole magazine except "Page 128" (I don't own a 128) a "must read". Keep up the good work.

At our last User Group meeting (Wollongong C64/128 Club) we had the pleasure of seeing the demonstrations put on by Russell Alphey. I'm looking forward to a full review of Fast-8. The C-65 certainly made a lot of members drool!

It seems that the "YES" vote to there being NO staples in C.N. is overwhelming. I've yet to receive a letter from anyone complaining about their absence.

It's always good to get a positive feedback re the publication. A lot of hard work goes into producing each issue.

I must admit it was great being able to arrange for Russell to take Fast-8 and Commodore World magazine with him on his great C-65 tour. I have been wanting to put together some form of C64/128 exhibition for some time now, but have lacked the time and resources to implement the idea. Russell's trip at least gave us a chance to show off a few things that are available to 64/128 users.

MPS 1230 PROBLEMS

OK, change of scenery, and over to South Oz, where Aaron Kernbach writes:

I am writing to you in the hope that you may be able to help me.

I have just purchased a second hand MPS 1230 printer. unfortunately it did not come with a manual. It seems to work fine. my problem is that I'm not sure how to connect it to my computer. The cord is set up like this, with 25 pins:

. . . . . .

. . . . . .

There is a socket in the printer for a 6-pin cord like the one used to connect the 1541 disk drive to the 64, but no such cord exists.

The 25 pin cord is connected/bolted to the printer and unable to be removed. Do I need an interface of some sort? Am I missing a cord?

I gather the printer can't use a 6-pin cord, since I connected one of them

from the printer to the disk drive, which in turn was connected to the computer. the programs which I run stated the printer wasn't connected!

Any help you can offer would be greatly appreciated.

Please keep up the terrific work with Commodore Network. It provides wonderful support for us C64 users.

Firstly, Aaron, your new acquisition is designed to be used by a Commodore using the 6-pin serial cable. Your problem probably stems from the fact that the printer itself is probably set in one of the "emulation" modes. The MPS 1230 offers the user the "luxury" of three separate printer emulations, which, when one is new to the printer, and/or the documentation is unavailable, can be a bit of a problem initially.

You may need to program your printer for Commodore serial data transfer by following this procedure:

1) Insert paper ready for printing. The options will be printed out on the sheet one at a time as you respond.

2)Turn your printer ON while holding down both the LINE FEED and FORM FEED buttons.

3) Confirm or deny each setting as it is presented. You do this by pressing the LINE FEED button for "YES", or the FORM FEED key for a "NO", until the last option is presented. The printer will then save these parameters as the default for future use. If you wish to stop the procedure at any stage, use the LOCAL key and you will be prompted with "WOULD YOU LIKE TO STORE THESE PARAMETERS?". Use the usual procedure to indicate a YES/NO answer. Now for the options you will be presented with:

INTERFACE: Select "serial Commodore" if you intend using the serial cable.

PRINTER EMULATED IN PARALLEL AND SERIAL COMMODORE: Select IBM G.P.

CHARACTER SET IN PARALLEL MODE: Choose international 1

CHARACTER SET IN COMMODORE MODE: Go for US/UK - unless you like writing in another language, of course!

OPEN MODE: Select "4 Commodore commands"

Once this is all done, and you answer whether you'd like to save the defaults or not, a "Changes Executed" message is printed out, indicating that you have successfully completed your task.

With luck, your printer will now be online and operating. If not, your software may be using the wrong printer drivers, and it may pay to investigate this angle.

You should also find that the parallel cable currently affixed to your MPS is removable by unscrewing the "nuts" and springing the clips at either side of the cable head. If this cable is suitable, you may find that the other end will plug into your user port and is useable by you as a parallel cable.

JUST VISITING!

OK, back in N.S.W., where Rod Graeber writes:

I spent the better part of last week in the Cobram/Yarrawonga area. I am a Psychiatric Nurse by profession, and some colleages of mine and myself took about 14 clients on a camping trip to Bourke's Bend (Bourke's Beach No.3) to be precise. We were actually in Cobram on the Thursday morning. I had a cursory look around for Wadeson Street, but didn't see it. Pity, I felt sure you would have appreciated a busload of people with varying degrees of psychiatric impairment dropping in for morning tea. Oh well, there's always next time.

Oh, I must say, I have never seen a neater, more manicured town then Cobram. It seems that there is not a flower or blade of grass out of place anywhere. Blew me out! I was afraid to pass wind until I got out of the town limits! Seriously though, you do have an impressive little habitat. I will return next time with my family.

See, I told you Cobram was a great place! Terrorist . . . er, I mean tourist capital of Australia! It's probably just as well you didn't pass wind within the town limits, we have pretty strong anti-noise regulations passed by the local polititians - anyone making more noise than they do (and believe me, that takes some doing!) is in trouble!

As for visiting 9 Wadeson Street, well, everyone's welcome, even Psychiatric Nurses!

MORE MPS 1230 PROBLEMS

Up in Old Bar, N.S.W., and Bill Bratby writes:

I'm here to worry you again, but, heck, isn't that why your boss pays you?

I need some advice regarding a cable for my MPS 1230 printer, amongst other things. Quite some time ago you produced an article titled "A Question of Cables", wherein you expounded the virtues of GeoCable Deluxe.

I know that you don't have an MPS 1230, but that quite a few fellow readers do, and I hope someone will take pity on me and put me out of my misery (What about it Don?).

My son uses GEOS to produce assignments for his homework, and it really gets up his nose when he can only print 75% of the page. Here are the points I need explained:

1) My 1230 is set up as a Commodore and the interface is Commodore serial. If I buy GEOCABLE, will this by itself allow me to print a full page in GEOS? or

2) will I also need to set up my printer differently?

3) If I reconfigure my printer as in 1 and 2, to emulate, say, an FX0, can I do all my GEOS and non-GEOS printing without having to alter anything?

4) I've read so many references in geoNEWS and C.N. (including advice to Barbara Muir, Tas, from Artie) on setting up an MPS 1230

which mention DIP SWITCHES. Mine ain't got none that I can see, and the user guide doesn't give them a mention. Can someone tell me about these fellers please?

I should have mentioned at the beginning that I must be a real dummy. This should now convince you of that. Ignoring all my previous ravings, and treating this as completely separate, should I ever decide to emulate an FX80 (not using GeoCable), will it work using the serial cable I now use? themanual tells me to set up with a PARALLEL interface setting, but will the 64 talk to the 1230 through the serial cable?

DIAGNOSTIC/REPAIR BOOKS AND WHERE TO GET 'EM!

Bill goes on to write, in a second letter:

It's me again (or should I say still). At the risk of making myself unpopular, I'm adding these questions before the mail closes.

I commenced my subscription with the first issue of C.N., and I've cut out everything which interested me, having built up quite a collection of articles which fill four binders. Like a dope, I used to throw away anything that did not take my fancy.

I have now seen the error of my ways, and have lately been keeping these unwanted pages, but not soon enough!

Possibly as long ago as a year, maybe more, I think it was you who commented on how very helpful was a certain bookshop proprietor lacated in Tasmania, and gave the name and address of the firm. A few months ago, Richard Pacey wrote to "Letters Link" re problems with his C64 keyboards. you reffered him to Campbell Computer Care, and in the next issue, or possibly the one after that, two people replied. One of these replies referred to a book he had on diagnostics. He named it, and I would like to inquire as to its availability from the Tassie firm.

What is this? Fix all your MPS 1230 problems month?

It is true, I don't have one of these printers, but I have recently acquired a copy of the manual and have been putting together a rather extensive "snippets" library for reference. Whilst on the subject of manuals - if anyone has some old, unwanted manuals laying around the place, I can give them a good home, and put them to some use in helping other Commodore owners.

Now, back to the problem/s at hand:

1) To print a full page in GEOS, you will need to set your printer to an emulated mode capable of printing out at 80 dpi and to have installed a suitable printer driver (Proprinter or FX80) as well as using a GeoCable.

2) Answered above.

3) If you alter your printer for 80 dpi GEOS printing, you WILL need to make alterations within the other programs you use to access the GeoCable. This will involve either a printer driver change, as in Superscript, or you may need to change the printer device number (to reflect the use of the User port instead of the serial port) accessed within the program. This can be as simple as changing a "4" to a "5". It may also pay to ensure your software outputs as TRUE ASCII instead of the PETASCII supplied by Commodore.

4) See Aaron Kernbach's letter earlier in this column. Apparently two versions of the MPS exist. One with DIP switches, the other without.

Lastly, to the best of my knowledge, you can not access FX80 mode via a serial cable. This would be simply because the MPS, acting as an FX, would be looking for incoming data on the PARALLEL port, not the SERIAL port, and would ignore the latter.

Now, your second letter. The Firm you are looking for is Ellison Hawker (recommended by Mick King), and the book is "Commodore 64 - Troubleshooting and Repair Guide" by Robert C. Brenner and published by Howard Sams and Co., ISBN 0-672-22363-5 (thanks to Roy Hansen who supplied the initial info). You can contact Ellison Hawker by writing to : Ellison Hawker Pty. Ltd., Box 304C, GPO, Hobart, Tasmania, 7001, or phoning (002)34 2322 or faxing (002) 34 5481.

MORE ON AUTOBOOT!

From Jane M. Jones of South Australia.

Following on the interesting 'Page 128' discussion on Autobooting [CN Oct94], and Gordon Wormald of Canberra's corresponding comment in the 'Letters Link' [CN Nov94], on Collect wiping out the Boot sector in the BAM, I would just like Gordon and other readers to know-about / remember a C128 80 column program reviewed in an earlier issue [CN Aug93] . This program is "Profile.80 Plus Mod3" (*), and it correctly and easily, with the convenience of built in comands, creates a 'protect file' for the AutoBoot track. And when it comes to Collect (disk validation), the program checks for, and handles the allocation of the AutoBoot track at Track 1 Sector 0 within the BAM, all in one go. There is no need to resort to sector editing programs, and other fiddly things, that require extensive knowledge of CBM disks, although a good thing to have on hand at such times, is a good reference source on CBM disks like "The HandBook of Commodore Disks" (**). Unfortunately the program 'Autoboot Maker' referred to, from the '1571 Test/Demo' disk, doesn't protect the boot track from being overwritten at a later point in the disk's use, wheras "Profile.80Plus Mod3# handles all of this effortlessly for the user. Nothing could be more simple.

(*) Profile.80Plus Mod3 (**) The HandBook of Commodore Disks, are products currently available from JMV Grafix.

Bit of gratuitous (free, even!) advertising, eh, Jane? Well, good on you. It's important that people know what's available out there, especially when they are of the quality of those mentioned above.

DISK-COVERER MENUS

And lastly, from E. Gordon

Wormald of Canberra comes this tome:

Naturally I checked when the November Disk-Coverer disks arrived today, and Hooray! - both versions of NEW TITLE/ID work!

But my gripe is why can't the 64 version be loaded from the menu? Or for that matter, items B - F? Why does the menu include self-reference, and what is a demo-lader? (sic).

I presume NEW TITLE/ID.64 went into the magazine disk rather than utilities for its wider coverage? But why was the .80 version not mentioned in the C128 summary? After all the discussion about AutoBoot, why doesn't DC #10's 128 disk? Why is its menu cluttered with useless entries like "menu 128", "menu:run first", etc, etc.?

TEN FUNCTION KEYS

Gordon goes on to say: It seems strange that you have not come across the simple BASIC that facilitates programming the SHIFT-RUN and HELP keys. Your suggested six lines of code could be replaced by:

```
10 BANK 15:SYS
24812,,8,,,"RUN"+CHR$(13)
```

Similarly, for HELP, except that 9 replaces 8 in line 10 (note that these numbers are 1 lower than the values allocated "z" in your code). As an example, I quote from my "FRIENDLY BOOT" used to initialise my 128's without RAMLink.

```
160 BANK 15: SYS
24812,,9,,,CHR$(17)+"BANK0: IF
PEEK (52736) = 17 THEN SYS
52737: ELSEBL<SHIFT-O>" +
CHR$(34) + "BOOT 1.X" +
CHR$(34) + ":SYS 52737 "+CHR$
(13)
```

This also illustrates how function keys can exercise choice in their programs, something not often required, but potentially quite valuable. I enclose a small prize for the first reader to explain, to your satisfaction, what this help code does.

GOOD ON YER BOB!

I could not trust myself to set pen to paper on the question of circuit diagrams, but Bob Morrow is to be congratulated for getting the necessary points across so clearly. He is obviously one of those experienced (sic) people.

NEW TITLE/ID.64 was included on the magazine side of Disk-Coverer for two reasons. The primary one was that the three 64 disk versions (Applications, Entertainment, and Utilities) were all complete. Both the "magazine" and 128 disk sides tend to be open for alteration for a longer period as I take care of them myself, and they continue to be modified right up until I send them off to Bev (Brown) for copying. NEW TITLE/ID only arrived shortly before I sent these off, and as a result were part of the last modifications, unfortunately, it appears as though I forgot to update the magazine menu (as well as the 128 summary) in my rush. It seems as though "Easy-Loader" was also a victim.

There is no doubt we need an update to the disk menuing systems used, and hopefully, I'll get time to do something about it soon! By the way "Demo-Lader" is German for "Demo Loader", and is the boot for a demo of the difference in operating speed between a standard 64 and one fitted with FAST-8.

Thanks for the programming info, I'm sure many a 128 user will find the input invaluable.

As for Bob, well, I've said it many a time before! Don't take it for granted that I'm some sort of Demi-God. I'm just a mug punter like so many of you. I need the sort of feed-back that people like Bob, Gordon, or anyone else, can supply. How else am I going to improve!

¶

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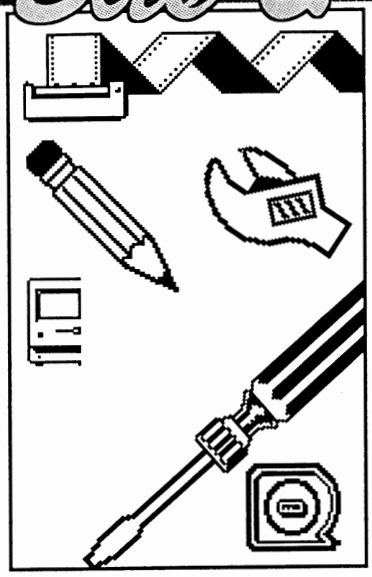
Bits & Pieces

Warren Naismith



This month, let's have a look at a few techniques for getting the most out of the "LIST" statement!

LISTING FROM WITHIN A PROGRAM

OK, want to execute a list from within your program? This tiny routine will do that for you! But, because program execution will halt when a listing is called for, we have arranged for the routine to POKE the word RUN into the keyboard buffer, and to execute that command as soon as the listing is completed.

```
10 FOR I = 631 TO 634: READ A:
POKE I, A: NEXT: POKE 19, 4

20 DATA 82, 85, 78, 13

30 LIST
```

FIX IT WITH LIST

List can be a mighty handy tool for debuggiing your programs!

I've often come across "SYNTAX ERRORS" without finding the corresponding fault to be obvious once the offending line number is listed. That is because not all keyboard entry faults will show up when the program is LISTed.

Here's an example: Enter the following:

```
100 PR<SHIFT-Q>INT "COMMODORE
NETWORK"
```

Now, if you run this, you will promptly get a nice juicy "SYNTAX ERROR". If you go on to list it, the <SHIFT-Q> will have dissapeared! Everything will look as it should!

You can fix it in one of two ways. Re-type the line completely from scratch, or, simply cursor up to the line concerned and press <RETURN>.

WHOA!

Listings going by too fast? Well here's a little trick for you that may help.

Enter:

```
POKE 56324, 28: POKE 56325, 0
```

Now, when you do a LIST, our Commy may seem to stall for a moment, but just wait a while and it will begin a very slow list-out. If you like things slower still, either press the CONTROL key or POKE a LOWER number into location 56324.

If you want to return to "normal" operation, just press the RUN/STOP and RESTORE keys simultaneously!

NO LIST

This little offering will stop almost any attemt to list out your BASIC programs. Enter this first line VERY carefully, with no embedded spaces except where shown. This line is designed to list in an unusual manner, so be careful!

```
0 P<SHIFT-O>2126,9:P<SHIFT-
O>2127,8:REM""<DELETE><CTRL-
RVS><28 * T><CTRL-
RVS/OFF><SPACE>REM<SPACE>"LIST
PROTECTED"
```

OK, done that? Well, don't RUN it just yet. Instead, make a direct mode entry as follows:

```
FOR X = 2125 TO 2127: PRINT
PEEK(X): NEXT
```

Now, if three zero's are printed out, line zero is the correct one to work with. If three zero's don't appear, re-enter the direct mode line (the last line typed). Once you have three zero's, enter this:

```
10 PRINT "COMMODORE NETWORK"
```

Now, if you run the program and then list it, nothing but the last part of line 0 will appear.

To protect a program, just append it to this piece of magic. the program can be freely saved and copied in it's protected form, but any attempt to add or delete lines will corrupt the program.

SAFE DIRECTORY

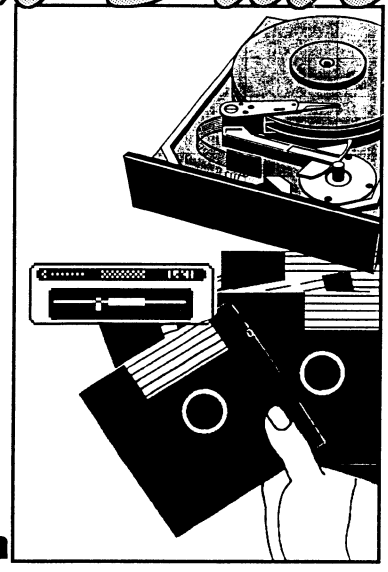
Want a directory, but don't want to loose that program in memory? Try entering this in direct mode:

```
POKE 44, PEEK (46) +1

LOAD "$", 8

LIST
```

when you've finished with your directory, just type: POKE 44,8, and away you go, back to your original program!

¶

The 1541 Disk Drive



Part #1

by Neville Thorburn

Editorial Comment:

One of the most common types of queries I receive here at Commodore Network is to do with maintaining peripherals. It is getting harder and harder for a Commodore 64/128 user to find someone you can trust to maintain and repair your hardware for you, and it is left more and more in the hands of the home hobbyist. In this article, the first of what I hope will be many, we will look at the 1541 and 1541 II, setting the ground work for more in-depth articles to follow in coming months. In the mean-time, I am looking for articles on the repair and maintainence of any Commodore 64/128 peripheral, and, indeed, on the computers themselves if anyone out there feels they would like to contribute.

THE FIRST LOOK AT YOUR DISK DRIVE

I've fiddled around with my drives a lot over the years. Experimenting, learning, exploring, reading, and in all that time I've learnt a lot. Especially over these last few months since Warren lent me his copy of Commodore Computer's official "Service Manual for the 1541/1541-II Disk Drives". Naturally though, there was a catch, and this is the end result of that "catch". A series of articles on maintaining and repairing your 1541.

So let's start off by doing a run-down of the drive's specifications. Most of this will be familiar to the majority of you, but it is essential background information. Let's go!

GENERAL DESCRIPTION:- An external 5 1/4" floppy diskette recorder offering high-speed (according to the Commodore service manual) and capacity for programs and data. An intelligent device, it contains its own microprocessor, RAM, ROM, and operating system software. This produces a faster throughput and greater memory efficiency within the attached computer.

MAXIMUM STORAGE:- 170k of data when formatted. 35 tracks.

MEDIA:- 5 1/4" floppy disk. single-sided, single-density, soft-sectored. Double density can also be used, but is unnecessary.

INPUT/OUTPUT:- Commodore Serial Interface. A second serial port is supplied for chaining another drive or a printer.

CONTROLLER:- MOS 6502 microprocessor operating at a clock speed of one mhz.

MEMORY:- 2k RAM, 16k ROM

DATA TRANSFER RATE:- 400 bytes/second.

FILE TYPES:- Program, Sequential, Relative, Random-access, and User.

NUMBER OF FILES:- Up to 144 different files per disk.

COMPUTERS:- Suits C64, VIC 20, SX64, Educator 64, Plus/4, C16, and 128 (all models)

MEDIA COMPATIBILITY:- diskettes formatted on a 2031, 4040, C1551, C1571

POWER REQUIREMENTS:- 120 volts AC at 60 Hz.

POWER CONSUMPTION:- 30 Watts maximum.

SOME BASIC TIPS FOR DRIVE CARE AND MAINTAINANCE

1) Don't use magnetized screwdrivers or other magnetized tools in unit repair or adjustment.

2) Don't place the drive near any device that generates static - motors, radios, etc.

3) Don't stack your drives one upon the other, or in any other way inhibit the air flow around each unit. Heat build-up can cause failure!

4) Clean your read/write head regularly using 90% isopropyl alcohol and a CLEAN cotton swab. Check the load pad for wear, and clean and replace as necessary.

OUR 1541

OK, let's get in a little deeper, shall we? Our 1541 is, as you will have noticed if you read the specifications, an independant memory device. It's essential components are a media clamp rotating mechanism, a head positioning mechanism, and an eject

mechanism. Read/write head positioning is controlled by an internal guide mechanism.

Upon closing the drives front door, the device's media clamp swings into action and performs two functions. The first is to centre the diskette, and the second is to clamp the diskette and retain it between the spindle and the hub.

The spindle and hub rotate at a rate of 300 r.p.m. through a closed loop control circuit using a D.C. motor/tachometer. The solidity of contact between the head and the media is of extreme importance during disk activity for correct operation. This being so, the pressure pad is used to hold and press down our disk with a force of about 12 grams from the opposite side of the disk to the head.

The head assembly is joined by a metal band to a four phase stepping motor. This motor is responsible for the track positioning of the read/write head within the drive, with a single step of the motor being the equivalent of a movement of one half a track. The control circuit positioned on the logic board selects the direction and the number of steps to be moved.

A glass-bonded, ferrite/ceramic mirror-ground head is used for reading/writing. Design is such that maximum signal is obtainable from the media. The "mirror ground" finish of the head minimizes friction, wear, and tear. Track to track erasing is accomplished using the "straddle erase" method.

The spindle drive motor works on 12 volts direct current. The speed of the drive motor is controlled by a feedback signal from the tachometer which operates on a servo amp that supplies the 12 VDC drive current.

OK, that's pretty dry and boring, isn't it! Well, it serves the purpose of giving you a general overview of your drive's operation, and therefore (I hope) a solid basis for our further discussions in later issues of C.N.

Next month, we'll look at the "flash Code", the means by which your drive can tell you of its problems, and we'll also look at diagnosing possible drive problems using a chart as a rough guide.

'Til then, See ya!

¶

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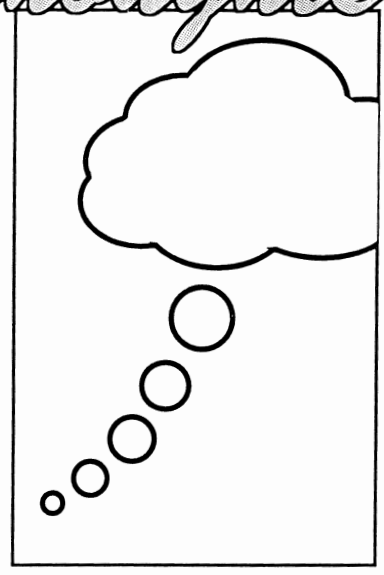
E. Gordon Wormald Afterthoughts



On our last Disk-Coverer, we included two programs, "NEW TITLE/ID.80" and "NEW TITLE/ID.64" that were programmed by Gordon. "NEW TITLE/ID.80" is found on the 128 disk exclusively, whilst "NEW TITLE/ID.64" was included on the "magazine" side of ALL disks. This article presents some afterthoughts on these programs as presented by Gordon.

Seeing NEW TITLE/ID again made me realise that MY programming was not quite as bright as it should have been. Since some readers could be interested in how it could be improved upon, and in some of the details of the programming of my logo, I decided to write this little offering.

Concerning lines 2-7

One of my aims was to screen a coloured logo in chunky (keyboard) graphics whenever the program was RUN or LISTed. As usual, hurry wastes time! in haste, I overlooked the possibility that the same code could be effective in either circumstance.

Clearly, to achieve the LISTing effect, I had to employ the "colourful REM" technique, in which various unusual characters produce unusual PRINT effects (see RUN Special Issue 1985, p.133-4). Lines 5-7 contain REM's which are ignored when the program is RUN. Their structure (as detailed later) provides that, when LISTed, the logo is screened. What I overlooked was that these same effects can be executed when the program is RUN as well! As a result, I provided unnecessary PRINT statements for the logo display (lines 2-4). These can be eliminated by changing to:

`2 LIST 5-7` : for the logo. When RUN, some extra text is screened, so:

`3 PRINT "<HOME><DOWN><TAB 4>NEW TITLE/ID.80<DOWN><REVTAB 2>" :` Puts text across from the top of the logo.

`4 PRINT "<DOWN 2><TAB 2><RIGHT 4>1988 BY E. GORDON WORMALD. THIS PROGRAM IS FREE TO USE<SPACE 38><LIGHT RED>PROVIDED IT IS NOT CHANGED IN ANY WAY<DOWN 2>"` : Puts the copyright message in place.

That's all, folks! Unless you are interested in the actual 5-7 REM's (Hint: much of their constitution can be seen by LISTing them to a printer, like: `OPEN 4, 4, 0: CMD4: LIST: CLOSE4<RETURN>`)

I say "much" because most printers cannot decode some of the control codes, and no printer could ever disclose "constructional" codes which disappear after they have had the desired affect.

The coding of such REM's can be tedious, partly because of the fact that their original enunciation has to be kept on-screen, and partly because you have to work at two interleaved levels - setup and effect. Unlike normal code, you cannot LIST the line to recover it in the form necessary for modification. There are other ways, but it appears that the simplest (albeit roundabout) way of constructing a BASIC line is to start with:

`5 REM"` followed by a reversed back-slash symbol or shifted-return, which is necessary to initiate print mode interpretation of its following control symbols when LISTed. However, that symbol cannot be entered directly. Instead:

`5 REM "<ESC-O><CONTROL-REVERSE><SHIFT-M>`

Not appearing in, but enabling the construction of a line, ESC-O temporarily suspends the quote mode to allow reversed characters. Now, the symbol generated by Reversed-Shift-M (for Shifted Return) is to be included in the line. Next we need symbols to condition the screen:

`5 REM <ESC-O><CONTROL-REVERSE><5 SHIFT-INST/DEL><SHIFT-M><SHIFT-CLR><DOWN><RIGHT><CONTROL-GREEN>` : Note how it is convenient to provide numerous insert spaces in one go. Clear, move and colour symbols need insert mode to be effective during LIST, as does the following symbol which begins the actual logo on the screen.

`5+ .....<CONTROL-REVERSE><SHIFT-POUND>` : There is no symbol to directly print the small triangular chunky graphic, but its inverse is reversible, as here. The next is:

`5++ ......<SPACE><COMMODORE-*>` : still reversed, for a solid chunk, then a different triangle. Then:

`5+++ ......<SHIFT-INST/DEL><CONTROL-RVS/OFF><SPACE>` : This time we need to unreverse for a normal blank.

And so on until line 3 is complete, holding the code for the first physical row of the logo. Lines 4 and 5 use the same principles, except that:

Each is rather longer, generating two physical screen rows.

Each includes movement symbols to reposition the cursor to the start of a row.

Each has to obviate visible listing like: `3 REM` (then cleared away, but not acceptable in lines 4 and 5). Instead:

`4 REM "<ESC-O><6 SHIFT-INST/DEL><6 DEL>` : plants Delete symbols in the text to "eat".

`4 REM "` immediately after it is listed to clear the row for continuation of the logo using the methods above.

Note that the lack of ESC and CONTROL codes will prevent these REMS being constructed on a C64, but they will run OK. I copy lines 5-7 into new programs to save a lot of work, but renumbering is fatal.

¶

The 1570 Disk Drive

Paul R. Williams

Many months ago there were at least two references to the 1570 drive, with pleas for information about them. Well, I've waited all this time for someone who REALLY knows about them to speak up, but in vain. So here's the little I have gleaned about this much maligned drive from various sources.

Firstly, these drives were apparently NOT the forerunner of the 1571 (not to mention the still-born 1572 dual drive - drool !). In fact they correspond roughly to Revision 3 of the 1571, and were released in Europe only as far as I can tell. The ones we have in Australia are probably the result of product runout or maybe small-quantity importing by some independent distributor.

In a nutshell, the 1570 is a single-sided version of the 1571, with all other attributes of the 1571 available - well, almost. For example, the 1570 will auto-boot, can operate at the 2 MHz "fast" speed, will operate in "burst mode", and operates under CP/M. It also has DIP switches for device selecting. However, there are some differences, and some limitations.

At this stage, you may wonder why on earth Commodore would bring out a drive like this, which must have been only marginally cheaper than a 1571, but with the crippling feature of only 664 blocks of storage, against the 1571's 1328 blocks ! Well, the reason is that the European hobbyist is generally not as free with the DeutschMarks as we are with our dollars, for many reasons mostly related to lifestyle, so that this drive represented an affordable step forward when the 1571 was likely rather out of reach. This probably also explains the great popularity of the C64 in Europe still. This is not to say they are poorer, rather, they have different priorities, dictated by different housing and social patterns.

Anyway, back to the drives.

The obvious difference between the two carries some clues to the internal differences - the 1570 is very like a 1541 to look at, which is largely because they have similar mechanics, no doubt being a key requirement of the price target. It is clear that the stepper motor and spin motor are not as advanced as the 1571, because the DOS ROM is coded with small delays to allow for lower speeds. My guess is that these are actually 1541 motors, but that is only a guess.

External differences carry through to the indicator LED's - the 1570 has the same colours as the 1541, green for power, and red for access or error. The 1571 is the opposite, which is a bit confusing if you run th drives together.

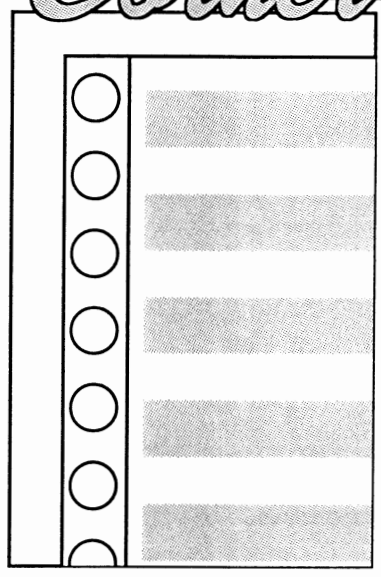
Then, the DIP switches for device changing - you see them on the 1571, but not on the 1570, though they ARE there. You have to open up the case to find them ! Pretty obviously, these cases were not a special run, just unused 1541c cases ! The operating system ROM is not the same chip, and can't be replaced by the 1571 chip, although all but about 75 memory locations hold the same info. The major changes are in the ROM Checksum, the BAM (which is exactly the same as the 1541), the maximum track setting procedure, the motor run-up delay and stepper timing, the directory track layout, and all the routines affected by these differences (such as the "format" process). I understand that CBM did not produce the upgrade ROM's for the 1570 in step with the 1571, but Rev 3.0 already had most of the 1571 bugs ironed out. CMD doesn't list a JiffyDOS ROM for the 1570, which is a pity, because JiffyDOS is programmed to the latest revision version.

Almost certainly, the optical stepper limit of the 1571 is incorporated, which makes a 1570 a better choice at least than a 1541, with its habit of being battered out of alignment. This feature appears as a small black tower near the rear end of the head rails, where a blade attached to the head interrupts a light beam to limit head movement to track 1.

All the DOS commands of the 1571 work with the 1570, with the exception (obviously) of the Head select and side select commands in the U0 group.

After all that, why then does the average 1570 owner suggest that it would be best used as an anchor for a small boat ? I must confess at this stage that I have never owned, or even used a 1570 drive (I did say that this information was gleaned from various sources, not including ownership). Anyway, I suspect that the 1570 gets a spot unreliable in burst mode, and possibly also in 2MHz operation, due to the slightly inferior motors, but probably the biggest reason for their bad name is

Continued Page 27



Wordstar Version 2.26

Alastair Hay

Wordstar, the great word processing program, came in many versions, one being version 2.26. Some readers may not have been able to get a copy of the final CP/M version, Wordstar 4, and if you have only got WS 2.26, then this article will help with setting up the following defaults:

1) On boot-up WS will log to drive B, saving you the chore of logging over each time you fire up the program.

2) Set HELP screen to 0 (Zero) so that you have the whole screen to write on.

3) Hyphen help shut off. This is so that when you reformat a file, the program won't keep stopping to ask whether something should be hyphenated.

4) Justification OFF. This is done so that text won't be squared off on the right side and you are not left with extra gaps between words displayed on screen.

These conditions will become the new defaults once you perform the necessary alterations. You can still toggle them on and off as required from the menus, just as before!

Well, let's begin. You will need a COPY of both your WS.COM and INSTALL.COM files on disk. Place this disk in drive A, and enter at the prompt INSTALL <RETURN>. It will now ask a series of questions. No, you don't want a first-time installation, select option D and give WS as the file name. Now select option U for no change to the next four questions, and YES, you are sure each time. Now, when it asks "Are the modifications complete?", respond with "N".

OK, we are now prompted for a location number. you will give it one. Yes, I will tell you which one in a minute. It will give you an OLD value, and ask you for a NEW one. You will respond by typing this NEW value in and hitting <RETURN>. You will then tell it the next location and repeat the process until you have finished, at which time you will enter a 0 (zero) as the location. INSTALL.COM will respond by exiting back to the A> prompt. Do not be nervous, remember, you are only working on a copy, and if you inadvertently give the wrong value, just give the location again and re-enter it. Now, before we start, place a disk with a few WS files into drive B because when you are finished, Wordstar will automatically log on to that drive. Here are the changes:

To Load To Drive B:

Location	Old value	New value
0101	10	50
0102	2D	03
0350	00	0E
0351	00	0E
0352	00	1E
0353	00	01
0354	00	CD
0355	00	05
0356	00	00
0357	00	C3
0358	00	10
0359	00	2D

To set HELP screen OFF

Location	Old val.	New val.
0360	3	1

To set Justification OFF

Location	Old val.	New val.
0386	FF	00

To set Hyphen help OFF

Location	Old val.	New val.
0389	FF	00

That is the end of the patches. Enjoy your new WS.COM. I think I have given Warren enough on CP/M for 1994 so I take this opportunity to say thanks for having me, and I hope some readers will become CP/M users. Merry Christmas and a happy New Year to all at C.N. and to all the readers. Thanks also to Mario Petrolati for joining in with some great CP/M information. please write again, Mario.

¶

John Buckingham

Welcome to 1995. Judging by what's happening in the 8-bit world this should be a great year for the 64/128 user. So much has happened during the last 12 months with users benefiting from new software and hardware. Many clubs are now beginning to take a different direction and once again memberships are beginning to increase. Remember that the clubs are now the only support we have for our machines so it is in our own best interests to give the groups all the support we can.

Many clubs are in recess over the Christmas break so many of you will be having a break from the computers as well I suppose. Did Santa bring you all the goodies you ordered?

Even though the newsletter competition is finished please keep sending me those magazines and newsletters as I enjoy reading them and keeping up-to-date with all that's happening. My thanks to Warren for judging the competition. I certainly didn't envy his job in that regard. My congratulations to the clubs that won prizes.

For those of you who live in or around Canberra please give some support to the club there. Phone either Matt Blydenstein on (06) 281 2714 or Ted Woodwell on (06) 281 6347 for any information. The South Coast section (Batemans Bay) appears to be still going OK but the Canberra meetings are not very well supported at all.

I have news from New Zealand that two clubs over there have folded, the groups in Wellington and the Waikato group. The North Otago group has now gone all Amiga so all these groups have been removed from the club listings. But for users in New Zealand the good news is that Jim Mullen is seeking to start up a postal group to offer encouragement and support for those of you across the Tasman. If you are interested either write or phone Jim. He would be happy to hear from you. His address is 110 Main South Road, Oamaru and his phone number is (03) 434 6026. I must apologise to Jim because for several months now I have been listing a wrong telephone number beside his name in the club listings. Sorry Jim. The problem has now been fixed.

Most clubs have now had their AGM's and their new office bearers for 1995 will have been elected. Congratulations to all those users out there without whose support as committee members many clubs would fold. Keep up the good work.

Keep that news about your club coming so we can all see how things are going with the clubs all around Australia and New Zealand. The address for this column is PO Box 244, WARILLA NSW 2528.

Bye till next month,

BUCKY

CLUB HAPPENINGS

Three clubs have recently held AGM's. The Wollongong club had the same committee re-elected for another time whilst at the Commodore 64/128 Club of NSW meeting several committee changes were needed due to the resignation due to illness of the club librarian. The president and secretary were re-elected. The new secretary of the Southern Districts group in Adelaide is its former president Rob Cloosterman.

CLUB LIST

This is a list of some of the user groups in Australia and New Zealand that cater for members with 64's or 128's. If you want any information or details about the club contact the person listed or write to the address shown. There is also a list of mail/postal groups as well. If you write to a club please enclose either a stamped self-addressed envelope, a stamp or reply coupon for your reply. Remember that school and public holidays can affect meeting dates. ALWAYS check with the club contact first.

AUSTRALIA

Albury/Wodonga Commodore User Group Inc., PO Box 1014, ALBURY NSW 2640 - 1st Tuesday 7.30pm Gas & Fuel Corp Building, Hume & Townsend Sts, Albury - Rod Graeber (060) 21 3703

C64 Developments Inc. (Wollongong C64/128 Club) PO Box 150, UNANDERRA NSW 2526 - 2nd Friday 6.30pm Unanderra Community Centre, Princes Highway, Unanderra - Jeff Gale (042) 71 5098

Commodore 64/128 Club of NSW (formerly Penrith Commodore Users Group - now incorporating SYDCOM) 12 Budgeree Rd, TOONGABBIE NSW 2146 - 3rd

Wednesday 7.30pm Minchinbury Neighbourhood Centre, Minchin Rd, Minchinbury - Steve Stecyk (02) 631 2323

Commodore Hornsby User Group Inc., PO Box 1578, HORNSBY NORTHGATE NSW 2077 - 2nd & 4th Wednesdays 7.30pm St Leos College, Wahroonga - Allan Hall (02) 476 4929

Commodore User Group (ACT) Inc., PO Box 409, CURTIN ACT 2605 - check for Canberra meetings' dates and venues. - Batemans Bay meetings 3rd Saturday Pearly Beach Baptist Church Hall - phone Matt Blydenstein (06) 281 2714 for all information.

Muswellbrook Combined Computer Group, PO Box 648, MUSWELLBROOK NSW 2333 - contact Jim Shorter on (065) 47 9144 for meeting details.

Newcastle Commodore Users Group, c/- 22 Copeland St, LAMBTON NSW 2299 - phone George Morrison (049) 57 4271 for information.

Tuggerah Lakes Commodore Users Group, PO Box 659, (065) 47 9144 for meeting details.

Newcastle Commodore Users Group, c/- 22 Copeland St, LAMBTON NSW 2299 - phone George Morrison (049) 57 4271 for information.

Tuggerah Lakes Commodore Users Group, PO Box 659, TOUKLEY NSW 2259 - phone John Davies (043) 93 1921 for any information.

Melbourne Commodore Computer Club Inc., PO Box 177, BOX HILL Vic 3128 - 2nd Wednesday 7.30pm Courtyard Room, Nunawading Civic Centre, Whitehorse Rd - Bernie O'Shea (President)(03) 438 1625

Yarra Valley Commodore Users Group, c/- 13 Cumberland Cres, CHIRNSIDE PARK Vic 3116 - 1st Tuesday 8pm Lilydale Elderly Citizens Club - Theo Hristakos (03) 735 5310

South Australian Commodore Computer User Group Inc. , PO Box 427, NORTH ADELAIDE SA 5006 - 1st & 3rd Mondays 7.30pm North Adelaide Primary School- Phil (08) 381 8444

Southern Districts Computer Users Club Inc. (Adelaide), PO Box 991, MORPHETT VALE SA 5162 - 3rd Wednesday 7.30pm Home Economics Room, Christies Beach High School (West), Beach Rd, Christies Beach - Robert Cloosterman (08) 382 0781

Computer Club of WA Inc. (Perth) - phone Tom Lee on (06) 332 6374 for all enquiries.

Cairns Commodore Users Group,PO Box 7, EARLVILLE Qld 4878 - 1st Tuesday 7.30pm Cairns Education Centre, Greenslopes Road, Edge Hill - Bruce Bimrose (070) 54 1949

Commodore Computer Users Group (Qld) Inc., PO Box 274, SPRINGWOOD Qld 4127 - 1st Tuesday 7pm Bardon Professional Centre - Gordon Wright (07) 299 7789

Woombug 8-bit - 4th Saturday 1pm - 4pm Tea Room, Masons Hall, Hill St, Woombye - Scott Roseboom (074) 48 5845

Tasmanian Commodore Users Group, GPO Box 673, HOBART Tas 7000 - 3rd Wednesday 7.30pm Derwent Regional Library, Glenorchy - Stephen Cook (002) 47 9985

NEW ZEALAND

As well as from the clubs listed below information regarding any clubs can also be obtained from Jim Mullen, 110 Main South Road, OAMARU Phone (03) 434 6026. (please note new phone number - the previously published number was incorrect)

Christchurch Commodore Users' Group Inc., PO Box 4665, CHRISTCHURCH - 4th Tuesday 7.30pm Philipstown School - Dave Maguire (03) 348 5976

Kapiti Commodore Users Group, 24 Makarini St, PARAPARAUMI - 1st Friday 7.30pm Kapiti College, Margaret Rd, Raumati Beach - John Hughes (04) 298 4349

Manawatu Commodore Users Group, 83 Havelock Ave, PALMERSTON NORTH - 1st Monday 7pm St Marks Church Hall - Sydney Mounsey (06) 357 9858

N.Z. Commodore Users Group Inc., PO Box 2878, WELLINGTON - now folded

Otago Commodore 64 Club (Dunedin) - contact John Knight 26 Estuary Crescent Fairfield Dunedin

Whangarei Combined Computer Club - contact John Pitt (09) 438 6651 for all information regarding this club.

POSTAL GROUPS

All these groups are mail based groups that cater for those users who are not able to attend a normal club or want to join a second club. Most provide a regular newsletter and give you access to PD programs and program information as well as give you the opportunity to meet other members through correspondence or phone contact.

FOR USERS IN NEW ZEALAND if you are interested in being part of a new postal group in New Zealand please contact Jim Mullen, 110 Main South Road, OAMARU phone (03) 434 6026

GeoCLUB (GEOS users) c/- Peter Hunt 70 Betula Street, DOVETON Vic 3177 - Frank Cassidy (03) 791 4991

Hills 64 Group C/-, PO Box 48, COCKATOO Vic 3781 - Ivan Blitz

Plus4/C16 Users Group 36 Western Highway, BLAXLAND NSW 2774 - Tony Ellis (047) 39 1528

The Old Codgers (over 40's) 18 Windsor Street, EDGEWORTH NSW 2285 - Gordon Screen

Woombug 8-bit c/- Post Office, WOOMBYE Qld 4559 - Scott Roseboom (074) 47 9985

Meeting 64/128 Users Through The Mail 1576B County Road 2550E, ST JOSEPH IL 61873 USA - Jean Nance

Many regular clubs can also cater for postal or associate members as well. In most cases out of area members would be most welcome. Check with your local club.

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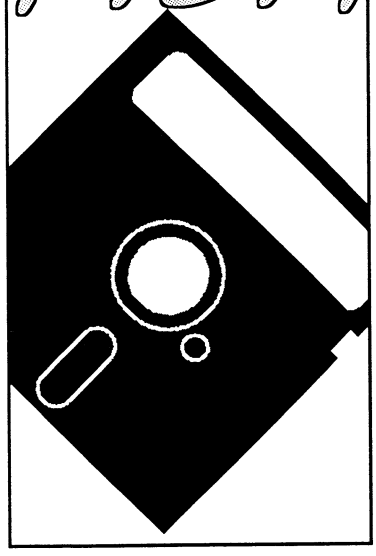

IMPROVING YOUR BASIC ENVIRONMENT

BASIC 2.0 is an excellent programming language to learn the essentials of programming. However, it is limited and, over the years, a number of "enhancements" have found their way in to the Public Domain. This month I am going to look at a few of these, what they offer, and how they perform.

APC-64

This program adds a whopping 37 new commands to our 64, and uses only a minuscule 89 bytes of memory, leaving all normal BASIC memory, the tape buffer, and the special memory area from 49152 to 53247 free for your use.

This is achieved by placing the program "under" the present BASIC ROM from 49152 to 45568.

APC-64 has its principal aim as making programming a viable BASIC routine easier and adds nine sound commands (Volume, Voice, Freq, Waveform, ADSR, Attack, Release, Beep, and Crash), eight new screen commands (Cls, Home, Ink, Paper, Border, Plot, Clrtop, and Clrbot), five printer commands (Hard, Hard88, Gap, Lprint, LList), three disk commands (English Pound, @;, and @"command: information"), and two programming commands (jump and Else). These are all used in program mode. Several direct mode commands have also been added, including: Auto, Renumber, Delete, Chain, Key, Keys, Old, Cold, Disable, and Find).

This BASIC enhancement is ideal for those who program a lot for graphics and/or sound. You will need to disable the wedge should you be loading a program that will automatically run or that is loaded via a LOAD "programname", 8, 1, but that is of minor concern.

BASAD

This is an old (1984) program that adds 23 commands to your BASIC. Its principal aim, unlike the above, is to make the 64's programming environment more "user friendly", and thus make tasks like line numbering/renumbering, disk operations, etc., simpler.

Let's have a look at the commands offered:

Auto - automated line numbering

Catalogue - directory

Old - Recover from a NEW

Page - review a "page" of your program.

Setpage - Set the parameters for a page.

Collect - disk validate

Header - NEW your disk

Rename - changes filename

Scratch - Erase that file!

Unscratch - Oops! Wrong one!

Copy - Need I explain?

Disk - Direct disk access via a disk editor (Diskad)

DLoad - load program from disk.

Dsave - save program.

Dverify - verify or compare a program in memory with that on disk.

DS$ - reads your disk error channel.

Bload - Load a binary file from disk.

BXLoad - As the above but to a specific address.

BSave - save that binary file!

Protect - Protects the disk against accidental erasure.

Release - deprotect a protected file

Send - send a command to the drive

Disk - read/write any particular disk sector

Kill - end

The author has also added a number of additional error messages.

BASAD is located between locations 49152 and 53247 and thus is susceptible to being overwritten by a number of programs.

BASIC 4.0

This really isn't a BASIC 2.0 enhancement, but a separate version of BASIC entirely. It is actually the form of BASIC used on the Commodore 8000 series of computer ported across for use on our machine.

The additional commands are:

Append, Backup, Catalog, Collect, Concat, Copy, DClose, Directory, DLoad, Dopen, DSave, Header, Record, and Rename.

BASIC-AID 64

A nice little programmer-oriented package, BASIC-Aid 64 adds a number of useful commands that make programming a breeze. I especially like the "HELP" command, which, when called, will print an offending line and highlight the location at which a program stopped or the error occurred. Other commands include:

Auto - Automatic line renumbering.

MLM - access the Machine Code Monitor

Dump - displays a variable string to screen

Change - searches for and replaces a string.

Delete - gets rid of a range of program line.

Read - dumps a named file to screen (similar to LIST)

Find - locate and print a string.

Kill - Disables the wedge

Flist - Lists a file to screen.

Number - renumbers program lines.

Scroll - enables a scroll, either backward or forward through a program listing.

Off - Kill the scroll

Trace - displays both the line number and BASIC token being executed.

Start - displays the programs load address.

Size - shows the size of the disk file.

Hex - Converts hex<> decimal.

Pack - removes all spaces and REM's from within a program (to make it smaller)

Un-new - recover from NEW

Screen - changes the screen colour

Merge - join two programs, one on disk, and the other in memory.

This is an excellent "programmer's" tool kit

As you can see by the above few reviews, BASIC enhancements can be roughly categorised in to two sections, Programming commands, and programming tools. My preference is for the latter type, as a good set of tools, as with any trade, can make a job a hell of a lot easier. BASIC enhancements that concentrate on commands used WITHIN programs generally require that the BASIC enhancement be present in memory before you can run them or use them in any way - not much chop if you hand your work around freely like I do, or if, once again like me, you get impatient just waiting for one program to load, let alone two!

There are a myriad more enhancements around, each offering their own angle on what a BASIC should be. Which one, if any, is for you, is up to you to decide. I do recommend that you do try and try as many different versions as you can. They can add immense depth and pleasure to your computer usage, especially if you like to "potter" around with your computer.

¶

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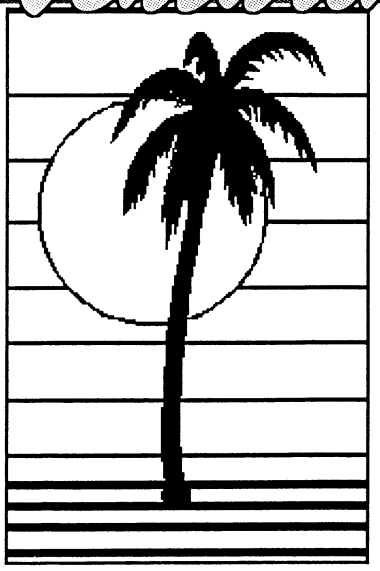


Zork II !!

I trust I find you all well, and hopefully you've recovered from your New Year Celebrations.

Continuing on from the December '94 issue, in which the map to "Zork II" was printed, this month all of the accompanying hints are published.

Let's get straight into it!

ZORK II - THE HINTS

Please note the following:

- the numbers before each hint refer to the location on the map (presented last month) where these actions should be performed.

- try to use these only when you are well and truly stuck. This way "Zork II" will be much more enjoyable to you.

Let's Begin. .....

1). With the lamp, sword, Opener and Mat from the Gazebo, Put Mat Under Door. Move Lid. Insert Opener in Keyhole. Pull Mat. Get key. Get opener. Unlock Door with key. Get blue sphere. Drop Key and Opener. Leave Mat. (Note: forget about the wizard as you can't stop him).

2) Attack dragon with sword. Don't be too persistent, though! Once you have his attention, move south. When he follows, attack him again and move towards the Ice Room. Repeat, moving into the Ice Room. Return to the Dragon's lair

3) Get trunk. Follow the princess (to the gazebo. She will open a secret door in Marble Hall). Get Newspaper, Matches and small gold key.(Note: forget about the red rose as you've already proved your insensitivity by attacking the Dragon).

4) Drop all but the lamp and the teapot in spinning carousel. Get portrait. Enter Curtain. Enter south wall. Enter curtain. Get Bills, Enter North wall. Leave and return. Get Bills and portrait. Enter Curtain.

When returning, fill teaport at Deep Ford.

5) In Riddle Room, say "well ".

6) Get in Bucket. Pour water (into Large bucket). Drop teapot (to do down, Get and Fill Teapot).

7) Get all but the orange cake (and there's a good reason for that!). Eat green cake and you will shrink Now enter tiny door (it's actually a mouse hole). Put Red cake in Pool. Get candy.. Leave flask (for another good reason of health!) Go through mouse hole again and eat blue cake.

8) Tell the Robot East. Tell Robot push Triangular button (The Carousel will now have stopped, making accessible Room 8 and the rather useful Grue Repellent. A steel box with a priceless violin inside it is now also present). Tell Robot South.

9) Get Red sphere. Tell Robot Lift cage. Make sure you have sphere.

10) With brick, string, paper and matchbook, Get in basket. Open and put paper in receptacle. Light Match. Burn Paper..

11) Land (at small ledge). Tie wire to Hook. Get Out. Get Zorkmid (coin) and Rare stamp (in the purple book). Read white book. Get in Basket. Untie wire. Burn more paper if necessary.

12) Land (at wide ledge). Tie wire again. Put String In brick. Put brick in Hole. Light Match. Light string with Match. Leave Room and wait for the explosion. Get Crown. Leave immediately, as the detonation of Brick in any room makes it very unstable. Untie Wire and close receptacle.

13) With Lamp, sword (or Bat), Gold Key and both Red and Blue spheres, Give Candy to Lizard in Guarded Room. Unlock Door With small Gold key.

14) Throw sword (or bat), at Aquarium. Don't stand too near or try it with your hands! Get Clear Sphere.

15) Put Red, Blue and Clear spheres in their respective stands. Get Black sphere.

16) Put Black sphere in Pentagram to summon the Demon. Give Demon each of the ten treasures (which

were listed in the December '94 column). Tell Demon Give Me the Wand, or, if you're feeling malicious Tell Demon Kill Wizard and then Get Wand (Note: You can have some fun here, as the game has a few interesting options. But remember to save your game before trying them. One command to try is tell Demon kill dog).

17) Wave Wand at rock. Chant float. Get collar.

18) The Oddly Angled Rooms (maze) are a baseball diamond (which Andrew believes could have at least been made soccer pitch!). Find Bat at Home Plate (go southeast.). Run the bases (SE, NE, NW and SW). Then go North. Put collar on dog.

19) In Crypt. Type score. Carrying the wand, Turn off Lamp.....

. . . and you're in need of Zork III!

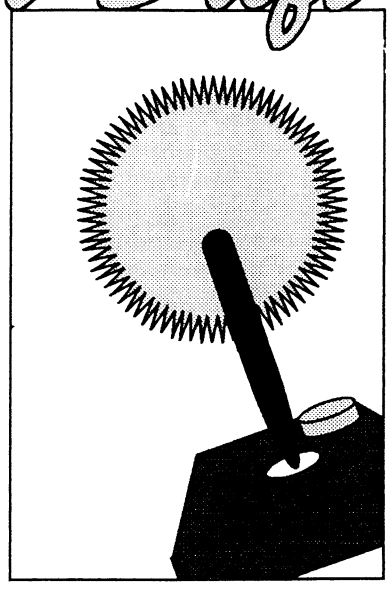
But, hey, if you already have ZORK III and are in need of some help we may cover that in a future issue (or most likely two).

I hope you have found these Zork walk throughs of use. Perhaps you'd like to see some other adventure games dealt with in this manner? If you would, why not write and let me know. I'd be more than happy to oblige.....

But if it's just a question you've got to ask, write to me at the address following. Likewise if you've some hints of your own. Whatever you have would be much appreciated. Send it to:

RMB 221
SUNRAYSIA
HIGHWAY
STUART MILL.
VIC. 3478.

¶



Andrew Gormly

Ghostbusters II

The Power Drift

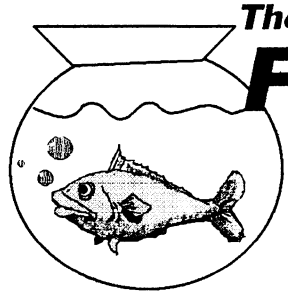
BANG! BANG! <knock knock> ... Who's there? ... BANG! BANG! BANG! BANG! <click> <click> All right, 1995, this is the police! We know you're in there, so come out now with your hands up or we'll shoot!

Welcome, one and all, to the New Year! I hope that it proves to be a most excellent one for all of you. I'll stop shouting now because it's beginning to hurt my head. So what did Santa bring along for anyone? a) A new game? b) A new cartridge? c) A new partner? If the answer is either a) or b), then you've entered 1995 at the right place. If it's c), then see the appropriate column elsewhere in this issue.

What does 1995 promise for the world of the Commodore 8-bit enthusiast? (I'm sure that line's been used several times already in this issue) Plenty! Warren's trialling his speedy little Fast-8 number which I'd love to get my hands on, new GEOS material is no doubt arriving by the Achille Lauro-load from the States, and our ever-friendly CN publication is continuing to grow. But all of these are side issues compared to the most important factor. That's right, the games just keep on coming! As does The Power Drift.

So buckle in, buckle up, and prepare your gamin' little hearts for twelve months of entertainment software galore.

BBS of the month



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ON THE SCOREBOARD

Yeesh, what a tacky title. Nevermind. Now that the introductory spiel has concluded, on to the important matters with which I have deal. Everyone recall our good friend Aaron Kernbach of Nairne here in South Australia? He was the lucky winner of the Mega Games Pack competition run a few months ago, the prize being the collection of games under the name same on sale at Alternative Software. I sincerely hope that the rest of you who weren't quite as fortunate have inundated Heath with requests for your own personal copies.

Anyway, Aaron wrote back to us here at The Power Drift Central to pass on not only his undying thanks, but also a high score for one of the games I've got my eye on for a promised comparative review in the future: Accolade's Test Drive. He described his total of 9,917 as modest, but I think his modesty is well worth a bit of worship. Not bad, Aaron! It's good to see some professional drivers out there still. However, I'm certain that not everyone is going to be struck dumb with awe at such a score. Can you beat it? If so, let's hear from you. Don't shout though - I've already exhausted my gift-wrapped festive season supply of aspirins, Panadols and Beroccas.

MY VERY OWN CHRISTMAS GIFT!

However Aaron's contribution to this illustrious column did not end there... As a token of his gratitude (he must really have loved Heath's games pack even more than I did!) he also posted two highly enjoyable games which gave me much pleasure over the Christmas period: Ghostbusters II and the very appropriate Power Drift, both samples of Activision's vast array of software. My thanks many times over, Aaron - if only all people of this world shared your generosity, then... then my software collection would be much larger than it is at present. :)

I therefore have two disks in front of me on the desk (come to think of it, I have several, but that's not the point). What to do with them? Decisions, decisions. Hmmmm... if I kept them, I'd begin to feel as mean as Christopher Skase. Would any of you like either of these games? Of course you would! A competition it is then - that's right, once again The Power Drift passes on its assets to you, the readers (with due thanks to Mr Kernbach, of course). But before you decide whether or not you actually want to enter, I'd better fill you in a few details.

Ghostbusters II and Power Drift - what are they like? Read on and find out.

GHOSTBUSTERS II

You all recall the movie, I'm certain. The one where Slimer expanded and turned to pink, Dana spent most of her time trying to find her baby, and a nasty ol' geezer from the past who vaguely resembled Graham Richardson the Carpathian Dungeon Master came back to life with the aid of a painter who'd clearly left his sanity on the playground swings. You know what I'm on about. Activision decided to port the film to the computer disk, and lo and behold along came Ghostbusters II. The overall aim of the game is to rescue Oscar (the cute baby) and destroy Vigo (the nasty man). On the way you progress through three different levels before arriving for the big showdown.

GHOSTLY GRAPHICS

<whack> Strike one for typical headline alliteration! The graphics in this game are quite well done, symbolic of the more advanced nature of the graphical work done on the Commodore around the time of its release. Each level has its own distinctive features, and between the levels is a single picture with a little background text from the movie. These three pictures - one prior to each stage - are a digitised effort, and I believe the artists bit off more than they could gargle. It's only a small point but nevertheless detracts somewhat from the otherwise clean and efficient graphical effects. The screen and sprites scroll easily to give the game a free-flowing atmosphere.

SPOOKY SOUND

<whack> Strike two! Sadly Ghostbusters II is yet another example of a piece of software in which in-game music would have been nice but is not in evidence. The sound effects are interesting, but after a while the once-amusing "Splat!" of slime gets repetitive. Even so, there is a sampled conversion of the movie's theme music played between the stages (they really couldn't leave it out, could they?), and a rather pleasant rendition of "Your Love Has Lifted Me Higher And Higher" to cap off the sparse but well-chosen arrangement. Not the best game for the sound buffs, 'tis true, but certainly still within the upper half of the ratings scheme.

GHOULISH GAMEPLAY

<whack> Strike three! I'm out! (Seriously, though, I'll leave the annoying headlines there before I go back to delete all of them right now) The gameplay of Ghostbusters II is to be lauded particularly for its variety. The three stages are all vastly different, and it takes a multi-talented player to pass all of them with any sort of ease. It's not too easy, actually - a problem which is altogether too common - but instead provides a challenge, giving enough ground to keep the gamer coming back but keeping hidden enough of its secrets to be worth the money (or the stamp, in the case of our competition).

Level One involves swinging a Ghostbuster down a shaft in a way reminiscent of Ocean's Batman The Movie. The second stage follows more of the traditional shoot 'em up format with a difference, and the final stage (which I can't really tell you about because I never made it that far!) apparently requires a tag team Ghostbuster effort to kill Vigo. Easy to play and addictive appears the best description of Ghostbusters II.

POWER DRIFT

As those of you who weren't with us at the beginning of this column, I have taken its name from this particular game which I always

enjoyed in its coin-op incarnation - and there doesn't seem to be much to complain about in the Commodore conversion performed by one of Activision's better coders, Chris Butler (I say that because I know he had a hand in one of my other favourites, but I can't for the life of me remember exactly which one at the moment!). A racing game, as you may have surmised from the name, and a good example of its genre at that.

GEARAPHICS

All right, last one. Just kidding. In this area Power Drift has a similar flaw to Ghostbusters II - again the artists have tried to do too much. The 3D "through-screen" image is the standard perspective for such games, and in an effort to make things in this particular piece of software different there are all sorts of trackside barriers and spectacles. A good idea, but they tend to "chunk up" the image and give the player a more blocky impression of the screen than I'd like to see. Something along the lines of Supercycle's background would have been better - but even so, Power Drift holds its own. The parallax scrolling of the back image which stays relatively still whilst the foreground moves with the car is effective and better controlled than many other efforts I've seen before. The attention to detail is nice - you can pick out which driver you're coming up on from the hairstyle in the back of his/her cockpit.

MUSIC AND SOUND

I would have to say that Power Drift is one of the very few games which has hit the combination of music and sound effects just about right. The soundtrack is simple but has enough variety to remain fresh throughout a few solid hours of play, and more importantly can be heard all the way through the game. The best feature, however, is the way in which the effects are incorporated into the game. If, during the race, you crash into a barrier, run into another car or get yourself hit from behind, the music lowers its volume a little and the appropriate sound effect can be heard. Once this has finished, the music returns to its former level. Of course, when you're sitting in fourth position hot on the gearbox of the third placed driver with less than a hundred metres to the finish line, you don't tend to notice such things. However, it's these details which make a game a good one.

THE GAME ITSELF

Power Drift has a good variety of options - you can choose to be one of twelve different drivers, for example (one of whom is a woman, of course, because this is the age of political correctness!). Also there is a selection of five courses, each of which consists of five races taking you from the desert to the sea and back again. The theme, naturally, affects the view and the background items I found it so hard to avoid. As a racing game, the car handled very well (better than mine, at any rate!) and the simple lo-hi gear choice operated by the fire button is a pleasant touch. And, of course, the feature which first attracted me to the game back in its coin-op days - whenever you pass another driver your character makes a rude sign... a non-conformist element to be sure, but perhaps one of the most realistic parts of the game!

COMPETITION

That's enough from me about these two games. Have you liked what you've heard? If so, then send in a envelope with your name, address and the answer to this simple question: Who is the coder of Power Drift? Not hard, is it? The place to send it, as I'm sure you'll all know, is:

PO Box 123

Walkerville

SA 5081

I'll be drawing two names out of a hat just as soon as I return towards the end of February, so you've about a month's grace to get those entries in. Don't delay though, I want to hear from you now!

BON VOYAGE...

That's right, I said, "...as soon as I return...". Where am I going? Well, my dear boss Warren decided that after almost a year of hard work on The Power Drift, his favourite columnist needed a break. So, I'm off to Europe for six weeks to get a hands-on view of all the latest gaming gear for your beloved Commodore. Therefore you can all expect the March or April issue to be bristling with exciting news from the other side of the globe, because as we all know gaming is a worldwide occupation! And besides, I'd rather pass a large watermelon than swelter here all summer long with the Greenhouse effect and all. Until mid-February then, enjoy your summer, long live Manchester United, beware of Port Adelaide in the AFL a few seasons from now, and don't forget that the revolution will continue well into the wonderful year of 1995.

Cheers Andrew

¶

The 1570 Disk Drive.... continued

the lack of the latest ROM upgrade, which fixed the last of the bugs. Of course, the notorious 1571 relative file problem with second side access (the BAM used to get confused, and lose or confuse information on side 2) is hardly relevant to this drive. Well, maybe its a bit optimistic saying that the last of the bugs were fixed - there are still some bugs in 1571's - and 1581's in my experience, all undoubtedly a result of Commodore's habit of continually patching up the original DOS for the 4040 double drives of pre-VIC20 days.

And above all, nobody really seems to know enough about them. But you CAN get them cheap !

¶

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Commodore Network is now carrying a range of publications for the Commodore 8-bit enthusiast. Prices quoted below are for non-subscribers. Subscription holders to CN are entitled to deduct 10% from prices quoted.

Cee-64 Alive! - American disk based magazine for the C64/128. Latest edition consists of six disk sides. Issued six times a year and available for just $35.00
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All software orders within Australia should include $2 to cover postage costs. New Zealand orders add $3 Aus. to cover postage, and for orders from elsewhere, a postage fee of $5 Aus. is necessary. Diskette Orders should include postage of $2 and 50cents per disk box within Australia, New Zealand Diskette Orders should include $3 plus 50 cents a disk box per order. Sorry we cannot accept orders for diskettes from elsewhere.