

### Editor's Comments

The Library is still 'closed'; I have received the whole set of disks from Sharon, so 'all' I have to do now is sort them out ( they became a little jumbled up in transit ) and we are back in business, hopefully the Library Review will appear in September. ( Please remember, I'm doing this issue early in July ready for August ).

Page 2 has an article for the more adventurous by geoNut himself. I guess they must have let him out of the 'home' whilst he did this, hopefully he is back now and we can all sleep safely in our beds. The Australian Genie appears on page 3, this is third in a series of 7. A newcomer to the pages of geoNews on page 5 tells us of his life with Commodore, this reminds me of a series we used to do called "Meet the Members" where members wrote a little about themselves and what they do. Maybe it's time this was re-started, who will be next ?. Page 8 see's another newcomer to these pages in the form of Mark Vowles from Bath who has sent a follow up article to the one in the June 1998 geoNews. It's great to see some new authors appear, not that we don't like the old one's, that is, they are not necessary old , or 'er... what do I mean ?, all this rain's getting to me .We have just had the wettest June for 60 years

Once again our Antipodean artists are keeping us well supplied with high quality graphics and once the library is open again for business these will be appearing with others on new geoClub disks. (Haven't I read that somewhere before ?.)

Happy Geos-ing, see you all in September when geoNews will be 7 years old . *Frank*



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*In Our 7th Year of Supporting GEOS and it's users*

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**Frank Cassidy**  
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M43 6FS

# SCUZZYING

By Dave Elliott

Having recently managed to obtain a hard-drive from CMD, I had thought of writing an article but the subject has been covered very well in the past. Since I reckoned most people may not have heard of **SCSI** (scuzzy), thought a few ramblings on the subject appropriate.

**SCSI** stands for Small Computer Standard Interface or words to that effect. It is the language used by the devices to talk to each other. A total of 7 devices can be chained but the last device must be end terminated. Very similar to the way our disk drives are put on the serial bus. Each device must have its own number.

The present standard is series 3 but this article is mainly about series 1 with a few words on scuzzy 2. With the prices tumbling and the Pee Cee brigade now into giga bytes, there is a lot of small hard drives for sale. Where a Pee Cee user would probably find a 500 meg to small for his memory gobbling machine, we Commodorians could find quite a use for that storage space.

Unfortunately hard drives do not come with any identification to tell you what series it is. I cannot even tell you.

All I can do is make a few suggestions.

- 1) Ask the owner if he knows what series it is.
- 2) If the connections are 50 pin then it is series 1 or 2.
- 3) Less than 1 gig then more than likely to be 1 or 2.
- 4) Older models will probably be series 1.
- 5) Make sure the device number can be changed, either with external or internal switches.

Before any of the above apply you must own a Commodore compatible hard drive. More than likely a CMD drive.

The manual accompanying your hard drive tells you the bare facts but since the chaining is simple, I suppose, long drawn out instructions are unnecessary. The pin outs for the cable are supplied, which are a 25 x 50 pins. Available from Radio Spares No 218-302. So I would imagine that Maplins would do an alternative. Infact RS do conversions for all types, 1 to 3 or 3 to 2 etc.

## ADDING A DRIVE.

- 1) Set new drive to device1.

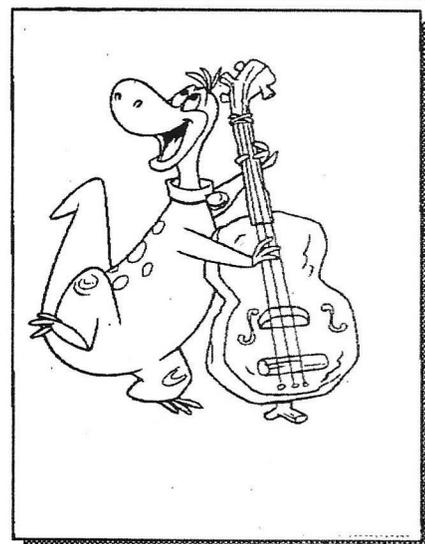
- 2) Connect cable.
- 3) Turn on all devices.
- 4) Load and run the program **ADD DRIVES** on the Utilities disk supplied with the hard drive.
- 5) Simply follow instruction.
- 6) Load and run the program **LLFORMAT** on the Utilities disk.
- 7) Simply follow instruction.

That is all there is to it. What basically happens, is that the program will poll for devices connected to the system. Once found, you will be asked if you want to add the drive to system. Details of the drive are displayed, number, make, size etc. You might want to check your blocks free on the original drive before adding the second. Then you can tell at a glance how many new blocks have been added. **LLFORMAT**, simply formats the drive ready for use.

One more important aspect, is termination. Most drives will come with a pass through port to enable the next device on line to be chained. This port must have a plug or terminator fitted. The program reads for this and then tells the DOS it has reached the end of the line.

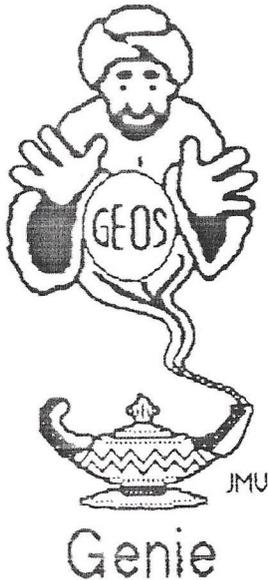
Using the above I successfully chained a 503 meg Connor drive to my 80 meg CMD. Since I did not do any checking of the blocks free before chaining I can't tell you the exact number but on completion I had over 2 million blocks free.

CMD have now updated to version 2, can't tell you when they did but the latest 1 gig drives are Scuzzy 2 and although supposed to communicate to Scuzzy 1 do not. It is my understanding, having asked people in the computer industry, Scuzzy 3 should talk to 2 and 1. Still trying to find out from CMD, but not having much success.



**Dino**  
by  
Gordon  
Turrall

# The Australian



by Jane M. Yoskamp - Jones

This month, we will look at the many different ways of setting the GEOS deskTop clock. But first a little background information.

## Why Set The Clock Anyway?

On boot-up of the original C128 GEOS v2.0 System disk, the date and time given is 08/22/88 1:00 PM (note the typical MM/DD/YY HH:MM AM/PM 12HR format). When you create, or simply update an existing GEOS data file, the operating system automatically records the month, day, and year for you, along with the time in hours and minutes. It stores this, with your data files, in the directory area of your disk, in the additional storage area after the filename and other GEOSy information. (Well, it's okay, if you don't mind to have the author's date and time of creation being your only way of working out when you made something!!).

Actually, it is stored in bytes 25 (\$19) to 29 (\$1D) if you want to get to the nitty gritty (like I usually do). Byte 25 (\$19) contains the Date : Year Last Modified, Offset from 1900. Byte 26 (\$1A) contains the Date : Month Last Modified (1-12). Byte 27 (\$1B) contains the Date : Day Last Modified (1-31). Byte 28 (\$1C) contains the Date : Hour Last Modified (0-23). Byte 29 (\$1D) contains the Date : Minute Last Modified (0-59). To

determine the time from there you would need to convert the hexadecimal numbers (\$) to decimal. GEOS normally does this automatically of course. Did I get too technical?, sorry about that folks (okay I'm not really, I love this stuff - smile). For more information refer to the section 'Examining GEOS Sectors' in 'The HandBook of Commodore Disks' (\*\*). For more information on converting hexadecimal refer to either 'The HandBook of the Commodore 128' or 'The HandBook of the Commodore 64'.

Anyway, having your OWN date and time is certainly better than having all of your files showing 1988 as the year in which you created every document (smile). Oh yeah, since it is nearing the year 2000, and we are still content to use our Commodores and GEOS, I will draw your attention to the point up there about Year Last Modified, Offset from 1900!

I can't imagine that this will cause any problems. We CBM GEOS users are a clever lot, I reckon we can work out at a glance that if a file's creation date shows 99 we know that it is 1999, and if it shows 00, 01, whatever, we will immediately guess 2000 or 2001, and not try to offset it from 1900. Who needs to be told something so simple as that!!

Oh yeah, I just tried it then, I set my DeskTop clock to 12/31/99 11:59 PM and let it roll over. No problemo! (as Arnie would say). I created a temporary Scrap file, then I used my favourite GEOS sector editor program MAVERICK S.E. from MAVERICK v5.0 [© of Kracker Jax, KJPB] just to take a little peek at those above mentioned bytes and they showed in hex 00 01 01. Nope, we won't crash! Yes, I did actually have to refer to my own HandBook to find my way around, it has been a long time. Thank goodness I wrote that when I did!! (grin)

## Setting The GEOS Clock

At this point, the non-System disk clock programs mentioned here, were the ones that I could find without a HUGE amount of searching and rummaging around in my GEOS 'cupboard' (something I am only just starting to do again). Most likely there are more, but due to my current circumstances I either couldn't find them, or didn't see them. Anyway, that's my excuse, for now (smile).

## Let Me Count The Ways (Part One)

**DeskTop Clock** : An integral part of DeskTop (v2.0) : Since this clock is always displayed on the DeskTop (or DualTop v3.0 if you are using it), if this is as far as you've got, it makes the most sense to set your clock here.

08/12/96 10:01 AM

Okay, for those who want to get difficult with me, yes, of course you can set it from the DeskTop options menu, set clock option. Can I go now (smile)? For more information on the set clock option refer to the section 'The DeskTop, Part 2 The Menus' in 'The World of GEOS HandBook III'.

However, the date and time will need to be reset this way every time you boot GEOS, or you are back to 1988 again on your data files. To begin, move the pointer over the clock display 'window', and click. An I-beam cursor will flash over the first character in the date, shown in MM/DD/YY HH:MM AM/PM 12 Hour format.

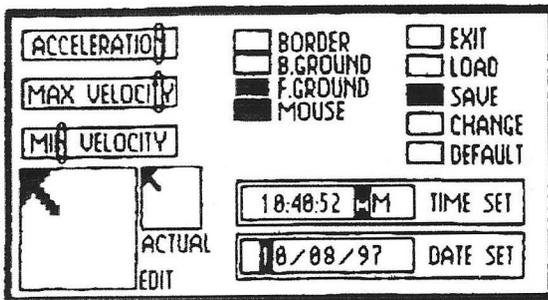
Type over the display, or use cursor keys to move around. To exit the window, press RETURN, and the pointer is back. Pretty simple stuff really.

**Preference Manager Desk Accessory** : Found on the System disk : This program is much slower than the clock display window, but if you must, you must. Double-click on the file icon to enter the preference mgr and the settings are displayed for you.

The clock is in the lower right, as TIME SET in HH:MM:SS 12 hour format, and DATE SET in MM/DD/YY format, click on either display box to access it. Either enter new numbers, or skip with space. To exit either box, press RETURN.

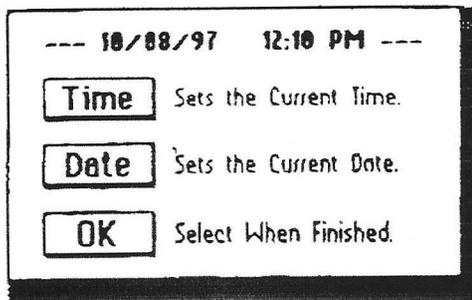
Unfortunately, the SAVE button does not store the date and time in the preference file, only the colours, pointer definition, and speed stuff, it's a pity really but typical of BBW back then to only go so far and then stop.

[See diagram next page.]



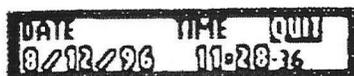
**AutoSet v1.0** : by William C. Coleman, Published by RUN Magazine June 1989 (ReRUN Disk May/June 1989) for v1.3 or higher. This handy Auto-Exec 40/80 column program allows you to set the Date/Time at bootup. A Dialog Box (DBox) is displayed with the current date and time displayed across the top. Time and Date gadgets, along with an OK exit gadget, are displayed.

Click on one to access the setting routine. I like this one. I used it for quite a long while without problems. The date is shown in MM/DD/YY format, and the time is shown in HH:MM AM/PM 12 hour format.



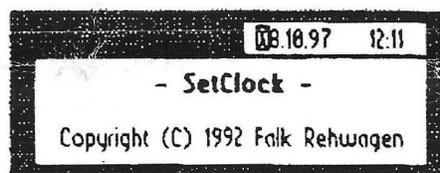
**QuickClock** : by Ernest R. Hunter, Published by Compute's GAZETTE September 1988. This small 40 column Desk Accessory program, when run, clears the screen with a background fill, and displays the clock (really small but) in the lower right corner in MM/DD/YY and HH:MM:SS AM/PM 12 hour format (note the addition of SS seconds into the time).

Click on the clock to access either the DATE or TIME numbers with cursor, and type over with the correct ones. Move the pointer over QUIT and click, to exit the program back to DeskTop.



**SetClock v1.1** : by Falk Rehwagen from the Public Domain (PD) via Germany. This excellent Auto-Exec 40/80 column program also allows you to set the Date/Time at bootup.

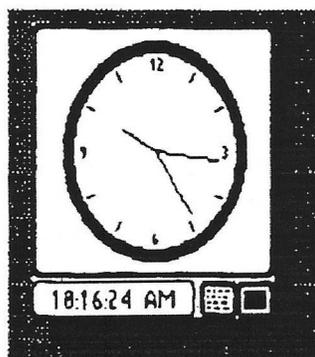
The program clears the screen with a background fill, and displays the clock, in DeskTop manner, in the upper-right corner of the screen, with an information box at the bottom of the screen (not shown to scale in picture).



The cursor sits in the clock, waiting for you to enter the correct the Date and Time. Note however, that the display is given in DD/MM/YY European Date format (a welcome change), and the HH:MM in 24 hour format (although this can confuse a bit).

This program is actually my favourite, as when run on an unprotected work disk, it will update itself to what you type in, in other words it stores the current date and time to itself. An absolute blessing.

**AnalogClock v1.2** : by Charles W. Bozarth from the PD. This Desk Accessory 40 column program doesn't actually let you set the clock, but rather displays the GEOS clock in analog (round clock face) format.



This clock ticks and chimes, and is quite good, even though it really performs no function whatsoever. Although I thought that it could be used like a screen saver program if one wanted.

.... To be continued ....

### Readers Three Wishes And All That...

So far there have been no queries, and you seem to be content to let me ramble along in my usual manner, and that is okay too. Just remember that if you need any answers, I may be able to help you with your 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 BBA(Business)E and I will write you back.

**The Australian GeosGenie**  
PO Box 635  
Enfield Plaza 5085 South Australia  
Telephone (08)8260 4062

(\*\*) The World of GEOS HandBook Series, are currently available from JMV Grafix PO Box 635 Enfield Plaza 5085 South Australia

The following HandBooks  
are ALL still available from

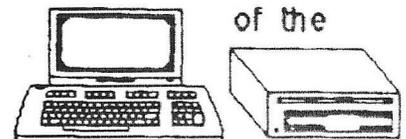
**JMV Grafix**

The HandBook of  
Commodore (tm)



Disks ©

The HandBook  
of the



Commodore 128 (tm) ©  
and Commodore 64 (tm) ©

## My Life with COMMODORE.

In 1983 my Son, Adrian became interested in us getting a Computer, so I purchased a S/H 'Commodore 64' with a '1541' disk Drive and hooked it up to a Second Hand T.V., and that began my life with the Trusty Commodores. We started by playing some Games, but soon realised that there was more to Computers than playing Games, and bought a S/H 'MPS803' Printer and began using 'Superscript' and writing to our Friends. They could not believe that you could do such things on a '64'.

I have over the years used 'Speedscript', 'Mini-Office II', 'GEOwrite v1.3' and now use 'GEOwrite v'2.0 64 &128'.

In 1989 I purchased a S/H 128 and a 1571 Drive and soon after a New "MCS 810' Printer (Whow what a Machine).

In 1991 my Wife and I purchased a small business and after a lot of persuasion on my part we eventually did our Monthly Accounting using C/P/M, which was very good, and we thought, professional. I actually drafted the Basic Invoice format up using Geowrite, instead of buying the proper expensive Invoices. We even made up a Calendar for our Customers on our Old Faithfull 128.

In 1992 I advertised to try and start a 'Commodore' users Club in our town of only approximately 3500, and knew of quite a few 'Commodores' around. But all that developed was that Three of us got together on a regular basis in each others homes and swapped ideas which was great. We all learn't a lot from this. But eventually two of them shifted away, so I was it, again. Well I just pushed on, as my mates all bought PC's, I joined various 'Commodore Clubs' and found the addresses and Phone No's of some Very Helpful people with 'Commodore's'.

So over the years I have grown to really do some very satisfying projects on my 'Commodore's'. My wife and I are keen 'Old Style Dancers' and travel some distance to follow them up. In 1995 we went to Victoria for a holiday and Dancing, and they have a booklet which covers all their Dances, Dates etc.. So when I come home I thought I would have a go at

doing the same on my 'Commodore'. Well it took some organising and thought but I now produce a Purse sized Booklet every year for South Australia which is now distributed State wide. So it proves these 'Commodores' are just as clever as others. I also do Posters & Banners etc. for our local Dances & Parties. Over the years my 'Commodore' has altered and improved.

I now run three systems:

- (1) '128 D' connected a '386 PC' hard drive via Paul Gardner-Stephen's '64Net', running an extra 2-1571 drives, 1750 REU, Panasonic 24pin printer, '1084S' Monitor and also have a 14.4 Kbps modem with a Turbo 232 interface already to go on the internet. Just trying to find a server at present.
- (2) '64C' with 'Excelerator' drive with 'Excelerator Dos' and a 'Handy Scanner'.
- (3) "SX64" with an extra '1541 Drive' which I have permantly in our Caravan for Hoildays, such as now.

I'm always on the lookout for 'Commodore' bits & pieces to Upgrade my systems.

Over the years I have used many Programs, but at present I use .....

'Geos'(GEOwrite, GEOpaint, GEOpublish, GEOcalc, GEOprint, GEOFile, GEOmerge etc.) almost exclusively.

I also enjoy scanning with the 'Handyscanner'. too, as well as using 'Superbase 128' I have a friend who users a '128', which he finds is good therapy, and his wife uses a 'Commodore Amiga 500' and is really producing a lot of good material with that, too.

I always wait in anticipation for my copy of 'Geo Club News' Monthly, which is a very informative and helpful Magazine. And I have bought some very intersesting and helpful Programs from your Library. And thanks must also go to Peter Hunt. Keep up the good work for the 'Old Trusty 'Commodore's". I may sit down in the future and write another article on my experience with 'Commodore' eg '64Net'. Perhaps next Holidays.

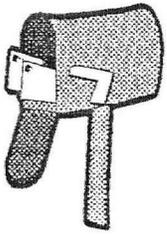
John Telfer.

Clare.

South Australia

Australia.

Email: johntelfer@hotmail.com



## Letters to the Editor

Mr M C Vowles ,Wychwood ,73 Rush Hill ,Bath BA22QT  
(01225) 318818  
Sunday 14th June 1998

Dear Frank,

I am writing to raise a concern I have with 'The Disk Tower' article featured in issue 82. There is a warning stating that cardboard inserts should not be used but instead an old disk. I find this very puzzling, why is there any suggestion that you should put anything into your disk drive? The only time the cardboard inserts supplied with the drives should be inserted into the drives is when you intend moving the drives and they will (or could) be subjected to vibration, In this case, the drive should be powered off and then the cardboard placed in the drive and the door closed. This holds the heads firmly during transit preventing damage . After transportation, the cardboard should be removed BEFORE power is reconnected to the drive, -When using the drives at home, there is no necessity to leave anything in the drives, certainly not a disk which you value because of the data corruption which could result from spurious drive head activity during power down. From this article, it appears that Mr Lanterrann inserts a disk into every drive before powering them down.

Mrs. Jane M Jones PO Box 635 Enfield Plaza 5085 S. Australia

Hello Frank,

I am pleased that you liked my columns enough to begin using them from the June 1998 issue of geoClub News. I can see that you have re-typed the page in your own way, that is fair enough, and it is after all the Editor / Publishers right to be able to do so. I would probably do the same thing in your shoes, so I am not painfully aggrieved. I would ask one thing however, that you publish the following in the next available issue please.

### Letter to The Editor

"From Jane W Voskamp - Jones, aka The Australian Genie. I just wanted readers to know , that whilst I did send a complete pre-printed batch of seven columns to be used, the Editor / Publisher has used his right of re-typing and re-editing the content of my columns for inclusion into the geoNews issue. Just as long as you readers know, that what you read is not necessarily exactly what I sent, everything will be fine. This way there is no problem.

That's all Frank, as you can see not a huge problem, and really I would appreciate you including this exactly " word for word". I would have appreciated a letter from you acknowledging receipt of my columns but I think I can see that you received them okay (smile). Thanks a lot for your help in this Frank and I hope it doesn't cause too much of a problem for you to include my letter to The Editor above. If all this works out, there may well be lore columns to come for next year as well.

Until next time, all the best  
Kindest regards Jane

. Dear Jane,

You did indeed send your columns pre-printed using I assume geoPublish however for the past two years or more I have been using MS Publisher, a PC program. The reason for this initially was that I have the same set up at work as I do at home, and this enables me to take files on disk, geoNews for example, back and forth to make use of any spare time I have at work to do some editing or printing. This is also the reason that geoNews has, for this time, been much clearer and easy to read, the fact that it is laser printed. So, when I receive items for geoNews I usually convert them from the C128 to ASCII and then transfer them to an MS-Dos disk using Big Blue Reader, dead simple. In your case however I couldn't do this, I could either print the page number on the bottom of the supplied pages, the problem here is making a second 'Master Copy' for Pete in Oz or, scan the complete page into MSPub as a large graphic ( which is how I have done it in this issue) or, as I did with the first two columns, scan in the graphic content and dump as a graphic ( the Adverts) and then OCR the text bringing it into Publisher that way. The problem with OCR is that unless the print quality is very good in the first instance then less than 100% goes in, the remainder goes in a s gibberish and this is where the editing and spell checker comes in. I DO edit items that I put into geoNews and have never made any secret of this. Some of the items from Zero Page have content regarding their club and it's meeting. This is not applicable to geoClub, geoNews or its readers and is therefore always edited out. What I DO NOT do, certainly intentionally at any rate, is alter the context of an article or letter. I was once accused of this by a person who had been a member only a few months, he sent a letter complaining how the C64 is much maligned which ran to 3 A4 pages. I could not possibly allow him that much space and so I edited it. He wrote back accusing me of using geoNews as a method of getting over my point of view, at totally unfounded accusation. Unfortunately I cannot check what differences I may have made to your original as I always dispose of hard copy once used otherwise I would suffocate under my very own personal rain forest. As for me not acknowledging the receipt of your articles, you may have done had I not been busy, running geoClub comes second to my 'paid' work and my family, sometimes the work load is far greater than others and so something's do take a back seat and sometimes get forgotten about. I do not make any excuses for this, I am after all just a human being.

Regards FRANK

### Finally an E-Mail

Frank, did you get my last 2 msg's?.I guess your very busy now that Sharon is out of action :-( I have just recieved 64/128 Versions of Topdesk, and its amazing especially the 128 Version. This is a Demo and it can be put in our Libray.But if it will help you members can get it from me if they send the usuall mailer/disk and enough for the return post.

If you still have your 128 take a look. I have also got a small list of their other products which I will put in a geoWRITE file on the disk.. - CUL De Colin G6AVK.

Colin,

You should have had a reply regarding this , maybe it went astray maybe I thought I'd replied and hadn't, getting older isn't all it's cracked up to be you know. Life has been hectic recently nothing to do with the Library, I have that to tackle yet, Hi. FRANK

# Random Access

by Dale Lutes

In January, I demonstrated a desktop environment for GEOS users called GeoDOS that was developed by a couple of Commodore programmers in Germany. I've been reading lately about a GEOS upgrade named Mega Patch 3 that sounded very similar to GeoDOS. Sure enough, after some checking, I learned that the authors of GeoDOS and Mega Patch are one and the same. This is just a guess, but it looks to me as if Mega Patch is an updated version of the program that I demonstrated.

Speaking of GeoDOS, this program has become an important part of how I put this newsletter together. Here's how: For some time now, Don McManamey has been submitting his monthly article to me in Macintosh format. Since I also own a Mac, I have no problem in reading the document and converting it into ASCII for import into geoWrite. After converting, I would transfer the file from the Mac to my computer at work via modem, then dial in from my Commodore and download the file. Not the simplest procedure, but it worked well.

In January, I upgraded my Mac and its operating system to a version that supported 3.5-inch IBM-formatted disks. I discovered GeoDOS at about the same time which, with my FD-2000 disk drive from CMD, can read and write the same IBM-formatted disks. This works great! The only thing that could be better would be to have a direct network connection between the two machines.

I am also using the Mac/GeoDOS combination to serve as my Commodore's connection to the internet. You are probably aware that Commodore computers can be used for internet access. But there can be no denying that a graphical interface is much more user-friendly. So I use my Mac to access the internet. When I come across a program for the Disk O'Quarter or a news story for The Zero Page, I turn to GeoDOS once again to get the file to my C-128.

# Rear View Mirror

by Moe Shouse

This month we will look at a Compute! magazine, April 1985. That is not a Compute!'s Gazette. What is the difference you may ask? Well the straight Compute! magazine does stuff about all brands of computers. Compute!'s Gazette is only about Commodores. But Compute! still has articles about Commodores. So it is one source you should not overlook. In case you did not know, some your favorite Commodore writers are in Compute!. Mr. Butterfield, Larry Cotton, Richard Mansfield. But there is one writer that is in Compute! that you may not recognize the name, but has had a bigger impact on computers than anyone! His name is David D. Thornburg. He worked at Xerox PARC in the 70's, invented the Koala Pad, and has written a dozen or more books on computing (some about Macs, one is an intro to artificial intelligence). He has been with Compute! from the first issue. This list is as of April 1985. I am sure he has done a lot more by 1998. Mr. Thornburg is an associate editor. His regular column is called "Computers And Society." He is the most qualified person to write on this subject. His April 1985 column is "Visual Computing, Part 1." He talks about user interfaces, keyboards, icons and so on. He says that in the late 1970s video games outsold computers not because of price but because the purchaser knows what to do once he got the game home. At the end of the article he says that visual interfaces are opening computer access to many thousands of people who would never have otherwise been interested in using this technology. I think that when one looks back from this point in time one can see that his words are very profound.

On page 25 is an article on the Winter Consumer Electronics Show. At this point in time, Jack Tramiel and his two sons have been at Atari for awhile. At this show they got all the attention. Why you ask? Well, they introduced a lot of new computers. The most notable is the ST. The Atari 520ST uses the Motorola 68000 microprocessor, the same CPU as the Apple Macintosh. In the ST it runs at 8 megahertz. It looks a little like a Commodore 128. The 520 ST was nicknamed the "Jackintosh." Its operating system is called TOS for Tramiel Operating System on ROM and Graphics Environment Manager, GEM. GEM is the Macintosh-like operating system interface origi-

*Continued on Page 9*

# Save My 1541 Disks Mk II

By Mark C Vowels

This is in reply to the article entitled 'Save my 1541 Disks!!' from *issue* 82. Jack Youngman has written an article which is great though I would think that as well as preventing a drive from recording to or formatting a disk, 1541 users may also want to allow such disk operations to take place with no regard to the right protect tab 1541 disks are almost all double sided and 1541 drive users have had to cut second notch to record on the reverse side. This may be easy if you have notcher but for those who don't its down to the old *nafl scissors* and two disks on top of each other technique. From my own experience, this is unsatisfactory.

*Now for* some additional details, the disk drives use an infra red light beam to detect the notch status. The beam is created by an infra red LED and a infra red sensitive photodiode. Any of the four wires identified by the article can be disconnected to prevent the beam operating. this is because two wires power the LED and the other two are connected to the photodiode which conducts when the infra red light shines on it The addition which I wish to make is that the Purple and Orange *wires* are connected to the photodiode, by connecting these wires together with an 820 Ohm resistor, the control circuitry of the drive will read this as the photodiode seeing the light thus allowing recording access even on the reverse of an un-notched disk.

The colours of the wire responsible for the photodiode differ depending on the drive. This modification also works on the 1571 disk drive which when used in C64 mode defaults to 1541 mode. In all cases the new wiring is the same only the method of connection and wire colours differ.

Here *is* a list of drives and the wire which are connected to the photodiode:

## 1541 old style locking mech

connector F6 (side), orange and purple wires (front)

## 1541 now style locking mech

connector F6 (side), orange and green wires (front)

## 1541 Mk II 1571

connector CN4 (rear left), orange and green wires (left)

## 1571

connector CN4 (rear left), orange and green wires (left)

The wiring differs depending on the connections made with the photodiode The old style 1541 and 1571 drives have sealed connections on the photodiode, with these drives the connections need to be made by cutting the wires. The other drives have open connections on the small PCB (Printed Circuit Board) at the front of the drive which holds the photodiode.

You will need a single pole double throw switch which has three locking positions (on - off - on), ask at your local electrical store for an SPDT centre off double locking switch or see Maplins switch FHO1B You also need some heat shrink tubing - you can use insulation tape but I find this difficult to use and it does not look as professional.

## Method 1 - for drives with a PCB mounted photodiode

Unsolder the green wire and connect (via extension wire) to the central terminal of the switch. Insulate both connections with heat shrink Now connect another wire between the PCB pad to which the green wire was connected and one of the remaining switch pin. Next connect another wire to the pad where the orange wire is connected, leaving the orange wire connected so that there are two wires on the single pad. The other end of this wire needs to be connected to the final switch pin through an 820 Ohm resistor (1/4 watt), The legs of the resistor should be shortened and then one soldered to the remaining switch pin, The wire should then be connected to the other leg and the heat shrink tubing slid over. This tubing should extend from the switch pin to the wire covering the whole resistor.

## Method 2 - for all drives with sealed or heat shrunk connections to the photodiode:

This is essentially the same only we don't have the help of the PCB for our connections, You need to cut the green (or purple if its an old 1541) wire, bear both ends and connect the end coming from the connector to the central switch pin, The other end should be connected to one of the other switch pins and both insulated. The next step is to bear a short section of the remaining wire (orange), it doesn't matter if you break it though soldering three wires together can be tricky, First melt a small section (about the width of a soldering iron tip) by resting the iron tip on the wire, Don't worry a bout the smell, the coating should just turn black and appear to remain,

Once you have moved the iron around the wire, remove it and use a knife to gently cut the coating, the burn should have left a hole to get you started, just be careful not to cut yourself or through the wire, Once you have successfully bared the wire, solder a wire to this bared section, In order to fit heat shrink tubing, solder the new wire so that its tip points towards the end of the orange wire which goes into the block connector. This allows you to disconnect the block connector and release the wire to slip the tubing on and over the joint The wire can be released from the block connector using a fine screw driver to push the small tag which stops the wire coming out of the block connector, This can be tricky so don't rush and get rough with the connector, you have to re-fit the lead, Once you have fitted the tubing, replace the lead, if necessary (if lead comes out of block connector when pulled gently) carefully bend the tag on the metal contact fixed to the end of the wire out slightly but be careful otherwise you may break it You can buy these from electrical stores if necessary though you may need to buy a connector set as well. As with Method 1, cut the legs of an 820 Ohm resistor down and fit it onto the final pin of the switch, Connect the other end of the wire to the second leg of the resistor and insulate.

The important things to do during this work are to insulate all connections except those on the PCBs since these connections cannot move. The other usual safety rules apply, disconnect all leads from the drive before opening it and ensure that no solder or anything else falls into the drive Either of the wires connected to the photodiode can be treated at the other for this modification so for example you can cut the orange wire and bear the green but they should NOT be interposed on the block connector.

The switch can be mounted in the case though you can put it in a separate box, this has the advantage of reducing the risks and you can remove the modification later if you wish. I personally don't like drilling holes in my equipment - it is rather drastic and is irreversible. Small plastic boxes are cheap and you can house the switches for all your drives in one box. I have used ribbon cable to connect my switches to a @e box. One issue is that this would permanently link the drives to this box but I cut a notch in the top of the rear face of the box- This allows the cables to enter the box and be held in this hole when the lid is screwed on but when the lid is removed, the leads are free so to remove a drive you just undo the nut on the switch and

remove the switch and lead - simple This method is also cheaper than buying connectors and ensures that no problems occur with unpolarised connections.

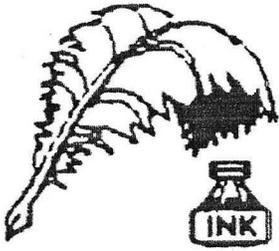
The operation of the drives write sensor is normal when the switch lever points towards the pin to which the resistor is connected, this is because the base of the lever is making contact between the two halves of the green (or purple) wire- When the switch is in the centre position, the green/purple wire is disconnected preventing any writing to the disk. The final position connects the resistor between the the two wires simulating the notch being open allowing recording access to the disk. The resistor is necessary to ensure that damage does not occur to the drives circuitry from shorting the photodiode.

If you have any difficulties then feel free to contact me for advice. Please note that I cannot and will not be held responsible for them modifications to drives, you are responsible since you are carrying out the work though to the best of my knowledge the information above is correct and will cause no damage to the drives.

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### *Continued from Page 7*

nally developed for MS-DOS computers and licensed to Atari by Digital Research. The new Atari 520 ST has too many high level features to list here, but the neatest one must be the Musical Instrument Digital Interface (MIDI). It is used to hook up an external synthesizer. The GEM interface looks a little like GEOS, but more like a Mac OS, but in color. It also has a hard drive interface built in! I don't know why the new Atari line didn't do a lot better. This is the same show at which Commodore showed its new Commodore 128 computer, just a prototype but scheduled for introduction in April or May. This show must have been in January or February. The photo of the 128 looks a little strange, it looks like the side next to the key pad flares out sideways. But it really does not, it is just the angle the photo is taken at. The text about the Commodore 128 says that after Tramiel left a lot of executives and engineers went to Atari also. So many in fact that some call it "the new Commodore." Now I ask the question: Is our loyalty to the name Commodore or is it to something deeper? A loyalty to a man and his ideas? For me it is to the name Commodore. I will not rule out a brand like Atari, but I will never get rid of or stop using my Commodores.



# Don's Digest

Don McMenemy

Don's Digest  
by Don McManamey

Of late, I've been thinking about things related to my house. You see, I'm getting old enough that if I want buy a new house it will be difficult to pay it off before I retire. My existing home is nearly as old as I am. If I stay put, the house will be 76 years old when I'm 80! I may not live that long but if I do, is this the house I really want to be in? I think not. Next question is how much room do I want? No doubt about it, I can't afford a house that big.

One reason for wanting that much room is my hobbies. I may not have the biggest Commodore system but I have a lot of systems. If you like Commodore computing, this can be a great time for you. While CMD is currently making a number of products for the Commodore most of this is out of reach for me. However, there are a number of products which were out of my reach when new but now I can afford used. The Koala pad is one. Considering how much I've used mine, it is probably a good thing I didn't buy one new. I am still glad I have it though. Have you seen a 1520 printer plotter? This is a fun toy which cost about \$100 new. I say toy because it has no useful purpose except entertainment. It will print in four colors and I have a Geos driver for it. It will also make those Spirograph type images from simple math code. Simple, if you are a mathematician that is. I have a 1 megabyte floppy disk drive but to date have not found an interface that works or that I've been able to get to work at any rate.

My collection includes an 8032 which is in the Pet class, a Vic-20 or so, a 64 which was my first just a few short years ago as I made the leap from the Vic-20 to the 128. Yes, I do have a 128, in fact I now also have a 128D. Wait, we went right past my 64SX. This is one of those things I wanted for many years but for me just wasn't practical when you considered price and function. Now if it had been a 128SX perhaps. I have 2 daisy wheel printers, several dot matrix printers including one color printer, and a color ink jet printer. Modems are one thing I didn't really use much in the past but now own several ranging from 300 baud to 33.6 Kbps.

We are truly fortunate here in Wichita to have a computer store, Z Software, that caters to the needs of Commodore owners. One would do well to stop by from time to time and see what he has. Additionally, we are blessed with a fine computer club. Many have fallen by the wayside over the years but ours is strong thanks in large part to a faithful few. The club is a good place to go with that obscure piece of equipment that your not sure how to get working. Chances are someone knows how it works or can find the documents for it. Dale Lutes and I have been working on a project that we are not ready to announce at this time but we hope to bring you another first very soon. This may be a do-it-yourself project for some of you. More details in a future issue of The Zero Page, I hope.

Until next time, keep collecting and using these old, antique, out dated, archaic, obsolete machines. Here's hoping you enough room that your wife doesn't throw you and them out on the street.

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## Request for Geos Writers

Frank,

Chris Holgate has recommended that I approach Sharon Chambers to write for my magazine and make various contributions about GEOS, and other things, as she is very reliable and interesting. I would appreciate it if she, or anybody else intested (yourself?) would like to contact me to write for my new magazine Commodore Faction. The magazine is colour and monthly, and is in need of regular writers. Please contact me at [faction2000@yahoo.com](mailto:faction2000@yahoo.com) for any questions. For your infomation the first issue is priced at £2 for residents of the UK and is out in September. It is a non-profit making venture, and cheques/postal orders should be made payable to

Gala Publishing.

Address:

Commodore Faction

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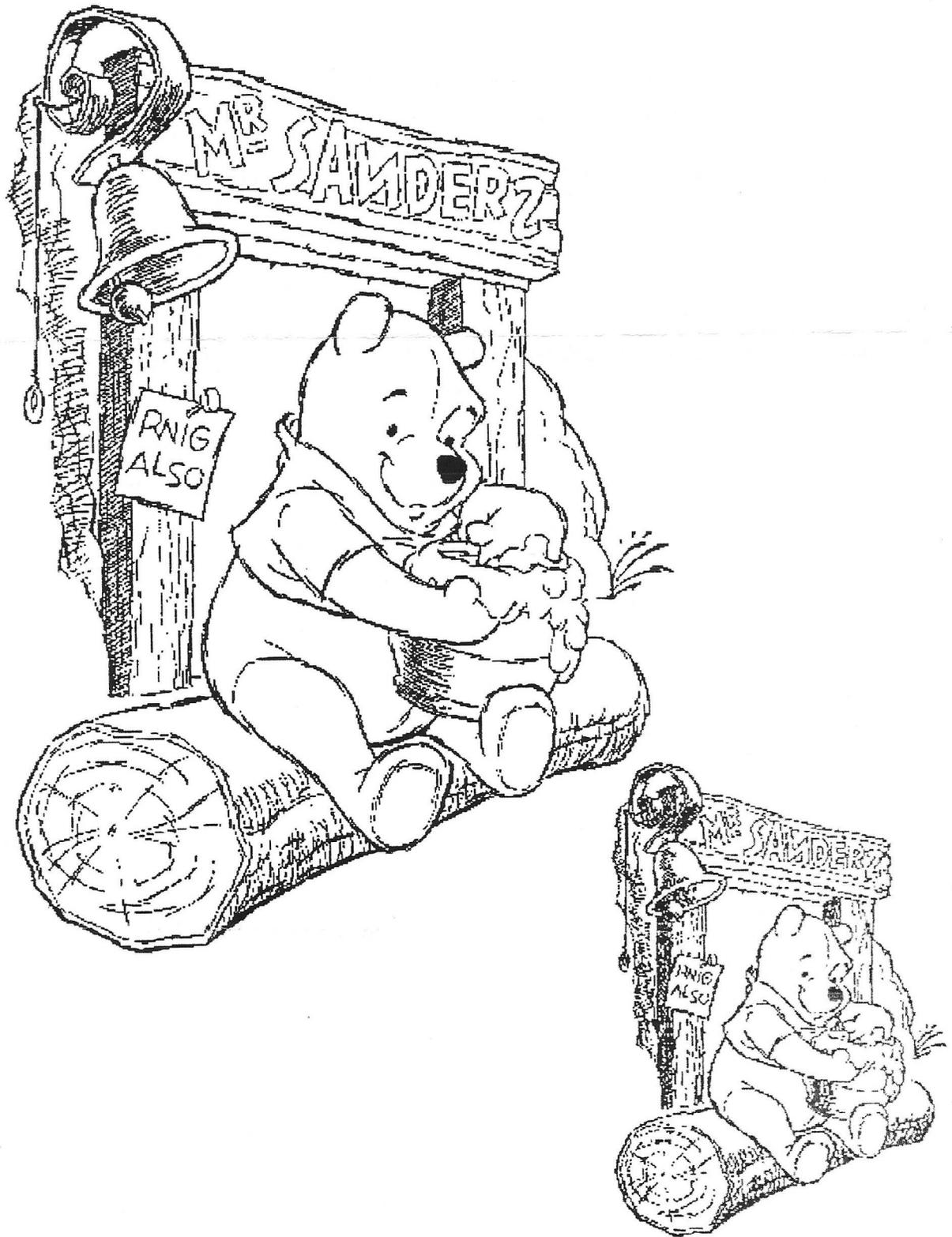
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Anyone interested in helping out here please contact them at the above address.

*Graphics by Peter McGuinn of New Zealand*



*Graphics by Gordon Turrall of Australia*



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