

### EDITOR'S COMMENTS

Many of you will no doubt be aware that Terry has decided to relinquish the mantle of Chief Librarian after six and a half years of dedication to geoClub and it's members, who owe Terry a very large debt of gratitude, and non more than me. When I first formed geoClub I used to do everything but it soon became apparent that I would need some help and this was when Terry stepped in and offered to run the library. I am sure that had he not, then the library would certainly have run far less successfully, indeed had he not taken over then all of geoClub could have suffered and ceased to exist. So Terry and Jackie, we can never repay you for all you have done but offer you our heartfelt thanks for a job non could have done better. Sharon now takes full command but for the time being Terry will still do disk orders that arrive at his door.

This just leaves me enough space to wish you all a Very Merry Christmas and a Happy New Year, and remind you that subs are due as of the end of December. I need to have the newsletter printed before Christmas and therefore I need to know how many copies are required. Failure to re-subscribe may mean no geoNews in the New Year.



### CONTENTS

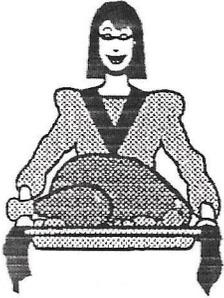
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*In Our 6th Year of Supporting GEOS and it's users*

# December Library Review



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Hi, and welcome to the Christmas review. I have some sad news. Terry has decided to retire from the Library, after many years of hard work. I would just like to say to you Terry, that we will all miss you. He has asked me to mention that for the time being, he will still take club orders. Due to me not having enough time, to get the October review in, this month we have a bigger than usual review. Thank's goes to the following members: Gordon Turrall, Peter Hunt, Dave Andrews, Brad Wightman, Laurie Alderson, Peter Boothman, Doreen Horne, Andrew Fisher, Jason Mackenzie & Dave Elliott. If I've missed anyone out, sorry. We start with.....

## geoCLUB DISK 540

A disk for anyone who uses the copy/utility program, Maverick. Thanks goes to Dave Andrews for this disk: QuickView - Dump Write files to screen; CONTENTS, MAVERICK 5.3, Maverick 2, Maverick 3 - the Maverick manual; SHADOW - Font.

## geoCLUB DISK 541

Some interesting geoWrite files, and some very good Lion King graphics: UNleaded, Manifesto, Unknowing, The Book, Ginger Beer, Med.Dictionary, Ambo Codes, CALENDAR HISTORY, Average Rainfall, ABO Applic, DESIDERATA - geoWrite files from Dave Andrews; SUPERB, DIVELY, MESQUITE, TREKKIE - Fonts for use with these files; GEOVIEW - to view the following: Flow Chart - Paint Image; LION KING-4 & LION KING-5 - geoPaint files, by Gordon Turrall.

## geoCLUB DISK 542

For all you Spice Girl fans, this is a disk for you. Thanks goes to Jason Mackenzie & Andrew Fisher for this disk. GeoSpice! - a note from Andrew; Spice Logo - The SPICE logo; Posh Spice - Victoria Adams; Baby Spice - Emma Bunton; Sporty Spice - Melanie Chisholm; Ginger Spice - Geri Halliwell; Scary Spice - Melanie Brown; SpiceWatch! - Spice Girls ring; Standing - Spice Girls group picture; Faces - Spice Girls group picture; At The Seaside - Spice Girls group picture; S - Posh Spice in letter S; P - Baby Spice in letter P; I - Sporty Spice in letter I; C - Ginger Spice in letter C; E - Scary Spice in letter E; Victoria - Posh Spice in Say You'll Be There; Vickie again! - Jason favourite Spice Girl; Ring - Spice Girls Ring; Colour Logo - Colour SPICE logo.

## geoCLUB DISK 543

TeddyBear-1 & TeddyBear-2 - from Dave Elliott a sad & happy teddy bear story; PHOTOGRAB - Use to manage photo scraps and albums; GIRLS - photo album; GEOVIEW - View, scroll, and print GeoPaint pictures; MARIO-1, MARIO-2 & MARIO-3 - geoPaint files from Gordon Turrall; FIGHTER.A, 4X4.A, TETRIS PIC.A, FERRARI, LAMBY.A, GARFIELD.A & ROBOCOP.A - geoPaint files, from Andrew Fisher.

Video Shop Program (side A & B needed)  
This is a funny program as it Auto Loads from a C128 in 40 col mode, into 64 mode. I've had a look and can't find a 64 version, but maybe one of you, would know how to load this in, on a C64. I've only have a quick play around with this program, but it looks like it could be a fun program to use. From what I've seen, you load in graphics, and fonts (see

the next disk's for these), play around with them, then watch it change on the screen.

## VS Font Disk 1 & VS Font Disk 2

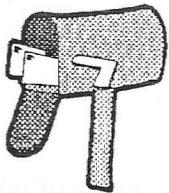
Fonts for use with Video Shop

## VS Graphics 1 - VS Graphics 15

A mix of 16 Disk's full of graphics for use with Video Shop. These graphics should also be okay to convert to geos. See Compilation Disk's 3 & 4, for help with converting graphics. A full list of these disk's will be in the Catalogue. There will be another set of these disk's next month.

Well that finished this Christmas review. As a small Christmas present to you all, I have decided to do a special 3 for 2 offer. So for December & January, all disk's, are any 3 disk numbers, for the price of 1.30. Please note this offer is coming out of my own disk's, if you are not ordering disk's from me, please check that the member you are ordering from, is willing to do this offer. Well that finishes this review. All I have to say, is have a Great Christmas & all the best for 1998....

Sharon and Terry



## Letters to the Editor

Dear Frank,

Most of the articles are very good but it would be helpful if we could have more basic articles such as "Looking At Geos" articles by Mark McManus in issue 55 whatever happened to the follow up article. Also could you include a series of articles on all the different applications that are available for Geos.

All the best

Thomas V. Moore  
Benfleet, Essex

*Due to a shortage of space the answer is on  
Page 6*

# Project G History

*Taken from Maurice Randall's Web Site*

*This is continued from last month*

The standard (non-SCPU) version allows approximately the same number of symbols as the current GeoAssembler and GeoLinker and will only allow 8-bit 6502 code. It also has the same limit of 20 characters in a symbol or label with only the first 8 being unique. On the other hand, the SCPU version will also allow 65816 code and all 20 characters in the symbols and labels can be unique. The only drawback is that if you take advantage of the extra features, your code might not be usable on the standard assembler.

The SuperCPU version will also take advantage of Project G's new function that gives an application its own Desktop control. What this means is that an application can have control of the system in a way that it can load and run other applications and when those applications exit, control will return to the application in charge. This function of Project G also allows third party Desktops to easily install themselves as the default Desktop. For the programming environment, this has the advantage of being able to load the programmer's favorite text editor such as GeoWrite for editing source code. It also allows the programmer to test the application that is being worked on without having to exit to the Desktop.

In addition to the assembler/linker combo, the programming package will include all the new information that is needed for a programmer to write new applications for Project G, including many sample source code files and library files.

The price has not been set on this package yet, but availability should be sometime during the first quarter of 1998.

## The Wave

One of the most sought after programs for the GEOS or Project G environment is a good terminal program that can make use of the high-speed modems using a SwiftLink or Turbo232 interface.

The Wave will hopefully fill that bill and is still in the works. The new Project G operating system will be a requirement for this new terminal program.

In its initial release (this is the official scoop, so pay attention) The Wave will not include a web browser. It will be a fully functional terminal program with uploading and downloading capabilities with all the popular protocols supported.

Keep in mind, The Wave is really a combination of telecommunication products. Once released, the optional add-on known as 'The Wild Surf' will be developed and offered. This will be the web browser and will require The Wave to operate.

You might see other telecommunication applications besides The Wave being developed. The programming package mentioned above will include a library of routines that will give programmers what they need to communicate with a high-speed modem in the Project G environment. There are many talented programmers that could take advantage of this opportunity.

## Other stuff

Naturally, the availability of new applications will be dependent on the desire for programmers to dig in and get to work. That's the main reason for releasing a programming package, to provide the tools needed as soon as possible. But the only way to encourage new application development is for enough people to be using the new operating system. This aspect looks promising since there are still many people using the Commodore 64 and 128 and Project G will breathe new life and productivity into these machines once again.

## Your current applications

You won't be left out in the cold with Project G. This new operating system has been carefully designed to allow most all of your old GEOS applications to still be used. There are only a small handful of programs that will fail, but it is safe to say that 99 percent of the software written for GEOS 2.0 will still run just fine, and in some cases better.

## OOooohs !!

Hi Frank and Peter,

Just a quick note: The URL given for the GEOClub web page on page 6 of the November geoNews is incorrect.

You have:

<http://videocom.net.au/geoclub/index.htm>

The correct URL is:

<http://videocam.net.au/geoclub/index.html>

It's VideoCam, not videocom, and the l is missing - it should be "html".

Other than that, it looks great, and with the response we've seen from the analysis, that's not too bad.

A hit counter is possible, but not recommended because this system sometimes remaps the first portion of the URL (from videocam.net.au to hal9000.hal9000.net.au) and when that happens, the hit counter comes up displaying an error message, plus the visit isn't recorded. The analysis program I use once a month uses ALL the log files on this ISP, and so picks

up all the visits no matter what URL it gets mapped to, and is far more accurate. I mainly shy away from the hit counter because I'd rather no one saw error messages on the page. :-)

For your next issue, can I send you a picture of what the web page looks like using Lynx, the text based Web browser that those without PC's use? I think it would be appropriate, and I can do the capture for you. It can be with a white or light background if you prefer.

Cheers, Gaelyne

Sorry Gaelyne for the error, the miss-placement of an O for and A i guess is in the mind (?). As for the missing l in html, my web sites end in htm, as usual I assumed things wrongly. Still it wouldn't bve geoNews without an error or two. Now off you go you Geophiles with Internet conection and have a look. For those without please turn the page.....

# geoClub Web Site

For those with text only browsers

Here are the two Lynx captures of the GEOClub page for you. I converted them to white with black text, as that would likely be best for printing with a black and white printer. Lynx can have different fore and backgrounds - mine is usually with a blue background and white text, but I thought it would be better for print as B&W. The highlighted areas are links. The line at the bottom of #2 displays the URL that my cursor is on (I like to see where I'm going). ;-)

As you can see, the maps and flags have "Alternate Text" so text users can see what the image is, and I have it formatted in such a way that visitors can download the Gif images to view offline. However, the GIF files are GIF89a, and many programs for the Commodore don't handle this format. There's a reason for using this format, and that is the background of each image can be made transparent, so you don't see the background colors at all. Without this, each map would appear as rectangles, and the banner wouldn't look right either.

If any GEOClub member would like the GIF87a versions of the images, I'll be happy to supply them. They'd be able to use geoGIF then to view the graphics. GEOgif is one of the very best programs I've used for viewing GIFs in GEOS. It does an excellent and clean grayscale of most images.

Cheers, Gaelyne

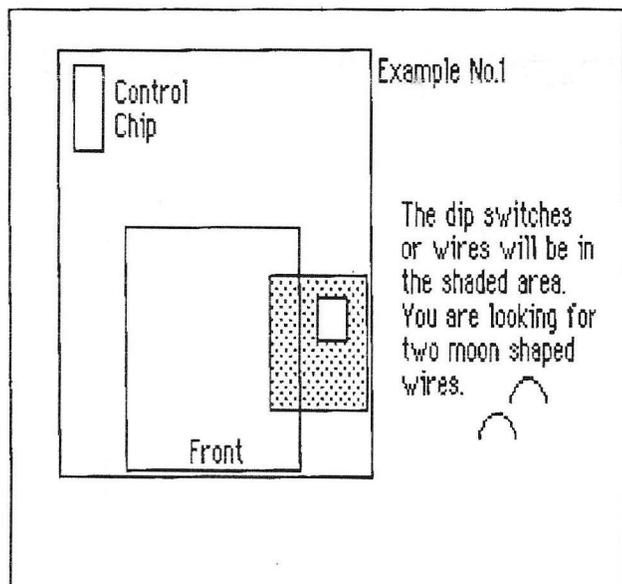
```
GeoClub Home Page (p1 of 3)
GeoClub Banner
GEOClub
*** UK Map ***
Frank Cassidy
55 High Bank Road
Droylsden, Manchester
M43 6FS
UK
*** UK Flag ***
GEOClub Oz
*** Australia Map ***
Peter Hunt
70 Betula St.
Doveton, Victoria 3177
Australia
-- press space for more, use arrow keys to move, '?' for help, 'q' to quit.
```

```
GeoClub Home Page (p2 of 3)
*** Aust Flag ***
Each month, GEOClub members receive our magazine, geoNEWS filled with
news, views and GEOS support. Members also have access to the GEOClub
Library, one of the largest PD/Shareware libraries available
worldwide.
Membership is just ú10 or $20.00 Australian per year and is open to
anyone with an interest in Commodore computing using GEOS.
For more information, contact either Mr. Frank Cassidy
<f.cassidy@virgin.net> in the UK, or Mr. Peter Hunt
<phunt@meibpc.org.au> in Australia.
Search Gaboom!
to find other GEOS sites on the Internet:
Keywords (separate by spaces):
geos Search CaBOOM!
This Basic Web Package was created and is maintained by:
more- http://videocam.net.au/geoclub/aus_flag.gif
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# Changing the Device Number on a 1570 Disk Drive

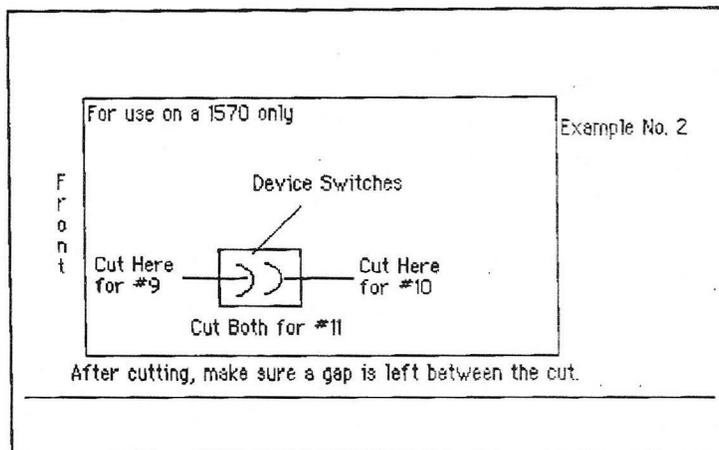
by Sharon Chambers

If you have a 1570 drive, and it doesn't have dip switches, how do you change it from device #8? This was a problem that I had. So I contacted a member who I thought maybe able to help me. As I did know that you can do something to an



old style 1541, to give you different device numbers. He got back to me with instruction on how to it. Which I tried, and it work. So for anyone else, who also has a 1570 drive, and would like to change the device number, here's how I did it.

1. Remove the 4 screws that hold the cases together. Now look at Example No. 1, this shows you where to look for either the dip switches or the wire.
2. Once you've found the moon shaped wire/s, you need to decide what number it is you want. See Example No. 2.
3. As you can see it is easy to do. But please remember that once done, you can't go back, only forward, on the numbers.



4. Once you've finished, replace the screws, and plug everything back in. Then try loading something in, on your drive. If all goes okay, then you've done it.

Please note: This is only for use with a 1570 drive, although the principle is the same, the 1541 has pads, instead of the location for the dip switches. If you do try this out, please be careful, because if it goes wrong, you won't have a drive. The risk is yours.

I would like to thank Dave Elliott, who sent me this info, and who without his help I would be lost. Thanks Dave....

Sharon

*Continued from Page 3*

Dear Thomas,

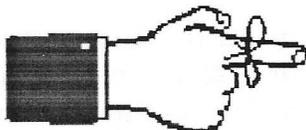
Many thanks for your letter. Yes, whatever did happen to the remaining articles by Mark McManus. They came to me via Australia and then dried up, I tried to obtain the remainder but to no avail. As for more basic articles and items regarding Geos applicatiuons. The fact is that it has already been done, unfortunatley you had not discovered geoNews then and as I am almost sure I told you in a letter when you joined, "you have missed an awful lot". However I shall endeavour to re-print some of the earlier stuff in the hope that it helps those who were not here from day one. Perhaps the January issue will be a good time to start.

Regards FRANK

# APRIL

## 1998

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5 Palm Sunday	6	FOR THOSE MEMBERS STILL MOURNING THE LOSS OF THE PEARSON CALENDARS THE geoPUB COMMITTEE HAVE PRODUCED A DISK WITH ALL THE 1998 MONTHLY CALENDARS ON READY FOR YOU TO CUSTOMISE WITH YOUR OWN PERSONAL DATES AND GRAPHICS Available on a double sided disk from your friendly Librarians for only £1:300 inc, p&p			10 Good Friday	11
12	13 Easter Monday				17	18
19	20	21	22	23 St Georges Day	24	25
26	27	28	29	30		



### **REMINDER**

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# CAPTAIN CRUNCH

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Brunswick Publications  
P.O. Box 745  
Campsie NSW  
Australia

In 1969 John Draper was an electronics engineer, age 26, living in San Jose.

Around this time he received a phone call from a friend who asked him if he could build an electronic unit that would be able to play single, sustained musical notes.

Draper said yes, he could, and upon visiting this man for further details he was given a short lesson in telephone technology that was to change his life.

His friend told him that he wanted the unit to be capable of recreating the exact musical tones that were used by the phone company.

The Bell system in the USA had a system where notes of specific pitch were sent down the phone line during a call. Inaudible to the caller, these notes were part of the phone companies house-keeping and billing procedures. Different notes represented different functions.

For example many businesses like to take advantage of the system where customers can call them free of charge from anywhere in the country. Free Call numbers were (and still are in many areas) distinguished by a 1-800 prefix.

If a caller dialled a number with a 1-800 prefix a note of 2600 cycles would be sent down the line. This particular note sent a signal to the caller's local exchange that no charge was to be made for that call.

Draper's friend had found a way to manipulate this system to make free calls to anywhere he wished. His system was originally based on using a flute or an organ to play a 2600 cycle note into the phone. If done correctly this resulted in an open line in "free call mode". At that point the caller could dial any number at all & bypass the phone companies billing procedure so that no

charge would be recorded.

He figured that an electronic device may be an easier way of doing this & knew that Draper had the expertise needed to build such a device.

John Draper went home and built a multifrequency transmitter in a blue box. It did the trick, and Draper, now fascinated with telephone technology, passed on a unit to some children he knew at a Californian School for the Blind.

To his surprise Draper was told that they were already aware of this trick.

One of the blind students had become aware that a small whistle that was given away with the Quaker Oats breakfast cereal "Cap'n Crunch" was almost exactly the right pitch to match the telephone companies 2600 cycle free call mode !

Draper eagerly passed this information on to his tech friends in San Francisco and at the same time started producing a stock of Electronic Blue Boxes that he sold for a small profit.

John Draper was renamed Captain Crunch by some of the electronic enthusiasts in the San Francisco Bay Area. This pseudonym stuck and it wasn't to be long before Captain Crunch was to become a legend worldwide.

The new concept of accessing the phone system by devious means became known as "phreaking" (a cross between phone, freak and free).

It became a popular pastime amongst those on the west coast of the USA who were in the know. Journalist Ron Rosenbaum heard about this and in 1971 he wrote an article for Esquire magazine called "Secrets of the Little Blue Box".

There were a lot of electronic enthusiasts in San Francisco at that time & the commercial district known as Silicon Valley was starting to establish itself as a major force, catering for the huge main-frame computers that were used by large corporations & defence establishments.

Personal Computers did not exist then, but with the recent advent of the silicon chip things were buzzing and a number of electronics hobbyists were

keen to see if this new chip could somehow be utilised in building a small desk top computer that could be used & programmed by individuals.

One such person was Steve Wozniak. He had already attempted to build such a unit but was thwarted by the fact that he did not have enough cash to get it off the ground.

Steve read the Blue Box article in Esquire. He realised that he could build and sell any number of these units to students at Berkeley & Stanford Colleges who were living away from home and were making frequent long distance calls on a regular basis.

The information in the Esquire article was not complete, but Steve knew enough about electronics to put 2 & 2 together and build the units.

His father was an electronics engineer at Lockheed Missiles & Space Co. & Woz (as he was known) had already designed a basic computer that won first prize at a Bay Area Science Fair.

Even though using Blue Boxes was illegal in California selling them was not. Woz and his friend Steve Jobs made a fair bit of ready cash this way.

Later Steve Wozniak designed his first full-on computer in his garage, and with the assistance of Steve Jobs, who was more of an entrepreneur than an electronics wiz, he marketed this new unit under the name of Apple. For the two Steves the rest is history.

Meanwhile Draper, inspired by the notoriety he had gained through the Captain Crunch whistle and the Blue Box, took his tools to London with him when he went there on a vacation in 1970.

Whilst in the UK he used the whistle to call friends for free in the USA and he took organised tours of the British GPO telephone system. His presence was felt by many young electronic enthusiasts in the UK. In fact almost 15 years later two British hackers who gained notoriety in the press named Captain Crunch as their hero. In 1984 Steve Gold & "Triludan The Warrior" had used various techniques, including Draper's phreaking innovations, to illegally access a computer system

used by Prestel.

Prestel was basically a London based information service that supplied customers with access to Stock Exchange reports, weather info etc, and gave them the ability to receive Electronic mail via their home computers.

Gold & Triludan were able to access the computer-based mailbox of His Royal Highness, The Duke of Edinburgh, Prince Philip.

They left a message there:

*I do enjoy puzzles & games.  
Ta Ta,  
Pip ! Pip !*

*HRH Royal Hacker*

This soon came to the attention of the British press & in fact made headlines worldwide.

Steve Gold & Robert Schifreen (Triludan - his alias was based on an antihistamine medication that he had to take) unwisely continued to hack the service & were caught when Prestel put a monitor on their phone lines.

At this point some mention should be made of the term "hacker". These days, through common usage, this term is generally meant to describe someone who breaks into computer systems to create mischief or even for personal profit.

In fact the term, which was originally coined by a group of students in the early days of computing, was meant to apply to someone who was an expert in computer programming and who would use this expertise to create elegant solutions to problems in this area. In the cases of those whose expertise took them into more suspect areas than their predecessors the original meaning of the term "hacker" generally still applies.

In the main these people were young males whose primary interests were improving their skills in the areas of computers & communication. And they were also adventurers & explorers. Captain Crunch's escapades had a huge effect worldwide.

**To Be Concluded Next Month**

# RAMLINK-GEOS- 17-MEGABYTES.

by Dave Elliott

Having made the decision to stay with the Commodore platform, I decided to look at what peripheral I could save up for that would enhance my present set up. After a long deliberation I came to the conclusion that a RAMLINK was the best option. The next few words describe my findings to date.

It is easy to describe ramLink, as it is quite different to other peripherals available for the C64/128. It resembles a rather large square like box unit. Like the REU, it plugs into the computer's expansion/cartridge port. As it's name implies, ramLink will connect your computer to an existing REU via its ram port,(hence 17 megs) while also letting you use a Utility Cartridge plugged into its pass-thru port. ramLink can be bought with varying degrees of ram. From 0 megs to 16 megs,the choice is yours. Inside the ramLink is a 'daughter-board' which allows you to expand the RAM capacity of ramLink to its maximum of 16 megabytes. Full instructions in the excellent manual that accompanies the ramLink for installing extra ram are given.

The next change you will find is that the ramLink comes with its own power supply, completely independent from the computer(no data loss),with battery back-up if required(makes power failures a thing of the past).Plus real time clock. Depending on the amount of ram installed the battery should last at least 8 hours if not more.

RamLink has two toggle switches on the top of it's case. One is an enable/disable switch. The other is the normal/direct switch which allows you to access another REU's memory either independently or combined with the memory on

ramCard. There is also a reset button as well as two device swap switches which instantaneously swap device numbers between RamLink and an existing device eight or nine. As you would expect from CMD the manual and Utils disk are first class. Since I owned an FD2000 before the ramLink I was already familiar with most of the utilities on the disk. Fcopy, Mcopy etc. Like the FD the ramLink has its master program for manipulating the device to your requirements called RAM-TOOLS. With this program you can change device numbers, create/delete partitions, rename partitions etc. Again like the FD the number of partitions you can create to a maximum of 31 is only limited to the memory available. The 1541, 1571, 1581 partitions are supported plus CMD's own Native Mode. Under Geos only the 81 partitions are accessible plus Native Mode under the gateWay. Native mode partitions are created in increments of 256 blocks and again are only limited by the available memory. True sub-directories can be created in this mode. This gives you a very a great deal of flexibility. No CMD device would come without JIFFY DOS installed and the ramLink also has it's own DOS. Like your standard REU, because there are no moving parts the ramLink is very,very fast.

I would advise that before you actually switch the ramLink on and especially if like me you have the max amount of memory to think about what you are actually going to allocate to the ram. Since I only use Geos the answer was simply. Create all Geos partitions, but you may want to emulate your favourite game or disk etc. The reason for the caution is quite simple,once turned on and all is working, utils cartridge fitted, REU installed. The only way to remove the components is to turn all power, including battery back-up off and that will wipe out your configuration. Failing to do this could seriously damage your ramLink. If in doubt consult the instructions. Also if you have Jiffy Dos installed in your computer,turn it off. The Jiffy Dos in the ramLink will do it all for you. Removing the whole ramLink from a powered down computer is permitted and likewise re-installing.

Once you are happy on what configure you have chosen and the ramLink as been tested. Turning on you computer will activate ramLink. Set to device 16 the ramLink will automatically create a partition

for you and if you have installed a REU then two partitions will be used. I had difficulty with the command given in the book, so I used @\$=p to check if the two partitions had been created.

Another innovation provided by CMD is the timing clip. True to form, it is amazing how many different internal boards CBM produced for the 64. Full documentation is given if you incur any problems mentioned in the instructions. Since I use a 128D the instructions indicated to try the ramLink first, there are normally no problems with the 128 series but again full instructions are provided if you do have any.

## GEOS.

To my mind the ramLink was designed for this system. Imagine having seventeen 1581 disk drives, stacked on top of each other. I just forget the exact amount of bytes available but it was over 65,000. Simply staggering. Any one who is serious about using his Commodore whether it be a 64 or 128 will never look back once he has invested in a ramLink. With a new configure file to recognize the ramLink and a program to give you six options to pre-configure your ramLink (for various ram memory configurations), installation is very easy. I have my ramLink set up as device 8, FD as 9 and a 1571. No auto-boot which allows me to use the other drives without switching ramLink out. Geos boots in about 5-7 seconds from the ramLink.

With Ram-Move by Jim Collette, a couple of clicks will take you to another partition and you can also copy files on the way. Two things may strike you, firstly—no noise, silence as the ramLink does it's job and secondly—speed, fast like an REU.

With the maximum amount of ram possible (although with CMD'S new 2meg REU, 18megs is now possible). You can have individual partitions dedicated to separate applications.

geoPaint, geoCanvas, geoWrite, geoFile etc plus geoPublish with all your data files etc on one partition. Finding files becomes very easy this way. No more swapping disks, or rooting out disks to find that file you haven't used for ages but now need. Place all your favourite applications on a partition etc.

Having the ramLink as device 8/A has one slight drawback, you cannot swap with drive 10/C. Geos doesn't for some reason like this option. Another quirk I found whilst experimenting with various configurations was that if you set up drive 8/A as a ramLink, drive 9/B as a standard drive and drive 10/C as a normal REU you can only have a ram71. Not really critical but it does stop you having say geoWizard and geoCanvas active at the same time. Any program that activates an REU will also corrupt the first partition on the ramLink. Despite these little drawbacks, and now that I have been using ramLink for several months I wouldn't be without it. It does help to bring our beloved Commodore into the 20<sup>th</sup> century. Stanby for the next installment the SuperCPU 128. (after I have saved up off course)

*Happy Geosing*

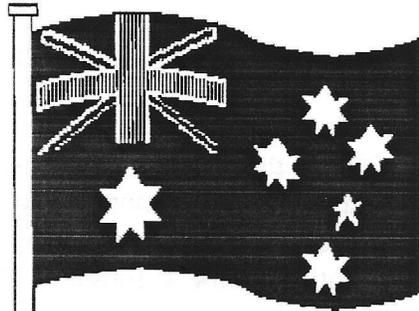
D.G.Elliott

## For Sale

### Plug in Geos clock

Plugs into tape port, sets the correct Time Day and date when you boot up Geos which then means that all your files are updated correctly. A must for the serious Geos user. £20:00

geoClub, 55 High Bank Road, Droylsden, Manchester M43 6FS



## KEEP THE FLAG

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Our flag bears the stars that blaze at night,  
In our southern sky of blue,  
And a little old flag in the corner,  
That's part of our heritage too.

It's for the English the Scots and the Irish,  
Who were sent to the ends of the earth,  
The rogues and the schemers, the doers and dreamer's,  
Who gave modern Australia birth.

And you who are shouting to change it,  
You don't seem to understand,  
It's the flag of our law and our language,  
Not the flag of a faraway land.

( Though there's plenty of people who'll tell you,  
How when Europe was plunged into night,  
That little old flag in the corner,  
Was their symbol of freedom and light.)

It doesn't mean we owe allegiance,  
To a forgotten imperial dream ;  
We've the stars to show where we're going,  
And the old flag to show where we've been.

Be A Proud Australian    Fly The Australian National Flag