geoNEWS
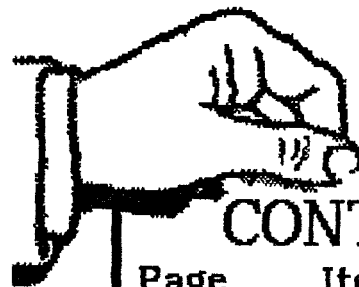
EDITOR'S COMMENT

Once again a pretty busy month. Quite a few thingts happening GEOS -wise. Some very interesting news on page 9 regarding new equipment from the USA. , I hope you all enjoy the free disk donated by a Canadian company, I have not had time to give it much of a try due to other distractions, mainly a new LC24-200 Colour printer. I expect that the 24 pins will give us a slightly better quality newsletter but as of yet there's no chance of a colour production. I hope to include a reviewnext month of the questionaire results from the ones that were returned, it was only a rather small percentage but it does give an insight into what some members want out of our club We have been offered some top quality articles by Joseph Thomas author of GetOItWrite, and this month see's the begining of a series of articles by Roy McIntosh covering geoPublish and geoFile geoChart and geoCalc. Due to the size of these articles they will be spread over a series of months. If at the end of the series any member would like the articles in a binder all to-gether then this can be arranged but there will obviously have to be a small charge for this. Happy GEOS-ing

CONTENTS

INFO

```
NAME    FRANK CASSIDY
STREET
TOWN
CITY    MANCHESTER
ZIP
TEL
PACKET

  ■ WRITE PROTECT
```
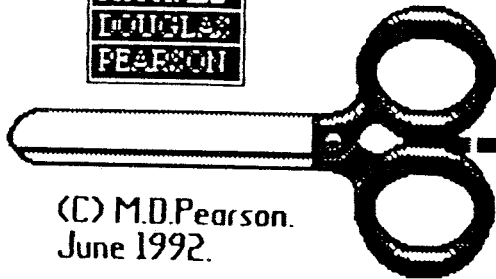
GEOSNIPS

Snippets of GEOS facts and fun for your interest

GeoIntro – This is the first of an occasional series of articles that will contain, what I hope will prove to be, useful short pieces of information that will be of interest and of help to both the GeoNovice and the GeoExpert alike. If you have any short tips then please send them to me and then they can be included in a future GEOSNIPS. This will enable fellow members to further extend their use and enjoyment of GEOS. Let me know whether you find this idea useful or if you have any ideas for improvement.

GeoSnip – 1

Use your Geos Desktop to reorganise your files on your none-Geos disks. Open any of your own (not commercially protected) disks from your Geos Desktop (you will be asked if you want to convert it – select OK – this will not harm your disk in any way. You will still be able to use the disk outside of the Geos environment). You can then use the facilities of the Desktop to move the files into the order that you want them, delete files that you do not want (care!) and if you want a 'divider' after some of the files in the directory, then you can create a Geos file on the Geos workdisk, name it "------------" and then transfer this file to the none-Geos disk in the position that you require, to easily create a 'divider' in your directory listing. Alternatively, you can use an already created divider on a none-Geos disk and transfer it to the required disk – all using your Geos Desktop. Not everybody realises that this is a very useful (none-Geos) use of your Geos system.

GeoSnip – 2

There are many Public Domain Sid Player music files (for example, in the ICPUG C64 library) and these can be used with the PD Geos music program GeoSid Player. Extend the music capabilities of your Geos system and transfer some of the music files to a Geos music disk and listen to soothing music when you find that your Geos inspiration has dried up – or when you are pondering what sort of article you are next going to submit to GeoNews.

GeoSnip – 3

When you are searching for a certain Desk Accessory on one of you work disks, remember that you do not have to page through all the pages of the Desktop. Just click on the Geos menu, this will show you all the Accessories on the disk, click on the one you require, and away you go !!

MICHAEL
DOUGLAS
PEARSON

(C) M.D.Pearson.
June 1992.
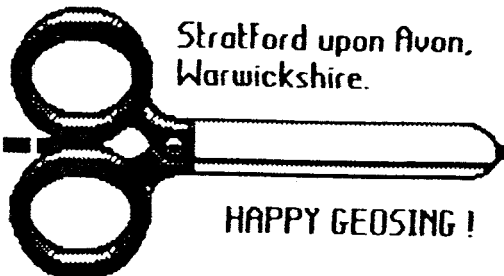
Stratford upon Avon, Warwickshire.

HAPPY GEOSING !

geoCODE

by Greogory Harper

This column will be dealing with programming GEOS. Some knowledge of machine language programming would be beneficial but NOT essential.

What I will be presenting in future articles will be tutorials on understanding GeoProgrammer. These articles will also show you how to develop your own applications and desk accessories.

Before starting off you will need the following: GEOS (V2.0 preferred); a disk drive (two drives make writing and assembling easier); and GeoProgrammer. Some people have had success with non-GEOS assemblers, but none can match the GeoProgrammer package by GeoWorks (Berkley). I therefore urge you to get your own copy. See the Australian Commodore and Amiga Review advertisements for a source or write in to this publication.

SETTING UP

The first step is to make TWO back-ups of the GeoProgrammer (GP) package. Why two I hear you ask? One to be put away with the original and one to work with, just in case something goes wrong (as it usually does). Setting up work disks depends on what type of system you are running. Make up work disks on either of the following:

SINGLE DRIVE: GeoAssembler, GeoLinker, GeoWrite (highest version), printer driver, geosSym,+ geosMac.

DOUBLE DRIVE: (disk 1) GeoAssembler, GeoLinker, GeoDebugger, geosSym,+ geosMac.

(disk 2) GeoWrite (highest version), printer driver, Text Manager (plus a text album), Photo manager (plus album). On a third disk, have your source files.

Now that the housework has been done, you are ready for action.

SAMPLE FILES

A few sample files are supplied on the GP disk. We will use these to get a feel for programming GEOS. Double click on the GEOASSEMBLER icon. You will be presented with a list of files on disk. Choose "SamSeq", then OPEN. If you have two disk drives, select which drive to output on. Choose then click on OK. The assembler will now swing into action.

Do the same for the file "SamSeqHdr". After this file has assembled, QUIT to the desktop and run GEOLINKER. Choose "SamSeq.lnk" then OPEN. You will be asked if you want a viewable symbol table, choose NO at this stage, then OK. Once the source files "SamSeq" and "SamSeqHdr" have completed linking, quit to desktop. Find the new application file "Sample Seq", run it to see what you have created.

SOURCE FILES

Any program you wish to create for GEOS will need THREE essential files. They are: file header, link file, and source files. The source files look similar to other assembly program files. The GeoAssembler program supports all the 6502 machine language commands. E.g., LDA #02, STA $DD21. It also supports labels extremely well. Labels are names assigned to a memory location. For example, instead of using the memory address $C124, the name (label) Rectangle has been assigned. You would then use the label in place of it's address. e.g., JSR Rectangle.

You can look at the sample source files within GeoWrite, or in the appendix. Have a look now. The source files contain the bulk of the program you are creating. All windows, menus, icons, and dialog boxes are defined here.

HEADER FILES

All GEOS programs and supporting files have a header attached. This is stored on a directory sector on disk. It contains all the details of the file, including: Permanent name and version, Author, Size, Date/Time modified, Info Notes, and its icon data. The above information must be supplied to GP during linking. The sample file: "SamSeqHdr" is a good example. In fact, I use this for my own applications. All I do is change the necessary details.

HEADER FILES

All GEOS programs and supporting files have a header attached. This is stored on a directory sector on disk. It contains all the details of the file, including: Permanent name + version, Author, Size, Date/Time modified, Info notes, and its icon data.

The above information must be supplied to GP during linking. The sample file: "SamSeqHdr" is a good example. In fact, I use this for my own applications. All I do is change the necessary details.

LINK FILES

The link files simply combine all the source files with the header file. In addition it determines what the final name of the program will be, and where in memory it will be. For now, try what I have outlined here. It is best to start off simple. The sample files are the best way to get the hang of it.

PROGRAMMING STRUCTURE

Look now at the sample file "SamSeq", either from within GeoWrite or in the Appendix of the GP manual. After the routine label ProgStart, you will notice the command LoadW repeated three times. This routine has three parts: clear the screen (get rid of desktop), set a menu definition table, and define and place any icons. The menu table includes the commands seen across the top of the screen in applications. e.g., GEOS, FILE; EDIT; OPTIONS etc. as seen in GeoWrite.

After these three sections, an RTS is issued. This effectively puts control back to the operating system. That is, the mouse pointer is put up and GEOS waits for the next move. When an event happens, such as the user clicking on an icon or menu item GEOS will call one of the handler routines. Instead of using a thousand different hexadecimal addresses, symbolic names are used. We will refer to constants, memory locations, variables, and routines by symbolic names. A JSR DoIcons is more descriptive than a JSR $C124. The actual addresses and values for the symbol can be found in geosMemory Map, geosConstants, and geoRoutines.

Macros are supported and used frequently. For example,

```
LoadB   variable,value
```

is a macro for:

```
LDA   #value
STA   variable
```

A complete list of the macros used in GEOS appears in geosMacros.

KERNAL GEOS

All features of GEOS can be accessed with programs written with GeoProgrammer (GP). This includes: pull-down menus; icons; dialog boxes; multitasking. GEOS is a full-fledged operating system, and its central part is the Kernal. The Kernal is memory resident, i.e., it is always in memory and running all the time. It is the Kernal that supports all the aforementioned features. The desktop is not part of the Kernal but is an application like GeoWrite and GeoPaint. As a matter of fact, alternative desktops have been written. A couple that spring to mind are Gateway and QuickTop.

The Kernal keeps track of what the user is doing, whether it be a menu item, icon or other event, the proper user defined routine to handle it will be called.

There are two types of events:
1) a user initiated action, or
2) a user defined time based process

The clock is an example of the process as it is run every second.

There are two levels of code running within the GEOS Kernal, the MainLoop and Interrupt Level. The MainLoop is like one long loop of code. On each cycle it checks for user input, and determines its significance. The MainLoop checks if the mouse button has been clicked or double clicked. This would be the case if an icon or menu item had been selecte. It also checks for keyboard input, for text entry. The MainLoop starts any time based processes.

At the interrupt level, the GEOS Kernal handles the 6510 IRQ interrupt, which is triggered 60 times a second. That is, every 60th of a second, the Interrupt Level code is run. What this all means is that the GEOS Kernal does all the boring work. All the programmer has to do is define menu tables, icon tables, graphics and service routines. This will become clearer in future columns.

Feel free to contact me via the "Commodore Network", or at my home address: Greg Harper,
N.S.W.,   Australia.

Dear Frank,
Many thanks for the free disks, geoClub disks 1,2,3+4 they are brilliant. I have one problem however. When I try to look at a DOS file on GEOS Calendars, it says "File Too Big for 1.1" could you please explain what the problem is. geoCLUB Disk 3 + 4 when I try to convert to Geos disks it says disk full, I cannot move files because they are not GEOS files, please bear with me becuase I am new to GEOS. Is it possible to change fonts and styles after you have written a letter in geoWrite, if so, how. I do not have room for a mouse and so I am looking for a tracker ball do you know where I can get one from. Finally, in the last geoNEWS issue 12 you mentioned GEOS V2.0 for £20, would I get a manual with it. Kind regards. Mark Trapp. Erdington

Dear Mark,
I am afraid I cannot help you with GEOS Calendars as I have never used it but it sounds like you need a later version of GEOS to use it fully. Can any one else throw some light on this one ?. geoClub dsisk 3+4, it is always advisable to first of all make a copy of the disks for your personal use only, then should something go wrong it's not such a disaster. Then delete, out of GEOS if nesseccary some of the files not wanted and then convert to a GEOS disk. When you have written your geoWrite file (letter) and want to change the text or style just take the cursor to the part you wish to change, depress the activator button and drag through the text, highlighting it. Then go to font or style and do the alteration, I know of no restrictions on the number of changes that can be made. The V2.0 on offer last ,month for £28 (not £20 as your letter stated). These are brand new and bought from Berkeley Softworks so they do indeed include a manual. I do not where to obtain a TrackerBall but remember you may also need a TrackerBall driver.
Happy GEOSing - Frank.

What? There is still more to come !

by Roy McIntosh

Introduction

During one of my many talks with Frank over the past months we discussed one or two ideas for the geoClub magazine, which I would like to air with you here as part of an introduction to what I hope will be the start of a number of articles. The hardest thing for anyone planning and writing a newsletter, or magazine, must be the constant headache of trying to think what to include in the next issue. It has to be an article, or a piece of news, that everyone will gain something from; something that as many readers as possible will be interested in!
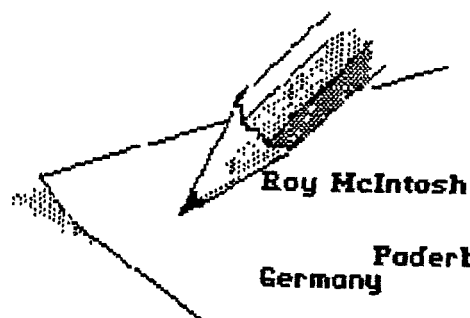
Over the past months a number of the club members have started to take an avid interest in adding to the number and richness of articles that have found their place in the newsletter. This, of course, is just what we need. The main problem now is to try and assess the number of experienced Users we have amongst us in the hope of reaching well balanced articles, well balanced enough that is, to enable the beginners as well as the more experienced amongst us to be able to read the same articles and still get something out of them. I would imagine that practically all of the club members are owners of the main Geos software: i.e. Geos V2.0 or at least have Geos V1.3. Most of the club members should also be conversant with the use of GeoPaint and the many other applications that come with the V2.0 software. But, how many of you know anything about the GeoPublish, GeoFile, GeoChart and GeoCalc programs that are also available from Berkley Softworks (who are now called GeoWorks). I am not sure how available these programs are to the English members of the geoClub! I do know that your resources in England are at present not very good - when it comes to Geos related software in general - maybe we might be able to change that sometime! The thing that I am trying to bring to your notice is that there could still be a lot of Geos-related software out there that you might not have yet (?) had the pleasure of using. So what I am about to do is to attempt to introduce you to some of this software over the next few issues of the geoClub magazine. I do not consider myself a professional User, nor do I believe that I know all of the tips and tricks when using this software, there will be pleanty of scope for many more of you to add your comments, tips and tricks and thoughts.

So as you can probably gather the main aim of this undertaking is twofold.

☞ The first and most important aim is to inform the newer and older members alike about other programs and try and bring as many members as possible up to the same level.

☞ The second aim is to achieve a backlash of input from other club members. Please feel free to add more input to what will be said in future issues. It would also be of interest if a healthy discussion were to be started. If anything in the articles is not to your liking, or in your eyes wrong, then let's hear about it in the form of letters to the editor (Frank - you could just get even busier here!) Anyone wishing to contact me directly may do so at the following address:

Roy McIntosh

Paderborn
Germany

to be continued........

A short Taster

by Roy McIntosh

Small Talk

As already explained about in the leadup to the pending collection of articles, I do not profess to know all of the ins and outs of every program that I shall be writing about. I have decided to consult a number of sources to enable me to glean as much information as possible about the various applications in question. All of the sources used will be mentioned at the appropriate time. Having said that, I still do not believe that all will have been covered when I have completed writing and your reading is finished. So I would once more like to point out that we are depending on all of you readers out there to give us pointers as to what is missing! Enough of the introductory mumbo jumbo - and on with the real stuff!

What will you be getting for your money?

Article Number One

GeoPublish

This will probably be the longest of the planned articles. The program is used primarily for DeskTop publishing, i.e. it enables the User to publish his own books, mags, leafletts and various other masterpieces. The publish program combines all of the programs in the Geos World together and makes them into one mighty workhorse.

What is Desk Top Publishing?

Which Geos setup is best for use with GeoPublish?

What is GeoPublish?

The GeoPublish components.

Master Pages

Page Layout

Page Graphics

The Editor Mode

Other programs and files which make life that little bit easier and where to get them from.

Article Number Two

GeoFile

Another very effective program. This program allows the User to make full use of a completely computerized form design and filing sytem. The program also allows sub-files and has it's own integrated print-system.

What is GeoFile

Form Design

Data Entry

Printing with GeoFile

Article Number Three

GeoCalc

A calculation program to make your eyes water! This powerful and extensive program will take the workload off of you and redistribute it to your Geos program.

How to use this very effective program

Article Number Four

GeoChart

CEOCHART   CEOCHART

With GeoChart you can turn the charts made with GeoChart into graphs of your choice. This program supports Pie, Area, Column, Point, Line and other types of graphs that can be included into all of your reports used in GeoPublish and GeoWrite and can also be used in conjuction with GeoPaint and PaintDrivers.

Preprarational work

What can it do?

How to use GeoChart effectively!

As you can see the Geos programs do not just end with the GeoWrite and GeoPaint applications. There is a great deal more to Geos than at first meets the eye. The above mentioned introduction is meant as a form of taster of what is to come. The length and depth of each article is at present unknown to me. If, however, you should feel that too much time time is spent on one application, or not enough on another - please feel free to comment. Rember, these articles themselves are only meant to be taken as information. I will not attempt to include any personal feelings on any one program or other. If your appetite has been whetted, and you wish to know where to purchase one of the applications. Ask Frank !! We start in the next issue with the article on GeoPublish. Bye for now.   Roy :-)

See your name in print!!

Any one interested in writting articles for YOUR newsletter is encouraged to do so, it is only by input from members that will help others get the most from thier hobby with this exchange of ideas. Almost anything is accepted as long as it is in the main GEOS related, we are after all a GEOS user group rather than a general C64 group. As I know you all wish to help and do your bit especially when it comes to helping me so here are a few guidelines that will help me more than you can realise. All I require is your article in geoWrite format, any version, and graphics in an album. Do not set margins put page breaks in or anything just a basic geoWrite file. I am happy to receieve it in any other format also and even a printout of how you see the layout but always include the original un-altered, un-margined, un-page break file. I like to keep it within the same format and I always use the same font. I do bend these 'house' rules slightly, for example Michael Pearson did an article in the July issue "Please Mr Postman" which was submitted in a geoPaint format and fortunatley I was able to cut and paste it to fit within my standard page so that was fine. One thing is very important, if you have to send in hand written articles please remember I have to type all that into geoWrite so at least make it leadgable. If you are sending in the printed page please use a ribbon that has some ink left on it, some of the items I recieve are so light it makes hard work to just read them and the day is near when submissions like these will go straight into the wastebasket. So come on all you budding authors, give it a try you'll get quite a buzz seeing your article or work of art in geoNEWS and your name on the front page in the CONTENTS box.

FREE DISK

The free disk you find with this months issue of geoNEWS was kindly donated by Brent Adolph of Digi-Clips. He tells me that they offer a Laser printing service so that your documents can look like a type set page. They also have on offer a large number of Clip-Art disks and a scanning service so you could have your favorite picture scanned into GEOS and used for your personal stationery. Should any member require further information about any of Digi-Clips services and prices please send an SASE, I will photocpoy what information I have and send it by return.

THE DISK
Side B of the free disk contains some Clip-Art which consists of 7 geoPaint files.

Side A contains the germ of their newest idea, a GEOS Startup Sounds Disk. When placed on your boot-disk, *AutoRAW* will play the first .RAW file it finds when you boot GEOS. This .RAW file must be first converted to the GEOS .RAW format using the RAWTOGEOS program. Also contained on the disk are some documents these are in ASCII format but I will also include these same files converted to geoWrite format. I would suggest that you make a copy FOR YOUR PERSONAL USE ONLY first in the event of a mishap. I am sure Brent would be vey pleased to hear comments from anyone who finds these programs useful and/or interesting. His address is......

Brent Adolph,

British Columbia

CANADA

Creative Micro Design NEWS

CMD of Massechusetts the major C64/C128 and GEOS support company have some great new realeases for the end of this year. There is to be a face-lift for both Perfect Print and GateWay as well as the new 'geoPaint', geoCANVAS, many of you will have seen the demo of this product on geoCLUB disk 9, if the demo is anything to go by it is a BIG improvement on our original paint program. The most notable has to be two new 3.5" disk drives both fuly compatable with GEOS. The FD-2000 will format to capacities of either 800K or 1.6Megabyte using standard double-density or high-density 3.5" disks. The FD-4000 utilizes the latest technology and formats capacities of, 800K, 1.6Mb or a masive 3.2Mb using standard, double-density, high-density or enhanced-density disks. Should anyone require further information on CMD products please send an SASE and I will forward a full price list.

----

geoCLUB Disk Review Part 2
by Terry Watts

geoCLUB Disk 17
PREFERENCE   Smiling Face
READ THIS and TRAINS 01   A Train Font plus info
GEOVIEW   Lets you view the following pics on this disk
Railroad PII The Railroad Old Train Gondola Car Steam Loco Railroad Station Train 1 (vert) Railroad 3 RR Cartoons PS RR Pix RA and H Railroad Garfield Disk contains some very good Train pics
Paint Scrap V2.0 copy any size scrap from G/paint pics

geoCLUB Disk 18
PREFERENCE   Sword
READ ME   Info on the Icon Files
ICONS 1-2-3-4-5 in geoPaint format
POINTERS in geoPaint format
ICON 5   Icons in a PhotoAlbum
PIC SHOW Not sure about this as there is no Info
HAPPY FACES   Round happy face pics
BUCKY BALL Pic of a Atom Carbon Molecule, very well done
BAT HZ a Bats face pic

geoCLUB Disk 19
PREFERENCE GeoClub pointer
ICON EDIT Create your own Icons
PETES SPRITES a Photo album
GEOVIEW View, scroll and print geoPaint pics
SCRAPEEK as Disk 7
GEOCLUB ICONS a geoPaint file
LETTERS NOS a geoPaint file
GEOCLUB PICS a Photo Album
NUMBERS and LETTERS a photo album of the above Letters Nos paint file
FONT VIEW as disk 5 and the following

fonts MICRO FONT SPRITE FONT and ICON FONT
ICON GRABBER as Disk 5
BOY READING a good colouring pic

geoCLUB DISK 20
PREFERENCE a Mouse
WINE BOTTLE SCHLOSS SBG TRAVEL CLIPS and FOOD CLIPS 4 very good geoPaint Files
PICTURE FRAME SQUARE CORNERS 1 and 2 ROMAN TILES and MARBLES are borders to be used with a geoPaint pic
TASTE-64 TASTE64 instu including a Taste font, something different!

geoCLUB DISK 21
PREFERENCE Hand
PAINT COMBO various geoPaint pics
COLOR BARS get the colours right on your TV, could be handy for members with a colour printer
CHILD 2 BOY FISHING TOADAL KAOS STARMAN ART BASSELMOLE and ZODIAC ANIMALS some very good pics, ideal to print out and colour if you have kids! If not, borrow some.

geoCLUB DISK 22
PREFERENCE a pencil
WESTERN GUNS MARVIN CARTOON CHARS 1 2 3 and 4 SIL6 more very good geoPaint pics

geoCLUB DISK 23
PREFERENCE a Rocket
BIRTHDAY/TRAVEL Birthday and Summer vacation pics in a geoPaint file
MOM and DAD pics for that Special day in a geoPaint file
CHRISTMAS and NEW YEAR ART seasonal pics in 2 geoPaint files
NY VAL STPAT some more very good pics
HOLLY BORDER ideal border for that special Xmas letter
HOLIDAY ALBUM Photo album of various holiday type pics, mainly American in flavour

geoCLUB DISK 24

PREFERENCE a Mouse
Some very good geoPaint pics of well known people inc. Q Eliz, P Diana, Nixon, Ghandi etc. 10 files in all.
BASEBALL SCANS scanned pics of Baseball stars
GIRL FACES 1 and 2 two geoPaint files of Girls/Ladies faces.

geoCLUB DISK 25

PREFERENCE a pencil
TMNT Coloured Turtle pics
EAGLE HZ Geopaint pic of an Eagles head
CATS HZ 1 and 2 Geopaint pic of cats
CITY CLIPS Geopaint pic of a U.S. skyline and street. My opinion, very good.
SEASHELL SCAN Geopaint pic of a seashell
NINJA TURTLES and CAL/HOBBES HUG Two geopaint pics, again ideal for colouring

geoCLUB DISK 26

PREFERENCE a Pointer
CORAL REEF a very good geoPaint pic for colouring
JAWS a geoPaint pic, need I say more.
1911 OVERLAND a very good old car pic
DIATOMS Freshwater organisms viewed through a microscope.
CARS 1917 another old fashioned car pic.
SQUARE DANCE a geoPaint pic of dancing couples.
CHILDREN another pic that begs to be coloured.

A REMINDER FROM YOUR LIBRARIAN

---I have noticed lately that some members are in a bit of a muddle when ordering library disks. To put the matter straight please note, the disks you see listed in this news letter and others are for 1 side of the disk. The library disks the club issues are double sided, so, when ordering please remember this. If you only want one side, it will still cost you £1.25.

PRINT SHOP GRAPHIC DISKS

We have in stock both side A and side B graphics. Side A can be used in GEOS and with PrintShop when using Non Commodore printers. Side B can be used in GEOS but need converting and also with PrintShop when using Commodore printers.

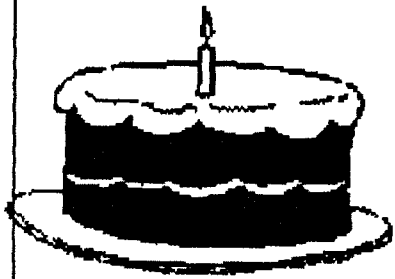I hope this will clear up any problems that members might have. Terry

NEW MEMBERS

New members this month are....

Ian Braybrooke	Newmarket
T. Staggs	Rainham
Richard Paley	Glossodia (Oz)
Mike Johnson	Chester

Welcome to you all.

This brings our total membership to 84 though we have effectivley lost 3, 1 to the IBM-PC and 2 to the Amiga.

SEPTEMBER
-1992-

SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			MICHAEL DOUGLAS PEARSON

HAPPY BIRTHDAY !

Many congratulatins on the success of GeoClub (UK) after a year in existence. Our thanks must go to Frank Cassidy for launching the Club and for his hard work ever since.

Geo CLUB U.K.

Calendar designed with the help of 'GEODATE'.
(C) Michael D. Pearson. Logo designed by Duncan Pearson.   (C) July 1992.

MANY HAPPY RETURNS !

Keep supporting GeoClub and send in your contributions to GeoNews. This way, UK GeoPhiles will have a forum in which to keep their interest developing for many years to come !

Digi-Clips Demo Disk
Given free with the
September 1992 geoNEWS
Donated by DIGI-CLIPS
Burnaby, B.C. Canada