The deskTop

of Dennis Rowland

Excuse Our Growing Pains!
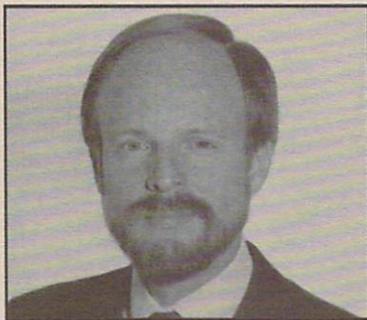
My name is Dennis Rowland and I am the President and Chief Operating Officer of **Berkeley Softworks (BSW)**. I coordinate and control the day to day operations of the company, including customer service. In short, the buck stops here, on my desk, for problems and complaints.

This last year we experienced some explosive growth, and in the process some unpleasant growing pains. That is to be expected. But it is not right that some of you, our customers, have shared in that discomfort.

Let's talk about growth for a minute -- growth that you have helped make possible. Sales have more than doubled since last year. We now produce 15 products, up from 5 since last May, and that is not counting some six international versions of each product! Additionally, the new products produced in the lab by our engineers, such as **geoPublish**, all the 128 **GEOS** products, and the soon to be released **GEOS** for your friends with Apple II's, promise to keep us growing. But we will continue to grow only if we do right by you, and some of you are justifiably unhappy customers.

I don't want to dwell on problems, but I'll go into a few details so all of you know what I'm talking about. Our customer service phone lines have been swamped and we've been slow in answering letters and QuantumLink messages. This is due partly to growth, but also because of delays in shipping **GEOS 128** and the replacement and upgrade disks you requested. We also found that our systems were not always able to answer all of your questions.

So what, you may ask, are we doing about it? Well, we're doing a lot and promise to do more. We are up-to-date on shipments to you. We have also put in a lot of overtime to answer your letters and messages. But more importantly, we are doing things to prevent problems from reoccurring.

We are installing a computer system to track all of your orders so that we can respond knowledgeably to your questions. If unavoidable shipment delays occur, we'll be able to give you the courtesy of a postcard informing you of the delay. We are beefing up our communications with you, our customer. This newsletter is one example of our effort. Increased staffing of customer support is another. Our new quality control procedures can't guarantee perfection, but few problems will get through this screen. We're dedicated to keeping you a satisfied **GEOS** user.

I just want to say one more thing, and that is *thank you*. Thank you taking the time to write, call, or leave a message on Q-Link. Thank you for telling us where we could improve and offering suggestions. And thank you for being loyal customers. We're fortunate to have customers like you.

Sincerely,

Dennis Rowland

Dennis Rowland, President

Super Services For GEOS Users!

Roger Ledbetter and **Skip Goetzinger** have taken the inexpensive power and technology of GEOS and applied it to help their businesses as well as others.

Roger Ledbetter began publishing geoWorld, a magazine geared to getting the most out of GEOS, in March of 1987. His goal was to show the merits of desktop publishing, while providing an arena for GEOS users to trade secrets on the uses (both at the production and programming levels) of the program.

"Before geoWorld came out, there was no monthly publication regarding GEOS that showed all of the printing capabilites of the program," states Ledbetter. Now GEOS users have that publication. People submit files through *QuantumLink*, and then the files are edited before being made into signatures (11x17 pages). The files are duplicated, folded, stitched, and mailed by Roger and his family.

"It's a pretty simple process and even the kids get involved. The response has been

geoDirections

By Brian Dougherty, Chariman & CEO, BSW

Welcome to geoDirections. I hope to make this column a regular feature of GEOS NEWS. Here I plan to share with you my views on where our company is going. On The deskTop in this issue you met Dennis Rowland. Dennis joined the company last June and, as he pointed out in his article, he has responsibility for the day to day management of the company.
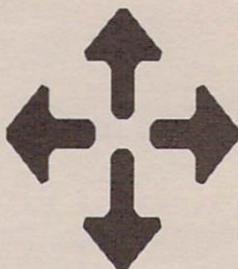
Dennis comes to BSW with an undergraduate degree in Engineering from the University of California, Davis, an MBA from Harvard, and 15 years of management experience in both large and small companies. In short: he is eminently qualified to manage us through the rapid growth our business is experiencing.

Kicking myself upstairs doesn't mean I'm getting out of the business. On the contrary, I'm focusing on what I think I do best--working with engineering to develop new products and managing the strategic direction of the company. Which brings me to the purpose of this column: letting you, our users, know where our company is going and how you are going to benefit by our actions.

A major new direction for BSW is the launch of GEOS for the Apple //e & //c computers. As a Commodore owner, you might be asking yourself, "How in the world does this help me?"

One of the benefits this new version will bring to Commodore GEOS owners is a larger universe of users with whom you can share data and information. Apple and Commodore GEOS applications have identical data file formats. We have already developed a file transfer program that simply requires a cable to transfer files between a Commodore and an Apple. Electronic Bulletin boards will allow both Commodore and Apple GEOS users to upload and download interchangeable letters, clip art librarys, fonts, and data files.
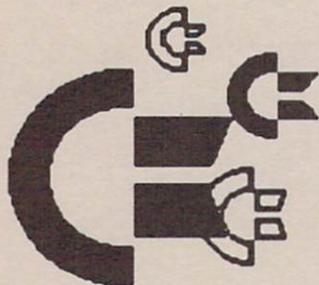
Because of Apple's strong presence in the educational market, BSW is hoping to make GEOS for the Apple // a strong product in the classroom. In addition, we are developing a product called geoNet. geoNet is a low cost local area network, targeted at the K-12 school market. geoNet allows C64's, 128's, Apple //'s, and IBM PC's to be networked together. If we are successful, your children could use their C64 to work on school projects at home, regardless of the predominant system used at school.

GEOS provides a common operating system platform across these machines, making it easy to develop a product for both systems at one time. The introduction of geoProgrammer, a sophisticated software development environment for designing GEOS applications, further facilitates this process. With the launch of GEOS for the Apple //, the potential market for GEOS Applications will be even more attractive to third party developers, leading to an even larger selection of applications for users on both systems.

All in all, the GEOS future looks pretty bright!

Brian P Dougherty

Brian P. Dougherty
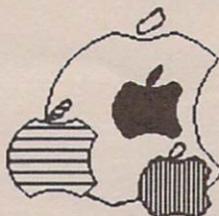
Super Services For GEOS Users

(Cont.)

great. I'm finding that a lot of people I wouldn't have thought use GEOS, like doctors and lawyers, are subscribing to geoWorld."

The articles in geoWorld cover a wide variety of topics. Subjects have included: how to get the most out of geoPaint, how to alter printer drivers to get an enhanced printout, questions and answers about desktop publishing, a discussion of the programming aspects of icons and pull down menus, and advertisements about clip art collections and new fonts designed by GEOS users. In addition, a representative of Berkeley Softworks (BSW) writes a monthly column talking about the latest release from the company -- often before many major publications have written their own reviews. Plus there is always an abundance of spectacular GEOS art drawn with geoPaint.

Skip Goetzinger started the Laser Direct company back in January. He went into the GEOS document printing market in direct competition to BSW's laser service on *QuantumLink*, and when it turned out he could process people's orders faster than BSW, they turned over their business to him.

> "The biggest advantage is for the customer."

"The biggest advantage is for the customer since we specialize in fast turnaround time," says Skip. "BSW's job is to create and support software, not laser print files. This way the customer gets better service, and BSW can concentrate on more important matters."

Skip's service is located in the GEOS ARENA in the Commodore Software Showcase on *QuantumLink*. (*QuantumLink* is the telecommunications software on the back of every GEOS boot disk.) Files to be laserprinted are uploaded through *QuantumLink*, and Skip downloads and prints them within 24 hours. Skip's service will also make slight modifications to fine tune a file, and return an order by overnight express if it is needed right away.

Charges are $3.00 for the first page of any document, $1.00 for each additional page, and $.50 for each additional copy of any page. Extra charges apply to some additional services.

"I've been getting files from all over the country. People use the service for newsletters, business forms, and sometimes manuals. There's even a stockbroker in Canada who prints a newsletter that he sends to all of his customers."

GEOWORLD
38 Santa Ynez St.
Santa Barbara, CA 93103
6 months for $12
1 year for $20

LaserDirect
P.O. Box 20913
Milwaukee, WI
53220-0913
(414) 543-9923
Q-Link: Laser Skip

GEOS and Productivity

Prior to GEOS, many Commodore owners did not realize the productivity potential of their computer. In designing the GEOS operating system, BSW's goal was much more than to create a single successful package. The goal was to create a new operating system platform that would make feasible a whole new generation of sophisticated applications. This special report focuses on two of the most important productivity applications for the GEOS environment: geoCalc and geoFile.

Before analyzing these products, it is worth taking a moment to discuss the foundation on which they are built. The GEOS graphic interface has a rich historical background. It began in the early 70's with a group of computer scientists and learning researchers at the Xerox Palo Alto Research Center (PARC). Their goal was to make the computer more accessible. In those days computer users had to invest a great deal of time in learning how to use the computer. The PARC researchers came up with a novel idea: instead of making people work like a computer, make the computer work like people.

Today, over 15 years after the initial research, graphical interfaces have become the preferred method of using a computer. Largely through the efforts of Apple and the Macintosh computer, the world has come to realize graphical interfaces have a lot to offer. Apple has recently made great advances in the corporate world because research has shown: *a consistant, graphical user interface, across applications, greatly reduces the cost of training and causes people to use their computers more frequently.* There is little doubt that a graphical interface is the way computers will be used in the future.

GEOS was created to bring this revolution in the way computers are used to millions of Commodore 64 and 128 owners. BSW closely studied the history of graphical interfaces selecting the best features advanced over the years and adding a few enhancements of our own. Since there is no other graphic interface available for C64's, we often compare our applications to those available for the Macinosh or IBM PC (under Windows). Although those machines have superior hardware capabilities, GEOS applications stack up quite favorably. In this issue geoFile and geoCalc are compared to similar Macintosh and IBM PC applications.

There are hidden benefits to working within the GEOS environment. geoCalc and geoFile are not only easier to use than any other Commodore spreadsheet or data base program -- because of the consistant user interface and the ability to share data with each other and with other GEOS applications -- but you will also find it easier to use similar applications in other graphic environments.

Whether you want to be more productive at home, or want your child to learn the computer interface of the future, GEOS and the expanding family of GEOS applications is the answer. As you read about the capabilities of geoCalc and geoFile on the following pages a whole new meaning to personal productivity will emerge. If speed and performance are important to you, we urge you to examine the 1764, 1750 RAM Expansion and 1351 Mouse offer on page 7. These peripherals drastically improve the performance of all GEOS applications. In particular, we highly recommend using the RAM Expansion Unit with geoCalc and geoFile.

geoCalc

geoCalc is a state of the art, graphically oriented spreadsheet. This report will introduce you to spreadsheets, how geoCalc measures up to other spreadsheets on the market, and how geoCalc can help you be more productive.

What is a Spreadsheet?

A spreadsheet is a general purpose mathematical tool. It is simply a large grid where each entry in the grid -- called a cell -- can contain a number, a formula (mathematical equation), or a comment. Each row of a spreadsheet is given a number and each column is given a letter. This allows every cell in the spreadsheet to be referenced by its row and column. For example, the 1st cell in a geoCalc spreadsheet -- the upper left most cell in the grid -- is the A1 cell.

The magic of a spreadsheet is that you can create formulas to perform mathematical operations on other cells in the spreadsheet. A cell containing a formula displays the result of the formula as opposed to the formula itself. For example, if all of your monthly expenses were displayed in a row (B2 - rent, C2 - food, D2 - clothes, etc) and you wanted to add them up, you could enter the following formula in E2, =B2+C2+D2. After you entered this formula, E2 would display the sum of the numbers in the other three cells. To change a formula, you simply click on the cell and the formula appears in an edit box at the top of the screen. To help make your spreadsheet easier to use, you might enter a

geoFile

geoFile is a graphically oriented, easy to learn, flexible, data base pro- gram. This report will intro- duce you to data bases and their uses; describe geoFile; and compare geoFile to other data base programs for the IBM PC and Commodore.

What is a Data Base?

A data base sorts and stores information allowing the user to retrieve the information quickly. A data base program can be used for anything from airline flight information to cook book recipes, to dental patient records. Managing large amounts of data is something computers do very well.

There are two kinds of data bases: large structured data bases and flat file data bases. Large structured data bases require programming to set up. These data bases have their own programming languages. Users must learn to program in this query language or hire a consultant to do the programming for them. This type of data base is necessary for very complex data transactions such as banks and airline ticket agencies. For home and small business applications, programming in a structured data base language is more work than a user wants or needs to do. For this reason file programs have become popular.

A file program allows the user to design a *data form*, sometimes called a *record*. Each entry on the form is called a *field*. For example, if the members of a boy scout troop were to be entered into a file program,

geoCalc
(continued from page 3)

comment at the top of a column or the beginning of a row. In the above example you might type Expenses in A2 to indicate that all of the entries in this row are monthly expenses.

A spreadsheet is, in fact, a tool for creating your own applications. You can create a little league statistics program, a stock portfolio manager, a home budgeting program, a sales forcasting tool, a cash management analyzer, a mortgage analysis tool, etc. With all this power and flexibility at the users disposal, it is little wonder the special stature spreadsheets enjoy in the personal computer world.

A Short History of Spreadsheets

The first popular spreadsheet was Visicalc, and it is often credited with being the fuel that powered the personal computer revolution. Visicalc was created by a business school student named Dan Bricklin who got the idea while watching a professor painstakingly add up rows and columns of numbers in a business analysis class. Little did Mr. Bricklin know the variety of uses this product would be put to.

Visicalc was a first generation spreadsheet, written in BASIC. It was slow and was limited in the range of functions it supported. Lotus 1-2-3, introduced in 1982 for the IBM PC, was the first "second generation" spreadsheet. 1-2-3 helped make the IBM PC as common on executives' desks as an in-basket.

Microsoft Excel, introduced in 1985 for the Macintosh, is the first "third generation" spreadsheet. Designed for the graphical operating environment of the Macintosh, Excel is much easier to learn and use than any 1st or 2nd generation spreadsheets. Excel is often credited for the Macintosh success in business. geoCalc, like Excel, is a third generation spreadsheet designed for a graphical environment.

geoCalc Features

geoCalc is the only third generation spreadsheet available for the Commodore market. The box to the right compares geoCalc with Microsoft's Excel (for the Macintosh) and the leading Commodore spreadsheet. While geoCalc does not have all of the features of Excel, it comes pretty close. This is quite impressive considering geoCalc runs on a 64K machine with a 1Mhz, 8 bit processor while Excel runs on a 512K machine with a 7 Mhz, 32 bit processor. There is nothing comparable to geoCalc in the Commodore market.

The most obvious difference between geoCalc and 1st or 2nd generation spreadsheets, is its appearence. Like all GEOS applications, geoCalc is WYSIWYG (What You See Is What You Get) and because of its graphical nature you have more presentation control. Cell entries can be right, left, or center justified and displayed in bold, plain, or italic text styles. Additionally, numeric cells can be set to appear in 13 different formats. For example, one of the formatting options is: $#,##0.00 ($#,##0.00). If the result of the formula was 1234.567 it would be displayed as $1,234.57 with the last digit rounded automatically. Another unique feature in geoCalc is the ability to split the screen and create two separate windows on the spreadsheet. This allows you to work on two different areas of the spreadsheet at once.

Less visible, but perhaps more important, are the internal differences between geoCalc and 1st or 2nd generation spreadsheets. In current Commodore spreadsheets, whenever a user changes the value or formula in a cell the entire spreadsheet needs to be recalculated. With geoCalc, each cell maintains a cell dependency list indicating which cells must change when the cell is modified, thus only the affected cells need to be recalculated.

Another important difference is the ability to create spreadsheets much larger than available memory. This is crucial in a C64 spreadsheet where memory is so limited. All other C64 spreadsheets require the entire spreadsheet to be memory resident. While they may display 256 rows by 128 columns, you can only enter data into a fraction of those cells before the spreadsheet runs out of memory. When your spreadsheet fills memory with geoCalc, it saves the least recently accessed cells to disk, keeping in memory only the cells needed for the section you are working on. When running off a standard disk drive, paging to disk can slow down the operation of the program. However, if you have a Ram Expansion Unit (Commodore 1764 or 1750), there is no performance penalty (see special RAM expansion offer on page 7).

Like all GEOS applications, geoCalc is very easy to learn. The pull down menus, informative dialogue boxes, and consistant user interface help make learning geoCalc a snap. If you want to use one of the financial functions built into geoCalc, and you do not remember the function name, simply select **paste function** from the option menu, a dialogue box will appear listing the 23 mathematical, statistical, financial, scientific, trigonometric, and special functions. So whether you are playing "what if's" with mortgage calculations or your daughter is doing trig homework, it is easy to create a spreadsheet to solve the problem.

Integrating geoCalc with other GEOS applications is also easy. You can cut and paste sections of your spreadsheet into geoWrite documents, paste data from geoFile into geoCalc, etc.

geoCalc 128 is the special C128 version of geoCalc. This version runs in 80 column mode and allows more of the spreadsheet to be viewed on screen. In addition, the 2Mhz operation of the 128 speeds calculations. Whether you own a C64 or C128, geoCalc is a powerful and flexible productivity tool deserving of a place in your software library.

Features	geoCalc	Excel*	Swiftcalc**
Spreadsheet grid size	112 X 256	256 X 16,384	104 X 250
Estimated number of actual cells	5,000[1]	4,000	2,000
Statistical Functions	YES (4)	YES (11)	YES (5)
Financial Functions	YES (5)	YES (8)	YES (4)
Mathematical Functions	YES (13)	YES (18)	YES (3)
Relative and Absolute Referencing	YES	YES	YES
Selectable Numeric Formats	YES (13)	YES (19)	YES (3)
"Smart" Recalculation	YES	YES	NO
Split Screen	YES	YES	NO
Graphic Interface	YES	YES	NO
Right, Left, Center Adjust	YES	YES	NO
Different Typestyles	YES	YES	NO
Cut and Paste to other GEOS applications	YES	N/A	NO

*Excel figures are for the 512K Macintosh; Excel is a tradename of Microsoft Inc.
**Swiftcalc figures are for C64; Swiftcalc is a tradename of Timeworks Inc.
[1]geoCalc is limited by disk size; this figure is for a 1571. On a 1581 over 12,000 cells can be entered.

SPECIAL REPORT: Personal Productivity with geoCalc and geoFile.

geoFile

there would be one form or record for each member. Several fields on each form would indicate the member's name, patrol, rank, address, etc. One of the fields on the form is selected as the *major criteria field*. This field determines the order in which records will be stored in the data base. If the last name field is selected as the major criteria, then the forms for each member of the troop are listed in alphabetical order according to last name.

Once a data form is designed, there are two basic operations performed: entering new records and searching for data. In our boy scout example, from time to time it is necessary to add additional members or delete members who leave the troop. When adding new records, a good data base will automatically insert the new record in its appropriate order in the data base. The real fun in using a data base comes when you search for data. For example, you might want to give a patch to all patrol leaders who have been with the troop over 3 years. The search capabilities of a good file program will allow you to print out just those members.

Whether you're cataloging stamps, managing a little league team, organizing the church choir, entering customer names, or creating an electronic cook book, a file program is a useful and productive tool.

geoFile Features

geoFile was designed not only to meet, but to exceed user's expectations of a good file program. geoFile contains many new features that push the state of the art. While powerful and flexibile, geoFile is also easy to learn and use. When the program is first entered, the user is presented with the familiar GEOS **Create, Open, Quit** dialog box.

Creating a new data base is as easy as pointing and clicking. You start with a blank 8 1/2" X 11" form and create data fields simply by drawing rectangles on the page. Data fields can be varied in size, a first name field might only be 1 inch wide while a last name field might be 2 inches wide. If, after using the data base for a while, the user determines a field is not large enough, it is easy to go back and re-size the field rectangle. Similarly, the position of data fields on the form can be changed at any time. Even more impressive is the ability to add new fields to the data base at any time. As shown in the comparison chart below, this flexibility in field manipulation is unique to geoFile.

Another unique feature of geoFile is the ability to design multiple *views* of the data base. In geoFile there is one master form that contains all of the possible fields a record may have. In addition to the master form, the user can define up to 15 *view forms*.

The view form may contain any subset of the data fields on the master form and the fields can be rearranged. In a dental patient data base, the user might create a view containing only patients names, addresses, and next appointments, omitting the fields containing insurance and historical information. This view might be used to send out appointment reminders. By designing limited views of the data base it is possible to fit more records onto the screen or printed page. For example, when going to call patients, it might be helpful to have a view displaying only names and phone numbers.

One of the most impressive features of geoFile is the robust search capability. The search form allows any and all fields to be used in the search criteria. Furthermore, geoFile supports wild card matching for text fields and mathematical comparisons for numeric fields. For example if you could not remember a business contact, but knew his last name began with a "V" and ended in "y," you could search the data base by typing "V*y" in the last name field of the search form. The "*" is called a *wild card* and will cause the search to display every form with a last name beginning in "V" and ending in "y" regardless of the number of characters between.

Another wild card character is "?." This matches any single character. Typing "V?y" would display any three letter name beginning in "V" and ending in "y."

If you were managing a little league and needed to pick All-Stars, you could search the data base of players using a numeric comparison on the batting average field. By typing ">.300" in the search field, all players with a batting average over .300 would be displayed.

geoFile 128 is a special version for 128 owners. geoFile 128 runs in 80 column mode and allows the entire width of the form to be viewed. The 2Mhz operation of the 128 speeds both sorting and searching for data. There are two peripherals BSW highly recommends for use with geoFile. One is the 1351 mouse. The other is the 1764/1750 RAM Expansion Unit (REU). As your data base grows, the REU can speed sorting and searching by a factor of 20. See the special offer for these peripherals on page 7.

It is easy to integrate geoFile with other GEOS applications. You can cut, copy, and paste to and from text scraps to share data with geoWrite, geoPaint, geoCalc, and geoPublish. In addition to this standard integration, geoFile comes with a special application called **geo-Merge** designed to merge data from geoFile with geoWrite documents. With geoMerge, users can create individually addressed form letters or even complex documents where paragraphs are conditionally included based on a data field in geoFile.

Sophisticated, easy to use, flexible file management, integration with other GEOS applications, a merge program for creating form letters -- the geoFile package is indeed a valuable productivity aid to any GEOS equipped Commodore computer. It will help you truly get the most out of your Commodore 64 or 128.

Features	geoFile	PFS-File*	Data Manager 2**
Max Number of Records	3000	not specified	2000
Max Fields per Record	64	3100	20
Field Size (in characters)	200	1024	32
Text and Numeric fields	YES	NO	YES
Create Multiple Views of Data	YES (15)	NO	NO
Search on Multi-field Criteria	YES	YES	YES
Search with Wild Cards	YES	YES	NO
Search and Replace	YES	NO	NO
Auto-sort on Data Entry	YES	YES	NO
Add, change, or delete fields at any time	YES	NO	NO
Graphic Interface	YES	NO	NO
Pictures in Form	YES	NO	NO
Cut and Paste to other GEOS Applications	YES	N/A	NO

*PFS-File is designed for the IBM PC; PFS-File is a tradename of Software Publishing Inc.
**Data Manager 2 is designed for the C64/128; Data Manager 2 is a tradename of Timeworks Inc.

SPECIAL REPORT: Personal Productivity with geoCalc and geoFile.

geoCalc Features	geoFile Features

Functions

* 5 financial functions (present value, future value, payment schedule, rate, and term)
* 5 math functions (Abs. value, integer, random, rounding, square root)
* 4 trigonometric functions (sin, cos, tan, atan)
* 4 statistical functions (sum, average, Min, and Max)

Special Features

* fast recalculations -- only dependent cells recalculated after change
* size of spreadsheet can exceed 64K memory
* cut & copy data between cells and spreadsheets
* functions & formats selected from on screen menus
* exchange data with other GEOS applications like geoFile and geoWrite

Layout

* use up to 28,672 cells (112 columns x 256 rows)
* 13 different number formats available for each cell (ex: $#,###; ##.#%; #.##e+00)
* adjustable cell width
* left, right, and center justification of data in cells
* split screen ability -- work on two seperate sections of the spreadsheet at once

Print

* select from four typestyles (plain, **bold**, *italic*, or ***bold italic***)
* print in draft, high quality, or near letter quality mode
* print all or part of your spreadsheet
* print with or without spreadsheet grid
* print with or without column and row headings

Form Design

* place up to 64 fields per record
* save up to 3,000 records per file
* design custom forms (up to 8.5" x 11")
* create text, numeric, comment, and graphic fields
* add new fields or rearrange existing ones at any time

Search

* search using up to 64 multiple variables at the same time
* sort data automatically by defining your sort field
* change sort field at any time without affecting data
* perform searches quickly and easily
* search and replace existing data

Print

* print data-base forms 16 different ways using sublayouts
* print more than one form per page
* print special sections or entire forms
* create and print address labels, index cards, price tags-- anything your choose

Merge

* transfer data to geoCalc for major number crunching
* transfer data to geoWrite for use in documents
* create personalized letters with geoMerge
* merge groups of address information with geoDex

Q: I am having problems installing my **geoWrite Workshop 128** with **GEOS 128**. Why?

A: With this program, you need to install it the *first time only* with your disk drive in 1541 mode (set using the Configure file). This applies only to **geoWrite Workshop 128** and all 64 applications. Other 128 applications can be installed with the disk drive in 1571 mode.

Q: How large are the fonts in **geoPublish**?

A: The fonts used in **geoPublish** can be as small as 4 points or as large as 192 points.

Q: What versions of **geoWrite** can **geoSpell** check, and what is the size of the **geoDictionary**?

A: Any version of **geoWrite** can be checked by **geoSpell**, and the **geoDictionary** has over 38,000 words. It is also possible to add words to a personal dictionary, with various prefixes and suffixes as well.

Q: Is it possible to paste text horizontally and vertically in **geoPublish**?

A: Yes. In the text attributes, you will find an option for *Orientation*. This box allows you to position text going across, up or down a page.

Q: How many records can **geoFile** hold, and how many fields per record?

A: **geoFile** can hold over 3,000 records per file, and there can be up to 64 fields per record (this number can vary depending on the size of the fields created).

Q: I entered a **geoWrite 2.0** file into **geoPublish**, and now I cannot open it with my **Writer's Workshop**. What happened?

A: When a document is entered into **geoPublish**, it is automatically converted to **geoWrite 2.1**. When using **geoPublish**, always work with a copy of a text file and not with the original so that you can later edit the original with **geoWrite 2.0** if necessary. (To avoid having to do this, see page 8 for update information about **geoWrite 2.1**.)

Q: What are the dimensions of the **geoCalc** spreadsheet and how much does it cost?

A: **geoCalc** has dimensions of 112 columns by 256 rows, and is suggested to sell for $49.95.

Q: How can I produce the effect of having white text on a black background in **geoPublish**?

A: Select the rectangle feature in page graphics and click on the attributes box. Choose a black pattern and the transparent feature. After opening the rectangle, select the text feature. Using the attributes box, select a white pattern. Place the text over the black rectangle and it should appear as white on black. (Note: It may be necessary to select the redraw feature after placing the text to see the effect on the screen.)

SPECIAL OFFERS

GEOS DESKTOP PUBLISHING CONTEST!!!

Stop the presses and win over $20,000 in cash and prizes!!

All you need to win is your Commodore, your trusty GEOS applications (like geoWrite, geoPublish, Graphics Grabber, etc.), and your own imagination to win in any four categories.

Categories:

* Flyers (handbills, data sheets)   * Newsletters (multi-page brochures)
* Poster Size (1 page enlarged 200%)   * Open design (Anything goes!)

Each category has two divisions: dot matrix and laser printed (Poster is laser printed only). There will be a winner in each division.

See the March 1988 issue of **Run** for full details. Submittals will be due by June 30, 1988.

GEOS PROGRAMMING CONTEST!!!

You write the program -- we'll provide over $25,000 in cash and prizes!

So you can code circles around the pros, eh? Well here's your chance to prove it! All it takes is a Commodore and your skill at programming under GEOS to win in any of four categories.

Categories:
* Games (dice, Scrabble, etc.)   * Education (flash cards, geography)
* Productivity (scientific calculator, spreadsheet data grabber, etc.)
* Open (disk utilities, telecommunications programs, etc.)

Each category will have two divisions: applications, and desk accessories. There will be a winner for each division.

See the April 1988 issue of **Compute!s Gazette** for full details. Submittals will be due by August 31.

Version Watch

The following upgrades are available from Berkeley Softworks:

GEOS 1.3: If you own the **one disk** GEOS 1.2 system, you can purchase 1.3 for $8.00 + $2.00 shipping and handling. This version allows for any input driver to be set as the default, plus has enhancements in the deskTop, geoWrite, and geoPaint. Send GEOS package sleeve with payment.

GEOS 128: A new 80 column version of GEOS for the C128. If you own GEOS for the 64, you can purchase GEOS 128 for $22.00 + $2.50 shipping and handling. Send GEOS package sleeve with payment.

geoWrite 2.1: The 2.1 version has the ability to expand the margins a full 8 inches. This upgrade is available to **Writer's Workshop** owners for $15.50 + $4.50 shipping and handling. Send original **Writer's Workshop** disk with payment.

geoFile: This newest version (1.2) corrects problems with 1.0 version. Send original **geoFile** disk. No charge to 1.0 owners.

(CA residents add 7% sales tax.)
Send money and sleeves or disks to:
Berkeley Softworks Update Offer
2150 Shattuck Ave.
Berkeley, CA 94704

Berkeley Softworks
2150 Shattuck Ave.
Berkeley, CA 94704

Henry, C. Novroski
53 Poplar Street
Kingston, PA 18704