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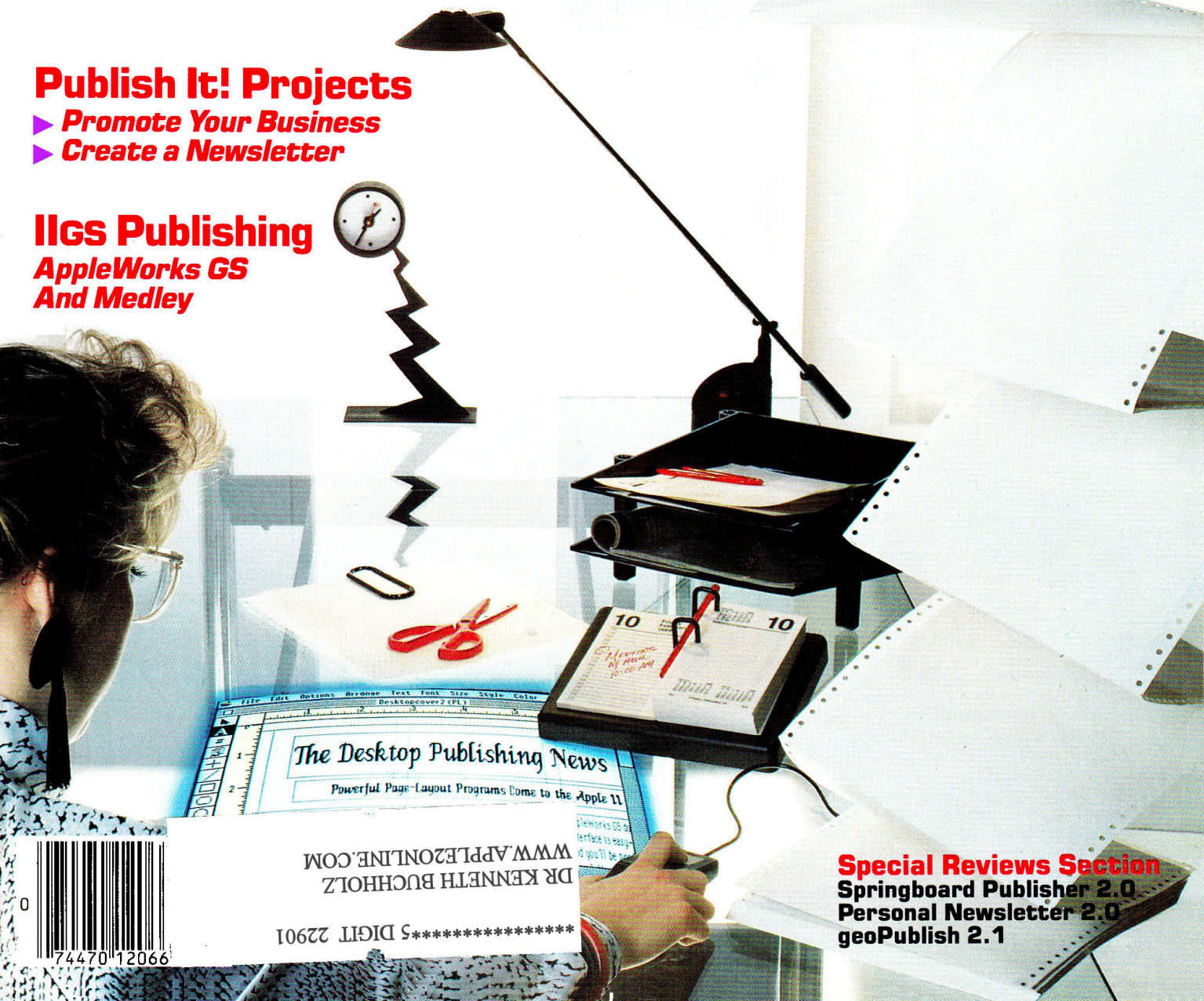

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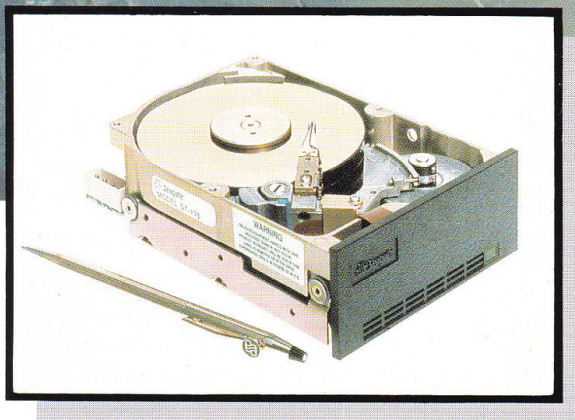

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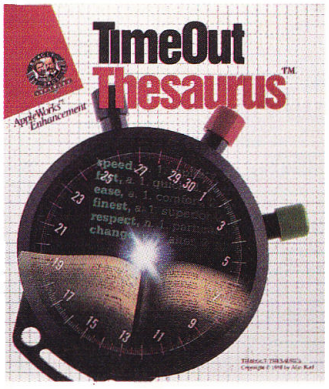

The TimeOut™ series is the best thing to come along for AppleWorks users in a *long* time. These widely acclaimed AppleWorks add-ons aren't like add-ons at all. They are integrated so well with AppleWorks they seem built-in—like they have always been there. And you can access them instantly from *inside* AppleWorks. Our original seven TimeOut products (QuickSpell, SuperFonts, Graph, UltraMacros, SideSpread, FileMaster and DeskTools) revolutionized the way you use AppleWorks. Now there are more TimeOut products that have just been added to the family.

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Thesaurus gives you instant access to nearly 50,000 online synonyms. Stop wasting time looking up synonyms by hand in your old paperback thesaurus. With Thesaurus you can just put the cursor on the word you want a synonym for, press Open-Apple-Escape and you will see a list of synonyms from the built-in Random House word list. Synonyms are listed by parts of speech—noun, verb, etc. If you see a word that suits you, select it and the original word in your document will automatically be replaced with the new word. If you see a word that you *almost* like, you can get a list of synonyms for that word—you can get synonyms for synonyms up to eight levels deep. And Thesaurus is smart. It automatically removes and adds suffixes as needed to let you find the maximum number of synonyms possible. Thesaurus is the perfect companion for QuickSpell too.

TimeOut PowerPack™

PowerPack (Editor's Choice, in Cider magazine August 1988) includes ten new applications that add more muscle to AppleWorks:

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TRIPLE CLIPBOARD creates three independent clipboards.
PROGRAM SELECTOR lets you run other programs and automatically return to AppleWorks.
LINE SORTER alphabetizes lists of words or numbers in the word processor.
HELP SCREENS let you make your own customized help screens.
FILE LIBRARIAN reads your disk directories into a data base file where you can search and sort on any category.
DESKTOP SORTER arranges the desktop index any way you want.
CATEGORY SEARCH lets you search one particular category instead of all.
AWP TO TXT saves true text without all those unwanted carriage returns.
ASCII VALUES converts numbers to ASCII, hex, binary and screen equivalents.

TimeOut DeskTools II™

DeskTools II adds all kinds of goodies to AppleWorks:

AREA CODE FINDER shows you area codes for the U.S. by city or state.
CALCULATOR PLUS is an extremely powerful financial and scientific calculator.
CLIPBOARD VIEWER shows you the current contents of the clipboard.
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DIRECTREE shows where your files are stored on disk and lets you load them without specifying prefixes or pathnames.
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PRINTER MANAGER lets you send any control codes you want to your printer.
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SCREEN PRINTER lets you print any portion of the screen.
STOP WATCHES keep track of up to five separate events at the same time.

TimeOut SpreadTools™

SpreadTools is packed with new applications designed especially for AppleWorks spreadsheets:

ANALYZER lets you scan your spreadsheet for errors, print out a cell cross reference, get a bird's eye view of the entire spreadsheet, adjust column widths to show entire formulas, track down cell references, and print the value of all cells.
BLOCK COPY lets you copy blocks of cells (rather than just rows or columns).
CELLINK links spreadsheets so you can import values from other spreadsheet files.
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TimeOut MacroTools™

In addition to the original MacroTools (Macro Debugger, Task Launcher, Menu Maker, Token Chart, File Stats, and lots of new macros), there's also MacroTools II which has still *more* for all of you macro maniacs including Publisher, File Lister, Macro Lock and tons of new macros.

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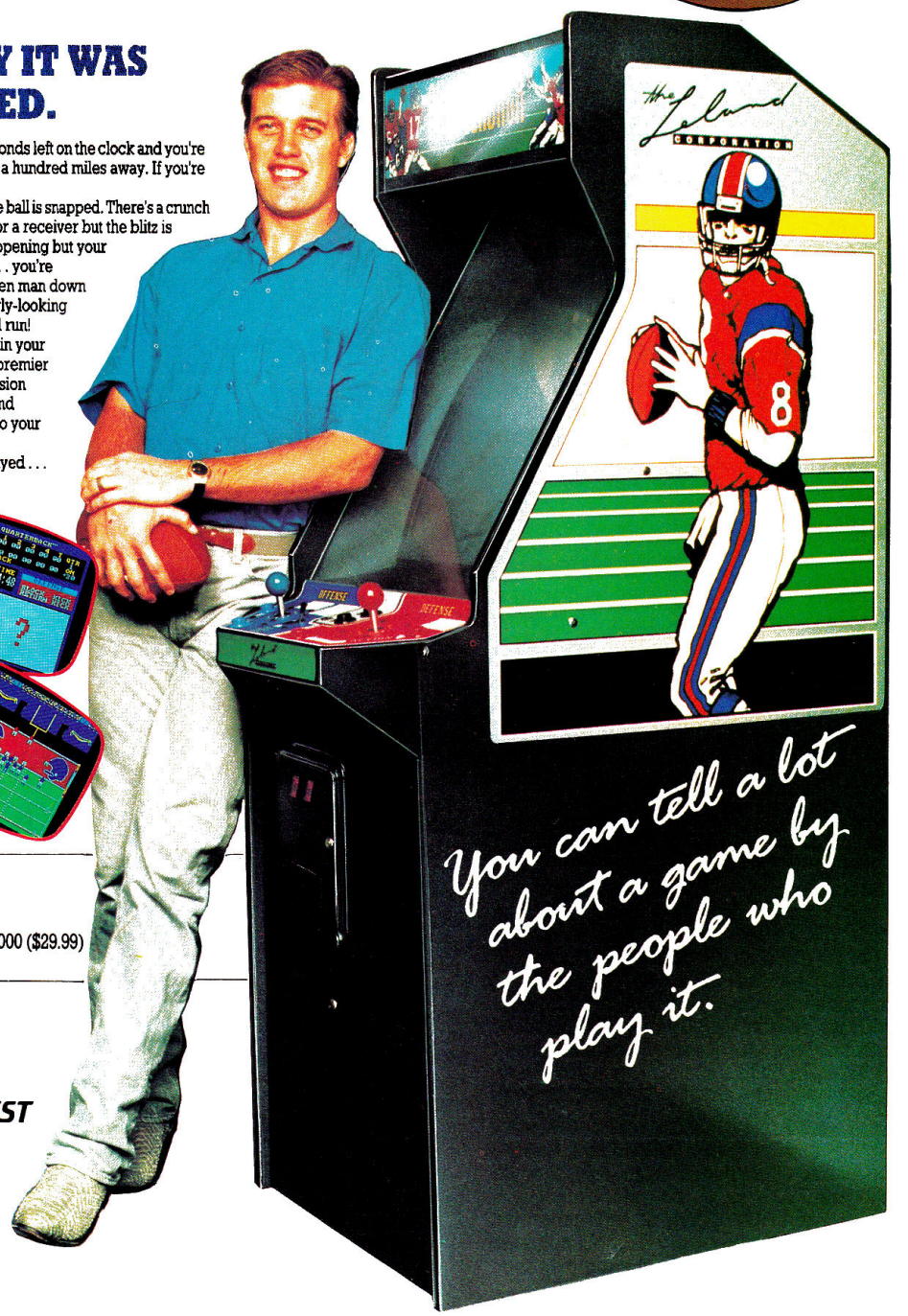

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inCider

AN IDG COMMUNICATIONS PUBLICATION

Vol. 7 No. 2
February 1989

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The Price of Power

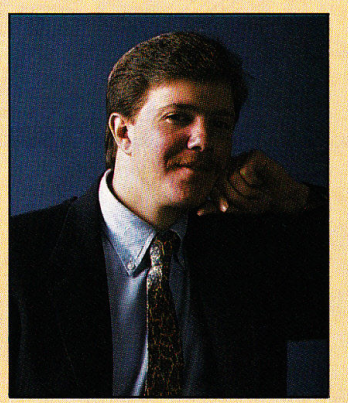
by Dan Muse, Editor in Chief

When George Bernard Shaw wrote, "There are two tragedies in life. One is not to get your heart's desire. The other is to get it," he probably wasn't talking about Apple IIGS software. However, GS owners who have been wishing for "real" 16-bit integrated software will certainly relate to Shaw's words.

Since the introduction of the IIGS in September 1986, users have been clamoring for a 16-bit AppleWorks. After spending thousands of dollars on a GS, users were frustrated that the best program available for it was the 8-bit version of AppleWorks (AppleWorks Classic).

Now there's good news for patient ProDOS 16 purists. Claris' AppleWorks GS and Milliken's Medley are finally available—integrated software that follows the GS' graphics-interface style and takes advantage of super-hi-res.

If having true GS software was "your heart's desire" you may be about to face the second of life's tragedies. AppleWorks GS and Medley are both powerful, feature-rich programs, but if you have less than 1.25 megabytes of RAM (random-access memory) and only one 3½-inch disk drive, get ready to break open your checkbook. A megabyte and a quarter is the bare minimum for these programs. They'll work with one 3½-inch disk, but you'll need two to keep your sanity—and even then you'll spend a lot of time waiting. Rather than adding a second 3½-inch drive, think about buying a hard disk. Prices are coming down and the number of choices is going up. Right now money can't buy a faster GS; by the time you read this, however, you may be able to buy Applied Engineering's TransWarp GS card.



"AppleWorks GS forces you to decide how much you're willing to invest."

Claris and Milliken should be commended for developing powerful applications for an underpowered machine. It will be easy for you to shout, "This program is so slow...." or "I don't want to buy a hard-disk drive and extra memory just to use this program." But don't blame Claris and Milliken; they're only the software developers. In developing GS software, they faced a double-edged sword. On one side, if they had created programs that would function on GSs with 512K and one 3½-inch disk drive, they would have sacrificed the power you're looking for. On the other side, powerful programs force you to add hardware to run the software at an acceptable level. AppleWorks GS now forces you to decide how much you're willing to invest in your system.

So if you have a IIGS with less than a megabyte and a quarter of memory and one disk drive of each size, what do you do? First decide whether a program like AppleWorks GS is really what you want. If you find color and an easy-to-use graphics interface a must, upgrade your system. Increase your memory and buy a second 3½-inch disk drive or a hard drive. Your other option is to not get caught up in ProDOS-16-versus-ProDOS-8 hysteria. Just having a IIGS doesn't mean you should replace AppleWorks Classic. It's a great program and on the IIGS it's even better.

There's no law that says good software has to follow the Apple Human Interface Guidelines (the Mac interface). Publish It! and other 8-bit desktop-publishing programs from Springboard and Berkeley Softworks also work great on the GS, even though they weren't designed for it. I've had a lot of fun playing with AppleWorks GS, but right now I have no intention of giving up good old 8-bit AppleWorks. The Apple interface is great for some things, but to me word processing and spreadsheets aren't two of them.

Programs like AppleWorks GS represent a great technical achievement. Claris' support of the IIGS is important and should be applauded. AppleWorks GS is destined to be the Porsche of 16-bit Apple II software. It may not be perfect right now, but when 8-bit AppleWorks first appeared, it wasn't perfect either—it needed fine-tuning and the support of both hardware and software developers. Applied Engineering's RamWorks helped make AppleWorks a classic—its TransWarp GS could do the same for AppleWorks GS.■

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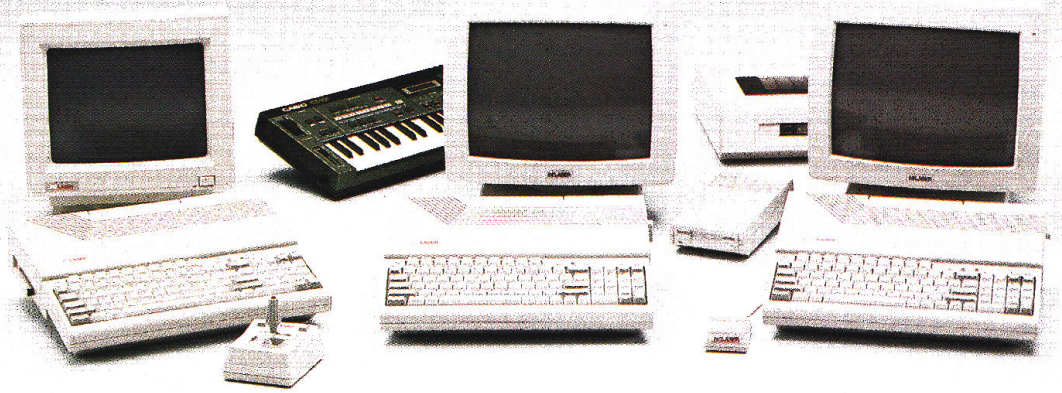

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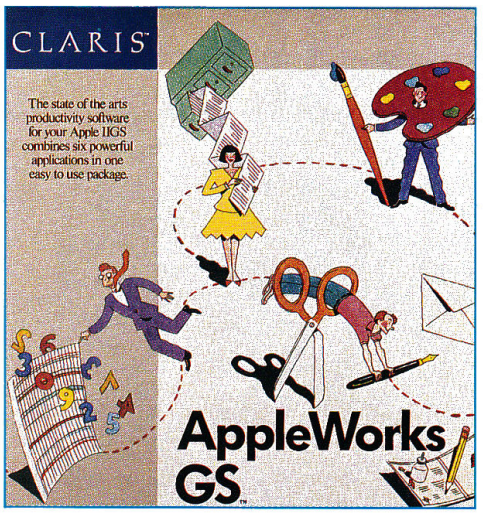
Hot Disks!

Home & Productivity

AppleWorks® GS delivers six of the most powerful and popular Apple IIGS software applications-word processor, spreadsheet, database, page layout, graphics, and communications-in one easy-to-use program. Its Macintosh-like interface means all six applications have the same look and feel, so you spend your time being productive instead of learning new programs. The applications work so well together that sharing data is as easy as a click of the mouse, so you'll get your work done faster.



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AppleWorks GS $215
AppleWorks $185
AppleWorks GS/ GS Ram Plus 1MB Bundle $660

Required Equipment:
- Apple IIGS computer (minimum 1.25MB memory)
- 3.5-inch disk drive (two recommended)
- Monitor (RGB color recommended)

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LETTERS

Forever Growing

I enjoy working with my IIGS and use AppleWorks for all three applications. As a student, I use the GS to write papers; I also direct and teach a preschool. To save time I use the database with mail merge. Additionally, the spreadsheet helps me set up classes; when I add students, I know immediately the total of incoming tuition, expenses, salaries, and other deductions such as taxes and Social Security.

When I bought the IIGS it came with only 256K. Now I find that the GS is coming standard with 512K. I don't regret buying the computer, but I wish Apple would upgrade the GSs originally sold. It should do this without charging owners, because the initial IIGS purchase was higher in 1987 than its price today with 512K.

From *inCider*'s reviews, I've learned that most GS programs require 512K or more. Now I'd like to purchase the newest program, AppleWorks GS, because of the advantages it offers. However, I can't use the program yet because I need to make another major investment to upgrade the computer. I'm very disappointed.

Marianne E. DeGrange
RD#3
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Belle Vernon, PA 15012

Under New Ownership

In your June 1988 review of the TouchWindow product line ("Reach Out and Touch," p. 42) you listed the company as Personal Touch. Edmark Corporation purchased this product line in March 1988.

Thomas C. Korten
President
Edmark Corporation
P.O. Box 3903
Bellevue, WA 98009-9990

What WIMP?

It's disappointing the way Apple II owners are jealous of Macintosh owners (Apple Bits, September 1988, p. 17). Without reason, they feel ridiculously inferior, for years thinking that the Mac's existence would eliminate their IIs.

Au contraire, the Mac helped the II to get better software and hardware. Do you think Apple would have spent time and money to develop the LaserWriter just for its home computer? For years, the Mac has opened the way to the Apple II. Look at the GS' Finder, and at GEOS, pull-down menus, and mice. I haven't even mentioned networking and the GS' control panel.

And now it's the publishers' turn, making childish jokes about those who helped the II grow. "WIMP" was the word, but don't IIc owners, GS owners, and now IIe owners use windows, icons, mice, and pull-down menus?

Martin Lavoie
P.O. Box 383
Montreal-Nord
Quebec H1H 5L4
Canada

Childish joke? Was not! —*eds.*

As the editor of an Apple IIGS and Macintosh journal and the leader of a IIGS/Mac user group, I was amazed at the shortsightedness of *The Road Apple* newsletter's motto: "Sack the Mac." I was equally surprised at the riddle referring to a fanatical Apple II user whose computer uses windows, icons, mouse, and pull-down menus as a WIMP.

If Thomas Edison hadn't given us the lightbulb, Apple II users who feel this way wouldn't have light by which to use their computers! If it weren't for the visionaries who felt we could go beyond the radio, these same Apple II users wouldn't have a monitor to see what their computers could produce. Don't Apple II users realize there once was an Apple I?

All technology advances. To stay abreast of that new technology, we must advance with it. We're trying to bring Apple IIGS and Macintosh users together, to share ideas on where computer technology should go next. Mac Plus users like the colors of the GS screen. GS users know that when they look at the Macintosh's user interface they're looking at the future of the IIGS. And they're learning from it.

Shelly Lisoskie
Editor
CompuShare
16010 East Shore Drive
Lynnwood, WA 98037

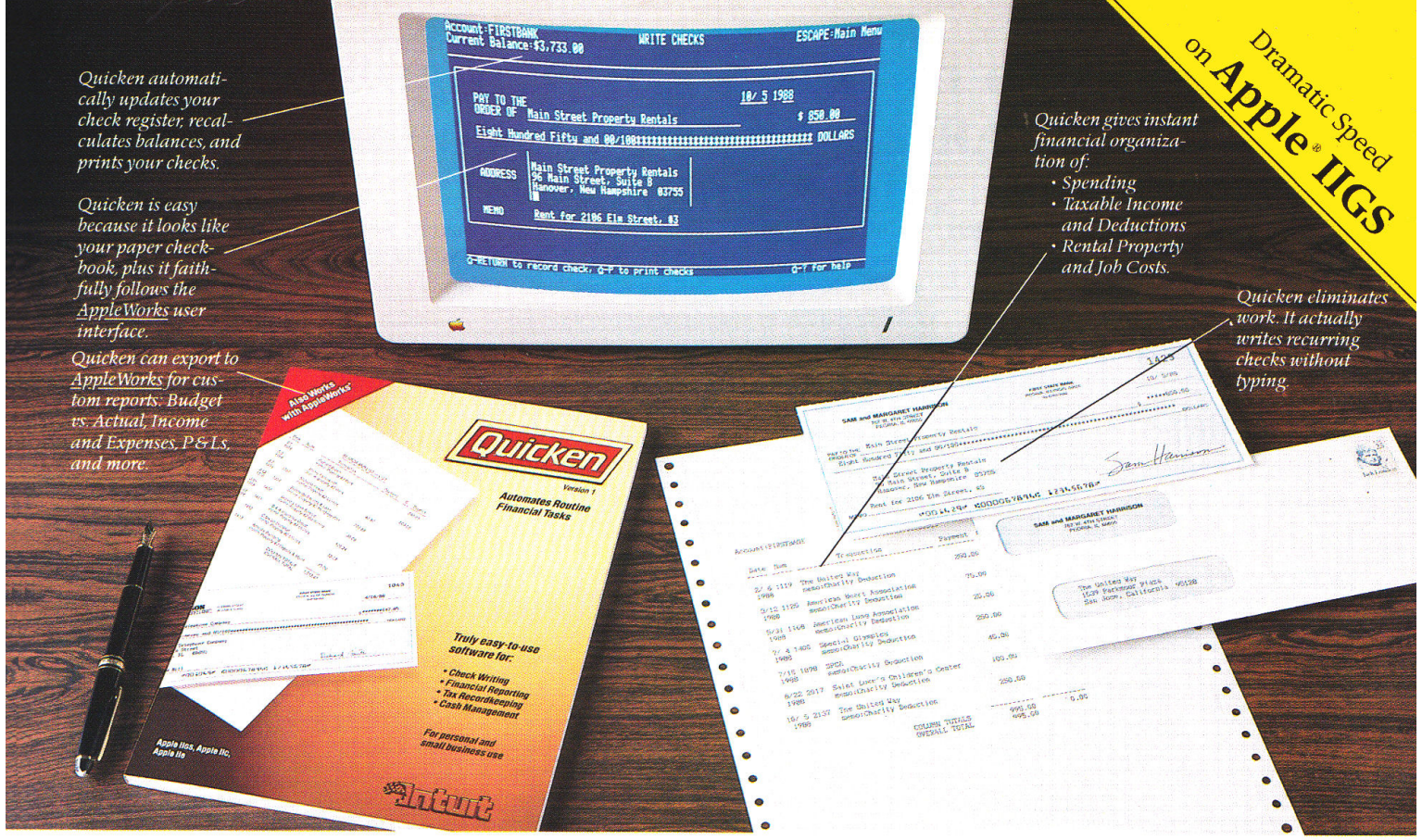
Discovering the Elements

I'm a high-school chemistry teacher and have created a database containing the ele-

GS RAM UPDATE

Since we published our GS memory-expansion chart in the December 1988 issue (p. 70), some additional information has come to our attention. According to David Westbrook, president of Applied Ingenuity, the GS Juice Plus board uses 1-megabit chips; it's expandable to 4 megabytes; the package includes a memory-diagnostics program and Diversified Software Research's Diversi-Cache; and documentation now comes on disk. In addition, Cir-Tech Ltd. now manufactures a third GS RAM card, the PlusRAM GS2, with 256-kilobit chips, expandable to 2 megabytes, priced at $399, according to Open-Apple, the company's American distributor.□

►



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Martin Blumenthal, **inCider Magazine**

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Ken Landis, **A+ Magazine**

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ments' periodic properties. If any readers would like a copy, please send $4.

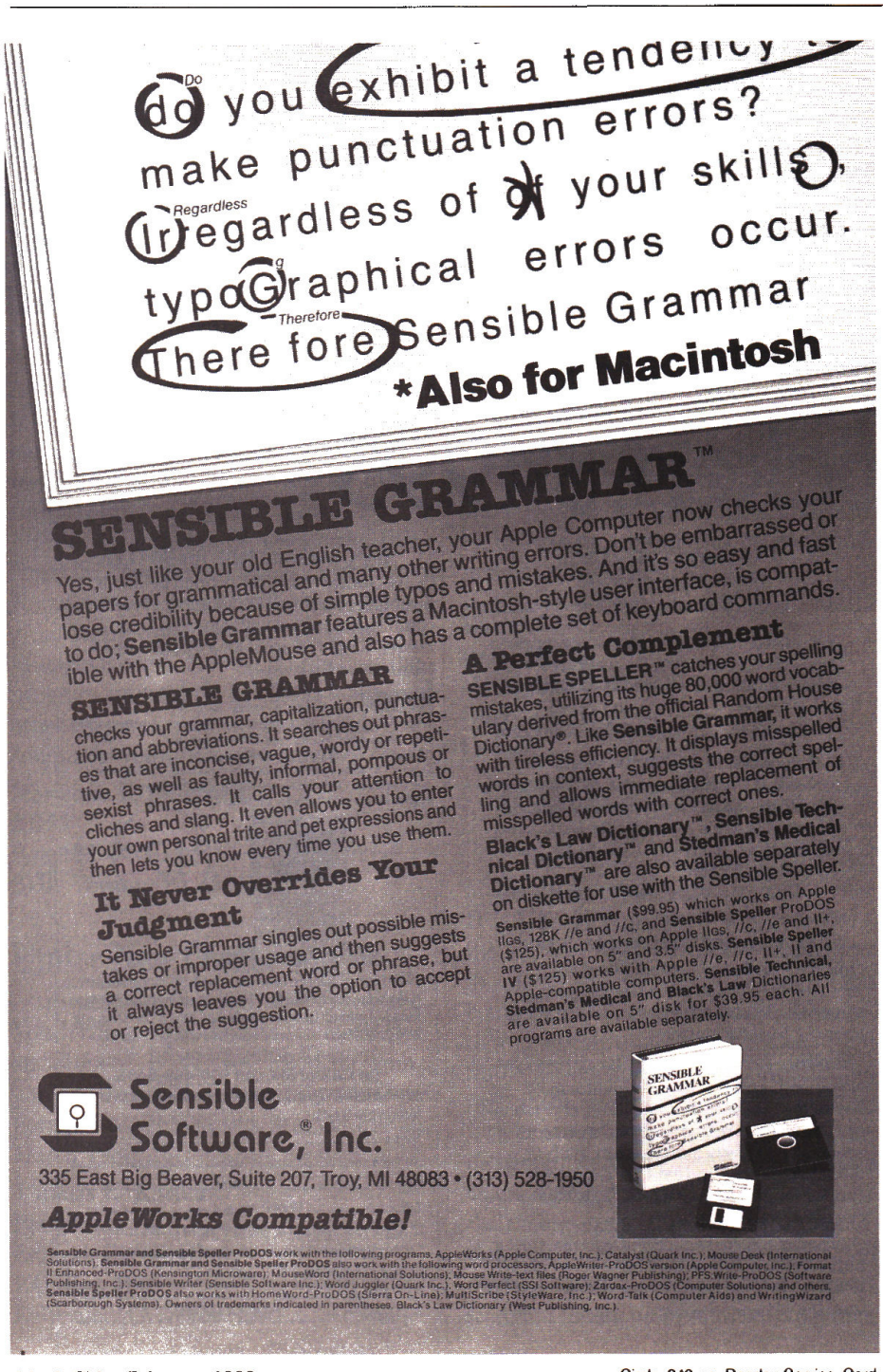
Mike Farmer
P.O. Box 193
Tigerville, SC 29688

Student Helper

We have a school enrollment of 350 students in grades K–12. One of our ninth-graders has Friedrich's ataxia, which makes it difficult for her to write with a pencil.

We'd like to use a voice-recognition unit that could receive spoken commands to activate a word-processor program and use the printer to record her answers. We're using a Scott Vet-2 voice-recognition unit, an Apple IIe, and a IIGS for our German satellite class. Unfortunately, we don't have a program that'll work with a word processor. If anyone knows of a program that'll do this, we'd appreciate hearing from you.

Stephen W. Cargill
Shidler Schools
P.O. Box 85
Shidler, OK 74652



CORRECTIONS

Broderbund Software's phone number as listed in our December 1988 review of ShowOff ("Picture Show," p. 34) contains a typographical error. The number should read (415) 492-3200. Broderbund's customer-service number is (800) 527-6263.

Applied Ingenuity's phone number is also noted incorrectly in December ("Get Into It," New Products, p. 127). The correct number is (800) 346-0811.□

Address List

I'd like to get in touch with the Teacher's Idea & Information Exchange you mentioned in the June 1988 News Line ("Teachers Helping Teachers," p. 18). Do you have its complete address?

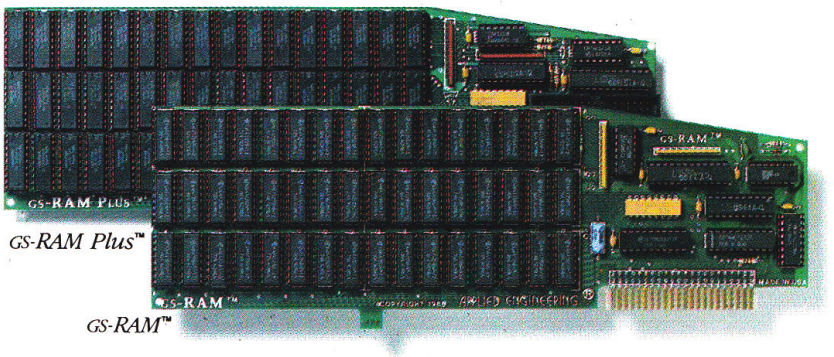
Jim Healey
Industrial Arts Department
North Cumberland Middle School
Nate Whipple Highway
Cumberland, RI 02864

Write to the Teacher's Idea & Information Exchange at P.O. Box 6229, Lincoln, NE 68056. A sampler disk and catalogue are available for $12.95. Call (402) 482-6987 for orders. Jim Carlisle, the organization's founder, is also on AppleLink; his screen name is AFAJimC. —*eds.*

inCider *welcomes readers' comments regarding articles, letters, or other topics of interest. We reserve the right to edit letters for clarity, style, and space. Please address your correspondence to Letters,* inCider, *Elm Street, Peterborough, NH 03458.*

Circle 240 on Reader Service Card.

Applied Engineering made an extra effort to make GS-RAM™ and GS-RAM Plus™ DMA compatible.



It was worth it.

Applied Engineering's IIGS memory cards, the GS-RAM™ and GS-RAM Plus™ are the ONLY large capacity[1] IIGS memory cards that are fully DMA compatible. Others are either totally non-compatible or compatible only in certain specific configurations.

That difference in memory cards is critical. Here's why: DMA (Direct Memory Access) tremendously speeds up computer operations by bypassing the microprocessor. All addressing and control logic is contained on our cards, enabling a DMA device to bypass the microprocessor and go straight to the heart of things...the computer's memory.

AE's full DMA compatibility means GS-RAM and GS-RAM Plus run all GS software, support all *current and future* DMA peripherals, and don't require you to adjust the size of your RAM disk everytime you use a DMA device...something every other large capacity memory card requires you to do.

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Both GS-RAM and GS-RAM Plus come complete with Applied Engineering's own powerful enhancement software.

Disk caching software is included, tremendously speeding up the computer's access to the 3.5 drive and running most applications up to *seven times faster.*

Diagnostic utility software is also included free. It graphically shows the location of bad or improperly installed chips and even tests for CAS before RAS chips.

Your free software also includes AE's exclusive AppleWorks Expander program that dramatically enhances the capabilities and speed of AppleWorks. This powerful software also:

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Coupled with Applied Engineering's RamKeeper, your GS-RAM or GS-RAM Plus actually give you an internal "electronic hard disk" with an instant-on finder and emergency power backup. RamKeeper even supports an Apple IIGS memory card (and most others) alone or in combination with one of our cards. See our RamKeeper ad for more details on how this $189 wonder gives your IIGS all the speed and power it was meant to have.

Compare Our Features

- GS-RAM expands from 256K to 1.5 MEG
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- Full DMA compatibility in *any* configuration
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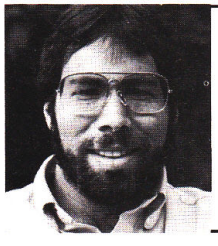

"I recommend Applied Engineering products wholeheartedly!"

Steve Wozniak, the creator of Apple Computer

What's best, the Phasor works with more off-the-shelf software than any other sound card you can buy. So now all your favorite games — like Skyfox™, Under Fire™, Willy Byte™, Tactical Armor Command™, Maze Craze™, Zaxxon™ and Ultima IV™ — can have shattering sound effects. Educational packages like Music Construction Set™, Guitar Master™ and Music Star™ are also dramatically enhanced.

The Phasor has *four times* the output power and *twice* the accuracy of any other sound card — but of course, you can easily turn down the volume if you need a rest. The Phasor is equipped with 12 simultaneous sound channels, 4 white noise generators, and a voice channel expandable to 2 voices. Programs written for other sound cards, including Mockingboard™, ALF music card™, Synphonix™ and the Super Music Synthesizer™, sound even better with the Phasor. And you can control speech, pitch, volume and more with simple commands.

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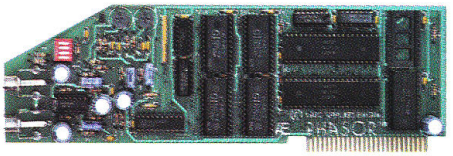
Order a Phasor for your Apple today — and prepare to be blown away! Call (214) 241-6060 to order (9 a.m. to 11 p.m. 7 days). Or send check or money order for $169 to:



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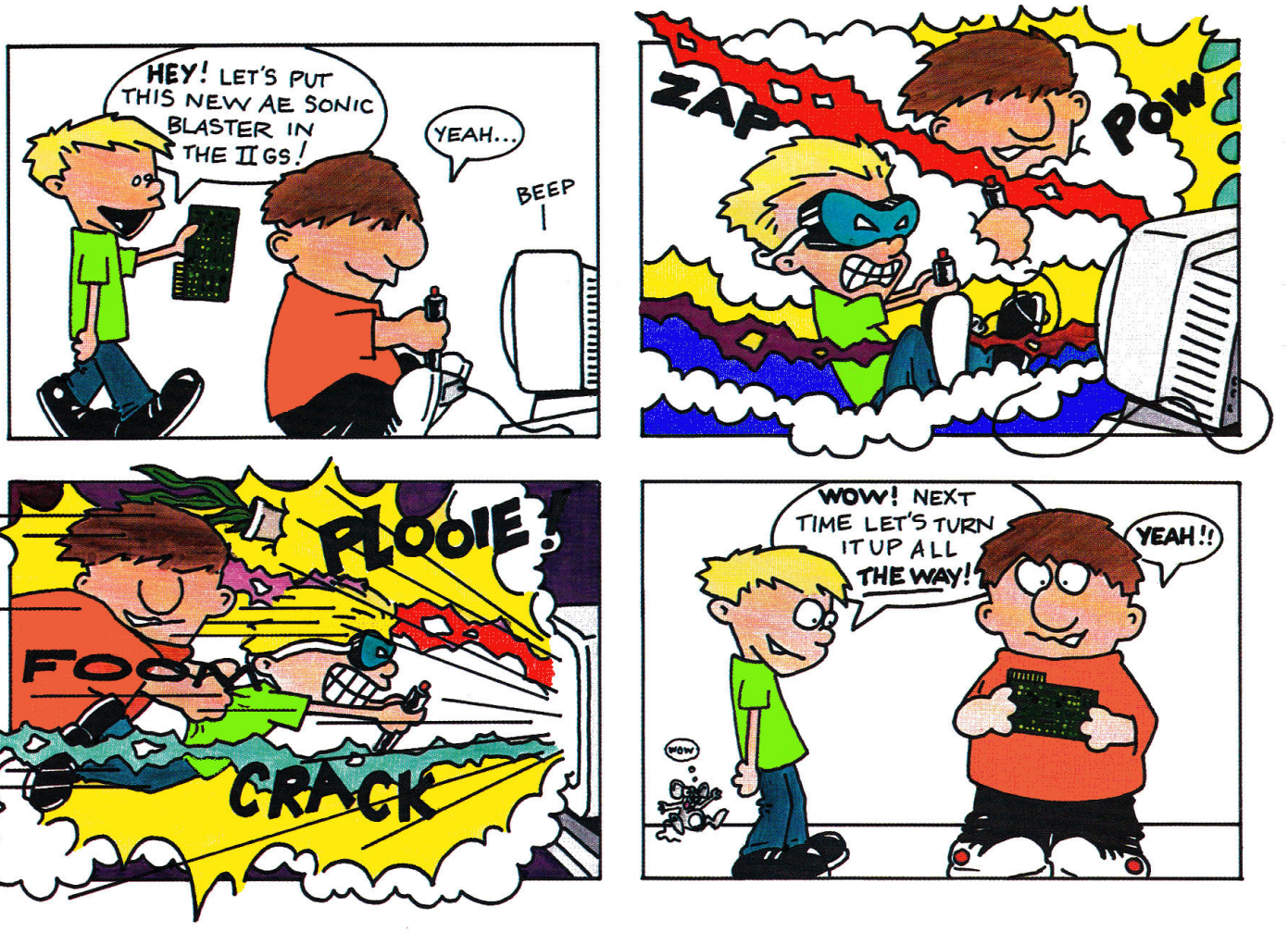
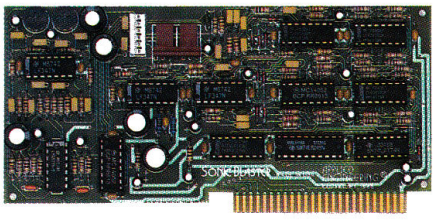


Serious Fun



Okay, we're willing to admit that sometimes we take things a little too seriously. We get wrapped up in developing ways to make your IIGS more productive, and occasionally forget how much fun it can be.

Our new Sonic Blaster™ is a full-featured stereo digitizer. You can record, amplify, edit and play back in rich, full stereo...and that's just the serious side.

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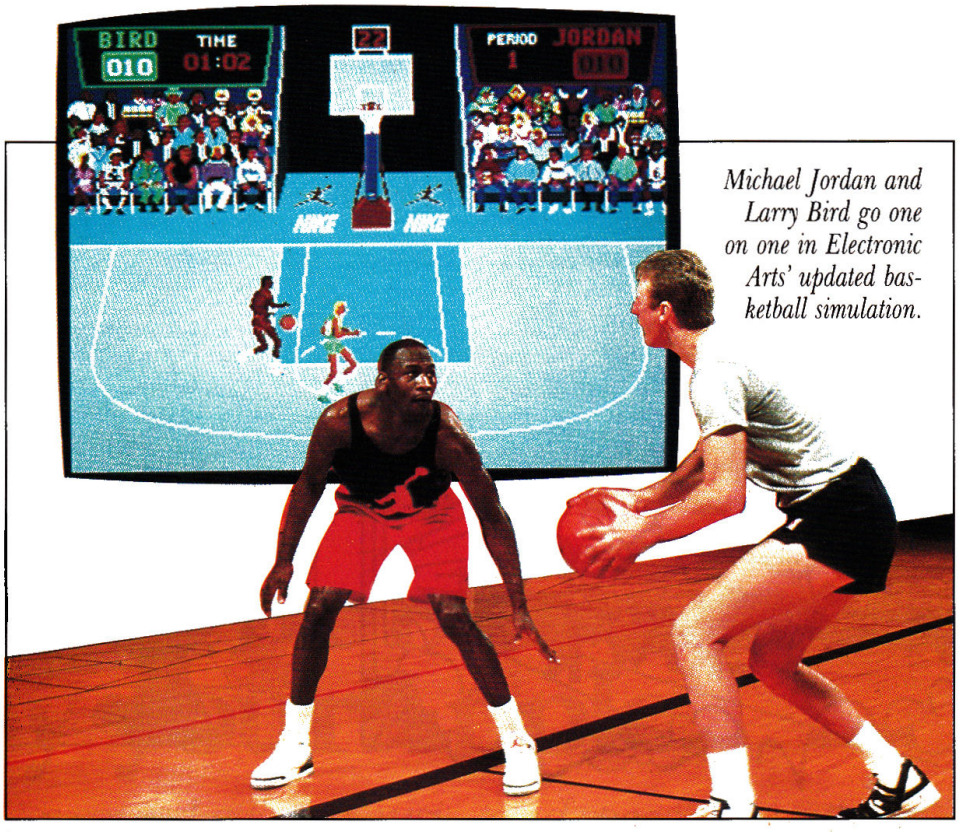
by *inCider* staff

FAMOUS NAMES, FAMOUS GAMES



Michael Jordan and Larry Bird go one on one in Electronic Arts' updated basketball simulation.

Sports stars are all over the place—in newspapers and on TV, on boxes of Wheaties, and in soft-drink commercials. But the latest place to see some famous athlete's name and face is on the cover of your favorite home-computer sports game.

One of sports software's earliest and greatest successes was Dr. J. and Larry Bird Go One on One, way back in 1983, from Electronic Arts (San Mateo, CA). It took six years, but EA has updated the rivalry to pit Michael Jordan against Bird—for today's customers who think Julius Erving wrote *The Legend of Sleepy Hollow*. Michael Jordan's slam-dunk style and three-point prowess have changed the computer competition as much as the roundball game.

EA's next attempt to take celebrity sports off the court and onto the diamond was a game with the name of one of the great coaches of all time: Earl Weaver Baseball (available for the Apple II in early 1989). Earl Weaver watched over every technical detail of this game as carefully as he used to watch opposing pitchers. "For the 'Ask Earl' feature [which gives you a hint for your current situation] we had to ask him a lot of questions," says Trip Hawkins, president of Electronic Arts. "Earl is a brilliant strategist. He always did what was best for the team."

And in Electronic Arts' "training camp" is a football game that will bear John Madden's name and likeness, as well as his entertaining analytical flair. Madden was a natural choice, according to Hawkins, because he was such a successful coach, and has done so much for the sport of football.

Madden reviewed everything in "tremendous detail," says Hawkins. He even let the game designers use his extensive Oakland Raiders playbook for reference. His famous "chalkboard plays," with which you can create your own, will also be part of the game (available in early 1989).

Jack Nicklaus' Greatest 18 Holes of Major Championship Golf is the result of a three-year agreement between Accolade (San Jose, CA) and the golf star. Accolade wanted a golf game even better than its already successful Mean 18, so it did what any amateur golfer would do: turned to the pro.

Nicklaus and his team of golf-course designers chose 18 of the most notorious holes from championship golf courses. Accolade also worked with Nicklaus and some of his closest friends to gain insight into his actual golf game. All Nicklaus' shots in the computer game are patterned after the way he was playing at the peak of his career. Some of the on-screen advice and strategy for upcoming shots came from Nicklaus, as well.

Because Accolade's agreement with Nicklaus will last three years (as opposed to a one-time endorsement), the company will be working on additional course disks similar to the Famous Courses series that goes along with Mean 18.

John Elway, quarterback for the Denver Broncos, has endorsed Melbourne House's (Costa Mesa, CA) new football game, John Elway's Quarterback (which should be available by the time you read this). It's a home-computer version of the popular arcade game, licensed from Leland Corporation.

What's next—Franz Klammer Skiing? A.J. Foyt Auto Racing? Professional sports figures endorsing home-computer games have taken an encouraging step in the right direction: Sports simulations have benefited from their attention to detail. Game makers who "bring in a pro" have reached a new level of commitment, professionalism, and savvy marketing in the seriously competitive world of game development.

—Lafe Low

SHARE WHAT?

Shareware. No, your stock broker won't find it listed on the NYSE. Shareware is a unique software marketing strategy made possible by the electronic revolution. It makes available to end users software solutions they might not find otherwise.

The "father of shareware," Bill Basham, president of Diversified Software Research (Farmington, MI) and an avid Apple developer/enthusiast, offers this explanation: "Shareware is software that's freely copied and passed around through user groups, downloaded from bulletin-board systems, or just shared amongst friends." As opposed to "freeware" or pirated software, however, "shareware authors expect payment for their products if you find them useful, fun, or both."

"Oh, sure!" you say. "Who in his right mind is going to bother paying for free software? Besides, if that shareware program is so good, why isn't it sold by some big software publisher?"

Basham estimates that only about one of every 20 shareware owners has actually paid for his or her products. Failure to pay is a form of piracy, although slightly more casual in intent than deliberately breaking the protection code and copying a formally published product.

But Basham's estimate of the degree of "freeloading" out there might be inflated by one fundamental—and unique—feature of shareware: You can use the product and evaluate its performance *before* you buy it. If you don't like it, you needn't pay for it.

In addition, shareware products are usually special utilities or product enhancements, such as Basham's Diversi-Copy disk-duplication software. Such products aren't acceptable to traditional software publishers or don't warrant "full" packaging and distribution. That's not to say a shareware product isn't worth every penny. What computer user hasn't yet lamented, "If only someone would..."?

If you're a customer tired of hearing your local dealer say, "Sorry, haven't seen anything like that," maybe the software you want is out there as shareware. Get involved with a user group that may have already sorted through the pile to find the best product to answer your needs.

Even *inCider*'s editors can help. We've selected the best shareware products for general users and made them available through the magazine's Shareware Connection. Check out our advertisement in this issue (p. 64) and get your share of the best.■

—Bill Kennedy

We're always looking for news of the Apple world. If you're making news, send your press releases and photographs to News Line, inCider, *Elm Street, Peterborough, NH 03458.*

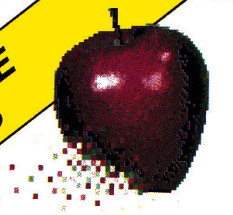
PRODUCT UPDATES

●If paying $79.95 just for a spelling checker bothers you, take a look at **DoReMe 2.1** from Multisoft (New York, NY). For that low price it adds a 50,000-word on-line dictionary to its integrated spreadsheet, database manager, and word processor. Call (212) 534-4047.

●Abracadata (Eugene, OR) has drawn up four different **Architecture Libraries** of home and office plans that work with **Design Your Own Home**. Each library costs $29.95; all four work with the Apple IIe/IIc version; in addition, there are special GS versions of three of the libraries. Call (503) 342-3030 for details.

●Version 2.0 of Softsync's **Personal Newsletter** (New York, NY) is now a true desktop publisher: It includes the Personal Newsletter Laser Driver that works with Apple's best printers. Call (212) 685-2080.□

APPLE BITS



■**Apple** has quietly killed its **GS BASIC**—the second death for what was once called Apple III Business BASIC. Is Apple thinking of picking up TML BASIC for the GS and bundling it with the machine?

■**Thirdware** (Miami, FL) has followed the "desktop" craze by introducing **desktop billboarding**. With **FingerPrint GSi version 2** you can print on your GS screen any image up to 130 feet wide by 130 feet high. Why would you want to do that? That's what they asked about desktop publishing, too.

■Apple quietly bought out the **Apple Programmers and Developers Association** (Renton, WA) in January. APDA had been part of the **A.P.P.L.E. Co-op** (founded in 1978 as the first national Apple user group), which recently changed its name to TechAlliance because Apple was concerned about the "Apple" trademark.

■Crate Technology (North Hollywood, CA) makes hard-disk drives for Apple IIGS computers. It used to be **AppleCrate**, but Apple's legal bloodhounds didn't like that name, either. Litigation's as American as cherry pie.

■Look for Apple IIGS **Pascal** and **C** compilers from **ByteWorks** soon.□

Say What You Mean

by Paul Statt, Senior Editor

A spellchecker takes only a second to save you from embarrassment, especially if you run it from a RAM disk.

Trouble is, my spellchecker just questioned *spellchecker* in the first paragraph, and ignored *RAM disk*. The meaning of the acronym *RAM* isn't common knowledge. After five years of answering your cards, letters, and telephone calls, I think my spellchecker's not doing the whole job. What I need is a "jargon checker."

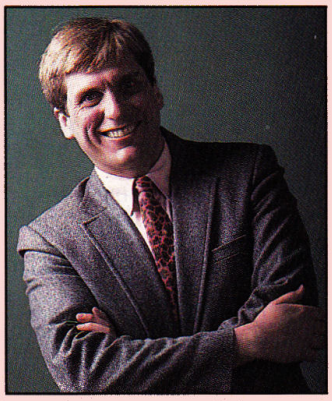
Nobody's ever asked me, "What's a spellchecker?" It's not in the *Random House Concise Dictionary* (the most popular dictionary among computer spellcheckers—ask for it by name), but you don't have to be a philologist to infer what a spellchecker does.

RAM is another matter. Everyone has asked, "What's RAM?" It's not a dumb question, and I hope every beginner is brave enough to ask it. "Ram" *is* in *Webster's*—it's a male sheep, or to strike with violence. *Webster's* can't help you understand RAM, and my spellchecker can't help me see that many of you won't understand *RAM*.

inCider, in our never-ending quest to make your life easier, "spells out" jargon on its "first use": "If your computer has enough *random-access memory*, you can set up a RAM-disk drive," for example.

But does calling it "random-access memory" help? Hardly, when *random* means "lacking a definite plan, purpose, or pattern." Do you want only "random" access to your checkbook database file? I wouldn't. (A *RAM disk* is not only not random, it's no disk.)

Jargon is traditional speech. It doesn't always mean what it seems to mean. The language of computers is full of traditional terms like *monitor*, which means both the most basic software in your computer and the computer's screen.



"Anybody who ever talks to computing beginners must speak English."

It's too late for *RAM*. Before the last election, I read in *The New Republic* that although one presidential contender was no rocket scientist, the other "didn't seem to be operating with a lot of extra RAM, either."

A word that's an acronym for other words that don't mean what they imply in the first place has entered our language. (But can you explain why a 3½-inch floppy disk that won't "flop" any more willingly than a phonograph record is not only *not* a hard disk, but is "bigger" than its 5¼-inch sibling? Try running that by someone who just bought his or her first computer—you'll learn what the phrase "blank stare" means.)

If political pundits can say *RAM* as confidently as they say *COLA*, are you surprised that your first visit to a user group felt like falling into a bowl of alphabet soup? "The RFI from my RGB fried the SCSI card on my HD40 in the middle of a DTP project." Perhaps something terrible has happened. Who knows?

The solution is simple. My colleagues in the press, presidents of user groups, computer dealers, writers of instructions, and anybody else who ever talks to beginners must speak English. Don't worry—even the most hardened veteran will understand if, instead of "Load the program to the RAM disk," you say simply, "Copy the program to the computer's internal memory, so that it will run faster."

But computers have a tradition of incomprehensibility. Apple first sold computers to people who built shortwave radio receivers in their spare time, and Apple wrote the instructions for them. Since then, Apple has become a champion of machines that anybody can use and understand.

I would commend Apple for its clarity, but Apple's now trying to push a new kind of *software*, called Hyper*Card*, which sounds like hardware—like a "memory card"—to most computer users. HyperCard's an example of "hypermedia," which is another name for "hypertext," but which you buy in HyperCard "stacks"—all of which is simply more confusing jargon to befuddle beginners.

This humble scribe's belief is that if what I write doesn't make sense, it's my fault. It's not "revolutionary technology" I must make up new words to describe. It's not "computer-illiterate readers" who don't know RAM from ROM. A good writer needn't rely on or invent jargon to be understood. Neither should the software industry.■

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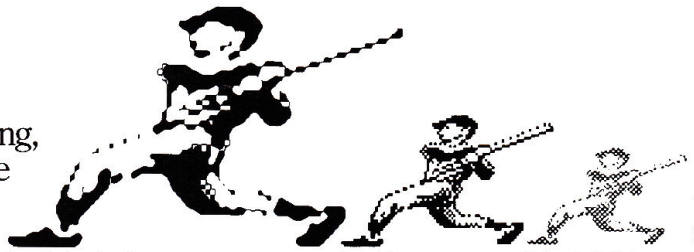
FINALLY, A DESK
WITH A SIZEAB



"Okay," you're asking, "why would anyone introduce another Apple II desktop publisher?"

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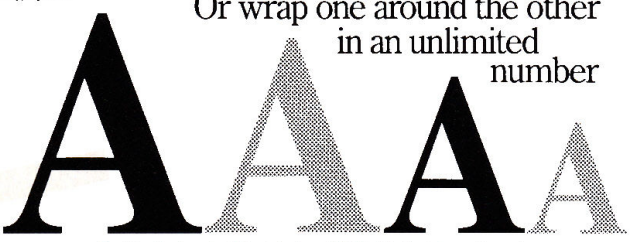

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And speaking of layouts, geoPublish not only lets you store all of your originals, it also comes with 24 style sheets built right in. Which means you spend less time contending with columns and more time perfecting your printed page.

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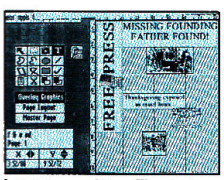
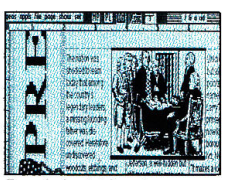
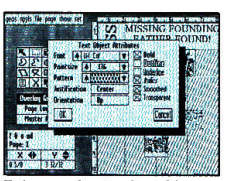
With geoPublish, you find really big differences in even the tiniest places. For example, the zoom option gets you down to the smallest details. The smoothing option automatically irons out bumpy pixels. And then there's the feature most worth waiting for: a redraw function that doesn't make you wait an eternity for one change.



Lay out a newsletter. Flow text. Preview entire page.



Zoom in for detail work.



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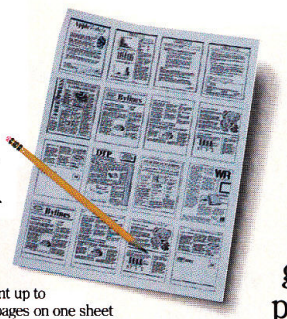

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The long and the short of it.

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SYSTEM REQUIREMENTS: Apple IIc, IIc Plus, IIe (or compatibles; IIe need not be enhanced), IIGS, with 128K memory, double hi-res graphics capability, joystick or mouse, 5¼" or 3½" disk drive.

geoPublish is not copy protected. Package includes clip art, easy to use manual, both 5¼" and 3½" disks, authoritative quick reference cards.

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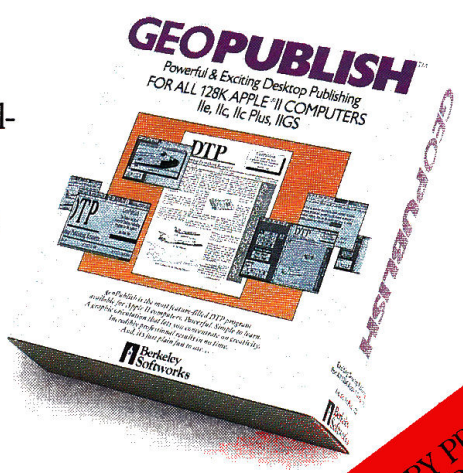

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Potpourri

by William P. Kennedy, Ph.D., Technical Editor

Apple Writer Upgrade

Do you know of a source for any versions of Apple Writer later than 1.0? Apple has apparently discontinued its distribution.

Lyal Williams
Houston, TX

Contact Sun Remarketing, P.O. Box 4059, Logan, UT, 84321 (800-821-3221 for orders or 801-752-7631 for customer support). These folks carry all kinds of discontinued Apple products, including Apple Writer version 2.0. Even if you don't need to use Sun's services now, jot down the address and phone number anyway, just in case.

Floppy Drives and GS/OS

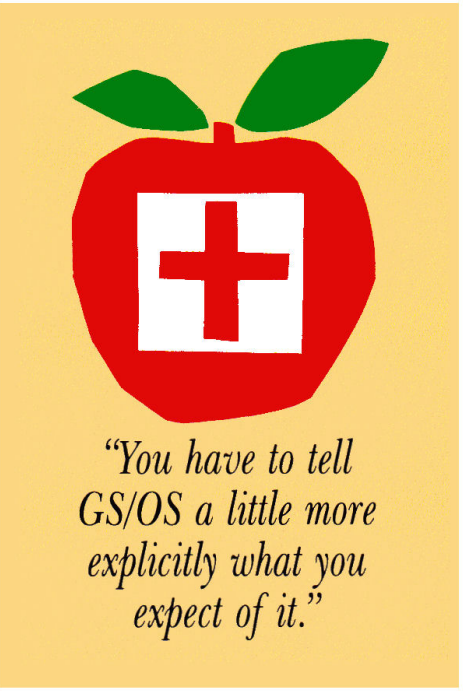
I can't get the new Apple IIGS Finder to access my 5¼-inch disk drives. What gives?

Thomas Wolf
Santa Monica, CA

Would you believe GS/OS disdains ancient technology? Nah. Like a small child, Apple's latest system software, GS/OS (see "GS/OS," November 1988, p. 56), just needs to be told a little more explicitly what you expect of it.

Tell GS/OS about your 5¼-inch disk drive(s) by double-clicking on the Installer application found on the Apple IIGS System Tools disk that accompanies your GS System Disk (GS/OS). If you don't have that disk volume, obtain a free copy from your Apple dealer.

Installer puts a "device" driver for your 5¼-inch drives, called APPLEDISK5.25, into the DRIVERS folder of the SYSTEM subdirectory on your System Disk. That driver is then used to access the 5¼-inch drives the next time you start up (boot) your GS. Use Installer similarly to update any other GS/OS-based boot disk that requires 5¼-inch drives. Installer also provides drivers for your CD-ROM drive, UniDisk 3.5, and several printers besides the ImageWriter II.



Previous GS system versions and ProDOS-8 applications such as AppleWorks already support your 5¼-inch drives. Don't waste your time or disk space transferring GS/OS drivers to those volumes.

That little extra effort required to install "special" devices is truly a blessing in disguise. You don't have to clutter your disks or, more importantly, waste your GS' precious RAM with unused device-driver code.

And how many of you share my impatience about booting the Finder and having to wait for the 5¼-inch drives to come "on line"? I often disconnect the APPLEDISK5.25 driver by dragging it out of the SYSTEM/DRIVER folder and into the SYSTEM folder of the boot disk, so that I don't have to put up with all that clatter. Just drag APPLEDISK5.25 back into the SYSTEM/DRIVER folder and restart your GS when you need to access the 5¼-inch drives. Similarly, to save RAM, move or "trash" drivers in that SYSTEM/DRIVER folder that you don't need.

Long-Distance Telecommunications

I live in a rural area about 80 miles west of Denver. I'm interested in telecommunications, but shudder at the prospect of long-distance phone charges. Do I really have to use long-distance calls to access AppleLink, for example?

Paul Aex
Dillon, CO

Unfortunately, Paul, long-distance phone charges take some of the tranquility out of living in rural America. However, the phone charges you may accrue by accessing major "on-line" services via modem won't be as stiff as you might expect. That's because you can telecommunicate with services such as CompuServe and AppleLink through digital-transmission networks provided by TymNet, EasyPlex, or Telenet.

You phone the nearest digital-network office—located in Denver, say. The network office then transfers your call automatically to the desired information service. If dialing EasyPlex or TymNet is a long-distance call, your long-distance phone company will charge you directly. If that's the case, or if your favorite bulletin board doesn't use a digital network, don't forget to make your long-distance call during nonpeak hours. All long-distance phone companies reduce their charges substantially after 5 p.m. and again after 11 p.m. or midnight until 7 or 8 a.m.

AppleLink's monthly and/or "access time" costs include the charge for using the digital network to link you in Denver to AppleLink in Cupertino. You save money overall because

the digital service's transmission costs are low compared with directly dialed long-distance phone charges.

Telenet offers you another option to save on long-distance telecommunications calls: PC Pursuit (1-800-TELENET). For an initial fee of $25 plus $25 per month, you can make an unlimited number of calls to more than 30 (and growing) telecommunications centers around the country. Again, call the closest Telenet office between 6 p.m. and 7 a.m. or anytime on weekends or holidays. From there, redirect your call to any modem within a local-phone-call area from a Telenet center—including a friend's on the other side of the country. So, go ahead and make that call.

II to Mac

Does the 3½-inch disk drive in the new IIc Plus use double-sided, double-density format? Also, can a Mac read IIc Plus disks?

Amitav Pattnaik
Alexandria, VA

The 3½-inch disk drive in the Apple IIc Plus, indeed all Apple Computer's 3½-inch drives except those in the earliest version of the Macintosh, have the same data density—800K. You can plug in an external 3½-inch drive you may have purchased for your Apple IIc (not a UniDisk) and use it with a Mac.

The way data are arranged and stored on disk, however—namely, that disk's format*—is different for the Apple II versus the Macintosh. Your Mac can't directly read files stored on a disk formatted for use with an Apple II.*

Rather, you can transfer files between the two computers with Apple's File Exchange Utility on the System Tools disk that accompanied your Macintosh. See "GS to Mac and Back" in the November 1988 Apple Clinic (p. 22) for additional details about this particular exchange process.

Viral Cures

The recent press about viruses and what they can do to my Apple makes me wary. I'm most frightened that my Apple is already infected, because I'm an avid user of bulletin-board systems around the country. How can I find out whether my Apple's been infected and, if so, what it will do to my Apple? Can I prevent viruses?

Edy Kusyanto
Rosemead, CA

You have ample reason to be frightened, Edy. Those destructive nerds who use their programming talents for insidious ends are wreaking havoc on just about every bulletin-board system across the country. You also have to be careful abut the "programs of destruction" that are proliferated manually on shared disks. Fortunately, using some rather simple, common-sense procedures, you can combat these so-called viruses and repair their subsequent damage.

The term virus *is appropriate for these small, destructive segments of computer code. Like their biological counterparts, they infect a host program and often lie dormant until particular conditions occur, then proliferate by infecting other programs and eventually destroy their host or the host's environment. Hence, you may not have noticed that the virus in a program you downloaded from a bulletin-board system and have run only once has infected one of your favorite applications. Then one day, many weeks later, your application crashes; your Apple's memory contents disappear; all your disk files, including your hard-drive files, are erased; and a stupid message like "Gotcha" splashes across your computer screen.*

*Viruses, fortunately, affect software only. They can't destroy hardware. Period. So, if you take the proper precautions with your programs and data files, you shouldn't have any problem reconstructing your Apple system should a virus strike. If your Apple begins to behave unexpectedly, drives whirring without provocation, for example, don't hesitate—*pull the plug. *You might not lose everything.*

See "An Ounce of Prevention" (December 1988, p. 60) for a list of precautions against viruses. The most important of these are to back up all your disks and files, especially your hard-disk drives, and to isolate all downloaded or "shared" programs (shareware from a friend or user group). Don't use these potential hosts with other important programs or files in memory or "on line" in a disk drive until you're positive it isn't infected by a virus (maybe never).

What if you suspect that a virus has already infected one or more of your programs, although it hasn't destroyed any data yet? Your ▸

Quickies

Does your printer go "off line" when you try to address an envelope? Roll the envelope sandwiched between the platen and a sheet of tractor-feed or standard typing paper.

—Frank Etzel
Pittsburg, PA

Does your Franklin 1000 or Apple II Plus freeze when booting ProDOS? Press Control-Reset after freeze-up and, in monitor mode, type the ProDOS version-dependent patch address from the table below, followed by two "NOP" commands (EA). Then restart ProDOS with the monitor command 2000G.

ProDOS Version	Patch Address
1.0	2647
1.0.1	265B
1.1	264D
1.1.1	269E
1.2	275B

For ProDOS 1.1.1, for example, you should type the following (monitor prints the prompt star):

*269E: EA EA N 2000G...

—Stephen Craft,
West Berlin, NJ

This UltraMacros offering lets you choose among several directories when selecting an AppleWorks file:

M:<all><oa-Q esc>5<rtn>2<rtn input : path : esc>1<rtn up rtn sa-O ; rtn >2<rtn input : path : esc>1<rtn up rtn oa-Y sa-O : rtn esc>1<rtn rtn>!

—Andy Ronneberg,
Tracy, GA

Enable double-width low-resolution graphics on the IIe, IIc, or IIGS: Enable 80-column mode (PR#3), then POKE 49278,0, POKE 49246,0, followed by GR. Deactivate it using POKE 49278,0 and POKE 49247,0.

—Ken Lupo
Macon, GA

first, and perhaps only, line of defense is to replace immediately all your programs with original, archived, presumably virus-free versions. This is particularly important for system programs such as ProDOS or BASIC .SYSTEM. Don't worry about data files, because you have to execute viruses as part of a program.

Beyond that, you might also invest in a virus-detector program. Rx for the IIGS by Glen Bredon is our favorite; you can obtain it through inCider's *Shareware Connection. (See our advertisement in this issue, p. 64.) Others are available as shareware or freeware through bulletin-board systems and user groups. Then hang garlic cloves around your computer room and pray the plague doesn't blow in on the next ill wind.*

A note to virus makers out there: Enjoy watching your destructive code do its work—join the Core Wars. For more information, contact the International Core Wars Society, 10 Tumbleweed, Irvine, CA 92715. And stop the slaughter of innocents.

Bird's Better Bye Transfer

Where was I when they passed out ProDOS 1.3? I can find only ProDOS versions 1.4 and 1.7, and I can't use Mike Jetzer's tip in the November 1988 Quickies (Apple Clinic, p. 22) to transfer the Bird's Better Bye quit code from ProDOS 1.1.1 to either version.

Roger Stembridge
Commerce, TX

Lo siento, *Roger. The tip Mike provided will work with any 8-bit version of ProDOS 1.3 or later. We printed Mike's tip incorrectly, however. Here's the right sequence:*

1) Boot into Applesoft BASIC.
2) BLOAD PRODOS,A$2000,TSYS—that is, PRODOS 1.1.1 containing Bird's Better Bye (BBB) code.
3) CALL −151 to activate monitor mode. (An asterisk appears in place of the BASIC prompt bracket.)
4) Isolate the BBB code by typing 1000<5700.59FFM. (Our earlier instructions specified 12FF instead of 59FF.)
5) BLOAD PRODOS,A$2000,TSYS—that is, the PRODOS version to which you want to add BBB.
6) Replace Apple's quit code with BBB, which you isolated earlier: Still in monitor mode (otherwise, CALL −151 again), type 5900<1000.12FFM.
7) BSAVE PRODOS,A$2000,TSYS to save the newly modified version. ■

Apple Clinic is a forum for discussing and answering your questions and concerns about Apple II hardware and software. Address your correspondence to Apple Clinic, inCider, *80 Elm Street, Peterborough, NH 03458. Because of the volume of letters, most won't appear in print, but expect a response from Dr. Kennedy via postcard.*

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Experts and users agree GraphicWriter is the desktop publishing program for the Apple IIGS.

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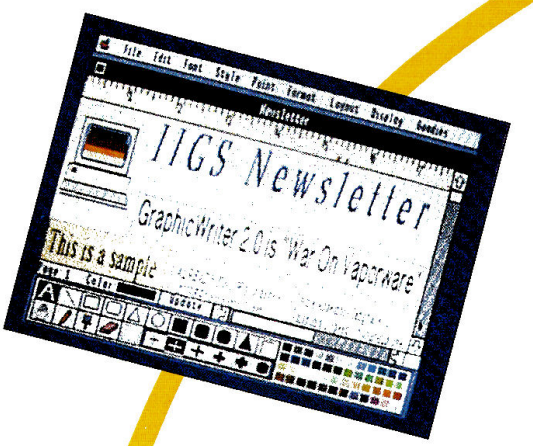

inCider magazine says, "GraphicWriter 2.0 is a giant st. forward for the Apple IIGS. It's a powerful way to produce exciting page layouts, and it's easy to do."

A+ magazine declares, "GraphicWriter facilitates a smooth blend of text and graphics, and the result is a tool that you can use for everything from writing a letter to creating page layouts with color separations."

Compute has this to say: "GraphicWriter really comes into its own when you want to integrate text and graphics." And 10,000 owners agree. Laurie Knight of Hemet, CA proclaimed, "Terrific program! It does everything I need to do." Roger Ruthberg of Philadelphia, PA thinks it's excellent, well worth twice the price."

GraphicWriter, which is color and laser printer compatible, combines word processing, graphics and page layout into one complete, easy-to-use package. The program needs only 512K of memory, and is not copy protected. And, most importantly, it's available NOW.

	GraphicWriter	Medley	Publish It!
IIGS-Specific	Yes	Yes	No (e, c, GS)
Memory Requirements	512K	1.25 MB	128K
Operating System (included)	GS/OS™	ProDOS 16	ProDOS 8
Uses Color Display	Yes (640 mode)	Yes (640 mode)	No
Suggested Retail Price	$149.95	$195.00	$99.95
LaserWriter printing	Included	Included	$39.95
SampleTemplates	Included	Available	$39.95
Clip Art	Included	Included	Included
Spelling Checker	Included	Included	Not Available
Total Cost	$149.95	$195.00	$179.85

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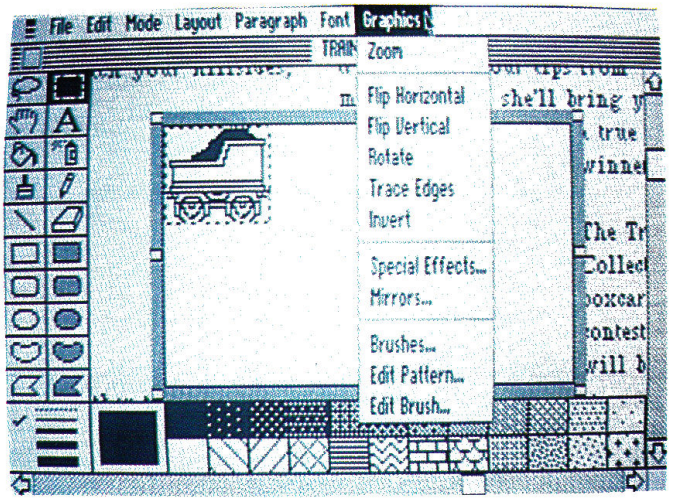
Springboard Publisher 2.0; Personal Newsletter 2.0; geoPublish 2.1; At a Glance; Games Editors Play: California Games GS, Mini-Putt, Fourth and Inches, Short Takes

Page Making

A quiet revolution has occurred in the Apple II world—it's bringing enhanced productivity to homes and schools, and to business, a competitive edge that was previously out of reach. The revolution is desktop publishing, implemented at last on the Apple II.

One of the most important contributions to this sweeping change is the new Springboard Publisher (version 2.0), which goes beyond the usual collection of tools for layout and design. With Springboard Publisher and its associated style sheets, you can ignore the mechanics of design and concentrate on the message.



PUBLISHING PURSUITS

Desktop publishing is a pastel phrase for a serious and often challenging pursuit—professional written communication. That goal has been elusive so far, owing to the difficulty of writing software of this nature for Apple IIs and to a deficit in the understanding of good design principles on the part of software publishers. Design is the visual presentation of a message; when done well, nothing communicates more powerfully.

Apparent throughout Springboard Publisher is consideration for good design. It's built into the program's tools, and it's captured in its rich set of style-sheet templates. Springboard Publisher looks good. It's also outstanding for its optimizations. With a large memory card installed, the program works from RAM (random-access memory), which lets it run faster. If you have enough RAM, it will also enable caching—another speed-up scheme.

Springboard Software claims that version 2.0 is more than three times faster than the original release. Maybe so, but in any case it's faster than competing packages, and the only time you might wish for more speed is if you use the Springboard word processor extensively, particularly with large documents.

The program's user interface is intuitive, with pull-down menus and three modes to handle page design, word processing, and graphics creation. If you're familiar with standard desktop operation, there are no surprises here (with the exception of a couple of unusual options).

I undertook three projects to get a feel for the amount of time required to get results with Springboard Publisher. It took 55 minutes to write a story, then design and print the first page of a newsletter. (The writing portion, done with AppleWorks, took 20 minutes.) I used an existing style sheet, added three custom graphics elements, and modified the design of two existing elements.

It took two hours to redesign an existing instructional manual that was nine pages long. I started the design from scratch, and scattered five illustrations throughout the booklet.

It took two and a half hours to design a series of custom-quotes libraries, each of which includes 20 pull-quote boxes designed to be copied and pasted into other documents. Springboard's page-design facilities are more polished than ►

SPRINGBOARD PUBLISHER 2.0

Springboard Software, 7808 Creekridge Circle, Minneapolis, MN 55435, (800) 445-4780
Desktop-publishing software; 128K Apple IIc, IIc Plus, IIe, IIGS; 1-megabyte RAM disk required, mouse recommended, 3½-inch disk drive or hard drive recommended (program available in 5¼- or 3½-inch format), printer required, LaserWriter supported
$139.95
Springboard Publisher Fonts, $29.95
Works of Art: Assortment Series, Education Series, Holiday Series, $39.95 each
Rating: ■■■■

inCider's Ratings

Excellent—remarkable, a must buy	■■■■■
Very good—impressive and recommended	■■■■
Good—average, solid performance	■■■
Fair—flawed but adequate	■■
Poor—unacceptable or unusable	■

A proven product, available now!

Waiting three months to go faster is like taking two steps back and one forward. Applied Engineering's TransWarp™ Accelerator for the Apple IIe or II+ is shipping right now. Period.

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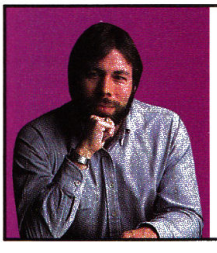
No more yawning while your Apple slowly rearranges text or calculates spreadsheets. With 256K of ultra-fast RAM on board, TransWarp speeds up *all* Apple software — including AppleWorks, and all educational software, graphics and games. And it's compatible with all standard peripheral cards (such as RamWorks III and Apple memory cards), hard disks, 3½" UniDisks, 80-column cards, modems, clock cards, mouses and more! You name it, TransWarp accelerates it.



"TransWarp is great! I have replaced all my other accelerators with it!"

Steve Wozniak, the creator of Apple Computer

An important difference.

With TransWarp, software runs up to three times faster than with other cards, since the others can't accelerate programs in auxiliary memory. That's why TransWarp is so much faster than the rest. Nearly all of today's more powerful programs run partially or completely in auxiliary memory: programs like AppleWorks, MultiScribe and Managing Your Money, to name a few. Why settle for a card that accelerates only part of the memory?

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Publish It!'s; I also prefer it to various GS programs on the market because of its improved speed and print quality.

FORMATTING FEATURES

Springboard's page-design, word-processing and graphics-creation modules are integrated. They work well individually, but together they create a whole greater than the sum of its parts.

The graphics mode is much like MousePaint in execution. Its features include scaling, flipping, mirror images, cropping, rotation, distortion, skew, inversion, and perspective changes. You can position text items vertically, horizontally, and diagonally.

The word processor includes a feature called Intuitive Text, which monitors and rejustifies your document as needed, figuring columns and wrapping around graphics and special text items to give you a WYSIWYG (what you see is what you get) display. One side effect, however, is the word processor's slow operation. It's unsuitable for writing of any length, but the program is oriented more toward page design than writing anyway.

Page layout is flexible. It allows up to nine columns of varying widths, quick definition of page regions (design elements), full-page view, page numbering, and documents limited in size only by disk space. You can even design shells to use over and over for one or more pages. (Several of the included templates are designed for multiple pages.) The single noticeable limitation in page design is that the program supports only standard- and legal-sized pages.

From any of the three screen displays (one for each mode) you can double-click on another graphics, text, or special text area to change automatically to that mode. You can copy or move items to other pages or other documents. (Springboard's Newsroom Clip Art Collection is also compatible.) You can redesign on the fly.

One important capability is missing—graphing. A technique for dealing with numbers from a business perspective is the one gaping hole in today's publishing programs.

QUIRKS

Inherent in software design are trade-offs, compromises, and bugs—though few in Springboard Publisher. Most notably, the word processor is pedestrian. It's acceptable for tasks such as writing headlines, cut lines, and other blurbs, but you'll want to write and edit your body copy in another word processor, such as AppleWorks. Toggling Intuitive Text mode sometimes loses text, too.

Springboard can read external text files, but it can't print a text file back to disk so that you can edit it in another program. If you've designed an advertisement, a business form, or something you might update and reprint occasionally, this limitation forces you into the clutches of the Springboard Publisher word processor.

The program doesn't issue a standard Quit command as prescribed in the *Apple Human Interface Guidelines* for desktop programs. Instead, the Quit command brings up a program selector. If you use a desktop, you have to do a time-consuming soft reboot. (A quick trick around this is to choose BASIC.LAUNCHER—or any other file you know you can't execute directly—as the next application to run. Then press Return at the error dialog box and you'll get your desktop back without rebooting.)

After you've worked with Springboard Publisher for two or more hours at a sitting, it may lock up unpredictably. Save your document every time you make a substantial change. Springboard Publisher is a large program, so the surprise is not that problems exist, but that there are so few. Don't be dissuaded from trying the product; Springboard Software just needs to take care of these few concerns in a future release.

TIPS AND TRICKS

Here are a few suggestions for getting around some of the problems mentioned above.

Write and edit your documents in AppleWorks or your favorite word processor, and save your Springboard document template before you import text.

At a Glance

Wordbench (December 1988, p. 28, by Patricia Payne), Addison-Wesley Publishing Company, 6 Jacob Way, Reading, MA 01867, (617) 944-3700, $149
Rating: ■■■■

Wordbench is more a writing program than a mere word processor, adding outliner, notetaker, and brainstormer modules, plus thesaurus, spelling checker, formatting tools, print manager, viewer (to flip among documents), and macros (called *shortcuts* in this program).

The package's neatest feature is that you can categorize your jottings in the notetaker, then organize and outline, and presto—Wordbench puts it all together for a coherent first draft.

ShowOff (December 1988, p. 34, by Carol Holzberg), Broderbund Software, 17 Paul Drive, San Rafael, CA 94903-2101, (415) 492-3500, $59.95
Rating: ■■■■

ShowOff may do for desktop presentation what The Print Shop did for desktop publishing. You can create overhead transparencies, a computerized "slide" show, and all sorts of other illustrations and diagrams. Compose a screen with the program's graphics tools, or arrange one from the assortment of nine clip-art stickers and 385 icons stored on disk.

After you've assembled a set of "slides," you can set them to run manually or automatically and adjust a timer to control how long each image remains on screen. You can also select the type of transition between slides—scrolling horizontally or vertically, or fading out. In addition, Broderbund is said to be currently developing a ShowOff Graphics Collection that will include more than 200 additional pictures.

Once Upon a Time (December 1988, p. 110, by Carol Holzberg), Compu-Teach, 78 Olive Street, New Haven, CT 06511, (203) 777-7738, $39.95
Rating: ■■■

Once Upon a Time is desktop publishing for kids. Children can choose the Farm, Safari, or Main Street Storybanks, and put together tales based on those picture sets. Each Storybank contains anywhere from 26 to 32 illustrations relating to that theme. The Safari collection includes pictures of an alligator, boa, elephant, giraffe, and other creatures you'd find in the jungle.

Children select pictures and position them, then add up to three lines of text at the bottom of the page. Once Upon a Time is easy to use, but somewhat limited in its scope in that children must adhere to stories relating to the Storybank picture sets. The program doesn't print in color, but includes a set of colored pencils for the "hands-on" approach.

Continued ►

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Circle 110 on Reader Service Card.

Programs & Peripherals

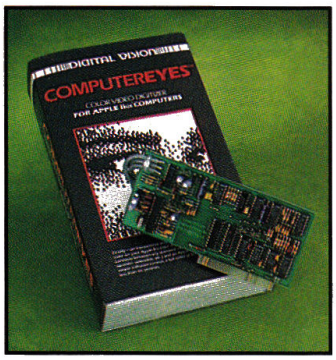
Modems

Anchor Automation 1200E	119.
2400E	159.
Applied Engineering	
DataLink Modem 1200B *(Int II+, IIe or IIgs)*	139.
DataLink Modem 2400B *(Int II+, IIe or IIgs)*	185.
EPIC Epic 2400 Classic II Internal	***Special*** 179.
Epic 2400 Mini Modem Ext.	***Special*** 179.
Hayes Hayes 1200 Baud Smartmodem	299.
Hayes 2400 Baud Smartmodem	449.
MDIdeas Commlink 2400	189.
Practical Peripherals	
Practical Modem 1200 SA Mini	85.
Practical Modem 1200 SA	109.
Practical Modem 2400 SA	189.
Prometheus Pro Modem 2400 *(External)*	255.
Pro Modem 2400G *(Non Expandable)*	179.
Pro Modem 2400A *(Single Card)*	139.
Pro Modem 1200A *(Single Card)*	119.
Pro Modem 300c	82.
Supra Corporation	
Supra Modem 2400 *(Hayes Compatible)*	149.
U.S. Robotics	
U.S. Robotics Courier 1200	199.
U.S. Robotics Courier 2400	349.
U.S. Robotics Courier 2400E	379.
U.S. Robotics Courier HST 9600	689.

Printer Interface Cards

Apple Apple Super Serial Card	119.
Applied Engineering BufferPro 32K	99.
BufferPro 128K or 256K	Call
Serial Pro *(II+, IIe, IIgs)*	115.
Parallel Pro *(II+, IIe, IIgs)*	85.
Orange Micro Grappler C/Mac/GS	84.
ProGrappler *(Apple IIe or IIgs)*	84.
Serial Grappler Plus	62.
Hot Link	49.
SMT No Slot Clock	42.
Print Tech II *(Parallel Interface)*	37.
Thirdware Finger Print GSi Ver 2 *(Includes Desktop Accessories-IIgs)*	***Special*** 79.
Finger Print Plus *(Specify Cables: Parallel, Serial or ImageWriter II-II+ & IIe)*	89.

Computer Eyes by Digital Vision



Computer Eyes is the economical way to capture exciting real world images and display them on your Apple II. Simply install *Computer Eyes* in any slot of your Apple II, attach it to any standard video source (video camera, VCR, or video disk) and in six seconds scan any image! *Computer Eyes* automatically calibrates brightness and contrast, but you can always adjust them after the acquisition to suit your tastes. *Computer Eyes* supports Hi-Res and Double Hi-Res modes (Color and optional Super Hi-Res supported on the IIgs version). You can export your scans to desktop publishing programs (like Springboard Publisher) for use in newsletters, flyers, or anything you produce. *Computer Eyes* includes user-friendly menu driven software so you can start scanning today!

Computer Eyes *(IIe & IIc)* ..... **109.**
Computer Eyes for the IIgs ..... **209.**

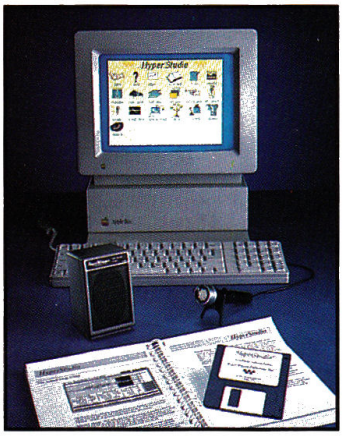
Utilities & Languages

Absoft AC/BASIC *(16-bit BASIC Compiler for IIgs)*	***Special*** 84.
Funk Software	
Sideways Prodos & Dos 3.3	45.
Roger Wagner SoftSwitch *(IIgs)*	39.
Merlin 8/16 *(IIe, IIc, IIgs)*	79.
The Byte Works ORCA/M *(IIgs)*	39.
ORCA/Pascal Desktop Debugger	80.
ORCA/Pascal DeskTop *(IIgs)*	34.
TML Systems	
TML Basic *(IIgs)*	84.
TML Pascal *(IIgs)*	84.
TML Source Code Library *(IIgs)*	35.
TML Speech Toolkit *(IIgs)*	49.
Zedcor	
ZBASIC 4.0 Interactive Compiler	39.

Disk Drives & Hard Disk SubSystems

American Micro Research ***(Micro Sci)***	
A5 D Half Height 5¼" Drive *(IIgs Daisychain)*	165.
A.5 Half Height *(II+ & IIe)*	139.
A.5C Half Height *(IIc)*	139.
Micro Sci C2 Controller	52.
Applied Engineering Transdrive 360K	219.
Transdrive Dual 360K	305.
Transdrive Half Height 360K	119.
Chinook CT-20 Hard Drive *(AP & IIgs)*	665.
CT-20c Hard Drive IIc	709.
CT-30 Hard Drive *(AP & IIgs)*	739.
CT-40 Hard Drive *(AP & IIgs)*	835.
CMS	
"SD Series - Stack" Platinum IIe, IIgs	
20 MB w/SCSI II card	645.
43 MB w/SCSI II card	845.
60 MB w/SCSI II card	950.
Cutting Edge XL 30 + SCSI HD *(IIe & IIgs)*	629.
XL 45 + SCSI HD *(IIe & IIgs)*	829.
First Class T6 60MB Tape	709.
D2 20MB HD *(IIe & IIgs)*	***Special*** 509.
D4/A 40MB HD *(IIe & IIgs)*	645.
D4/T 40MB HD/High Perf. *(IIe & IIgs)*	855.
D9 90MB HD/High Perf. *(IIe & IIgs)*	1465.
D96 Combo 90MB HD & 60MB Tape *(IIe & IIgs)*	2155.
Rodime Rodime 20 Plus Ext HD *(IIe, IIgs)*	629.
Rodime 45 Plus Ext HD *(IIe, IIgs)*	939.
Rodime 60 Plus Ext HD *(IIe, IIgs)*	1019.
Rodime 100 Plus Ext HD *(IIe, IIgs)*	1169.
Rodime 140 Plus Ext HD *(IIe, IIgs)*	1319.
Video Technology Universal Disk Controller	79.
Laser 800KB Drive	185.
Universal Disk Controller/800KB Drive Bundle	259.

HyperStudio for the IIgs by Roger Wagner



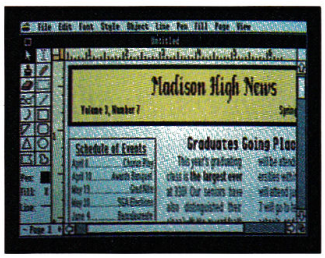
HyperStudio brings the newest computer revolution to IIgs owners! *HyperStudio* lets anyone create and use hypermedia applications. *HyperStudio* combines Super Hi-Res graphics (from popular paint programs or built-in paint tools), text from a text file, AppleWorks, or built-in editor), and digitized sound files from your own hardware or the included hardware, all in one integrated environment. *HyperStudio* includes sound digitizing software, a 'no-slot' digitizer card, microphone, and amplified speaker. You can create applications including interactive lessons to adventure stories, and much more!

HyperStudio for the IIgs ..... **85.**

Accessories

Apple Computer Apple Mouse IIe	125.
Apple Mouse IIc	85.
Applied Engineering TimeMaster II H.O.	79.
IBM Style Keyboard or Sonic Blaster *(IIgs)*	119.
Audio Animator *(IIgs)*	185.
Asher Engineering	
Turbo Trackball *(IIe or IIgs)*	69.
Bose RoomMate Powered Speaker System	229.
CH Products Hayes Flight Stick	52.
Hayes Mach II Joystick *(Beige or Platinum)*	29.
Hayes Mach III Joystick *(Beige or Platinum)*	36.
Hayes Mach IV Plus Quad or ADB	65.
Mirage Quad or ADB (Turns joystick into mouse)	39.
Curtis Curtis Emerald	36.
Curtis Ruby	55.
Cutting Edge EADB-105 Extended Keyboard *(IIgs)*	125.
Digital Vision	
Computer Eyes *(IIe or IIc)*	***Special*** 109.
Computer Eyes *(IIgs)*	***Special*** 209.
Ergotron Mouse Cleaner 360° *(IIgs)*	15.
Epyx Epyx 500J Joystick	27.
Kalmar	
Teakwood Rolltop Disk Case *(Holds 50)*	18.
Kensington Mouse Pocket *(Reg. or ADB)*	8.
Mouseway *(Mouseped)*	8.
Apple IIgs Dust Cover or Imagewriter Cover	9.
Mouse Cleaning Kit w/Pocket	17.
Disk Drive Cleaning Kit *(3.5" Drives Only)*	20.
Apple Security System	34.
Printer Muffler 80	43.
Printer Muffler 132	58.
Printer Muffler Stand 80 or 132	24.
AntiGlare Filter IIgs	39.
System Saver *(Platinum or Beige)*	69.
System Saver *(IIgs)*	79.
New Turbo Mouse *(Reg. or ADB)*	119.
Kraft	
Universal 3 Button Joystick *(IIe or IIc)*	34.
Koala Technologies	
Koala Pad Plus w/Graphics Exhibitor	84.
Kurta IS ADB Tablet w/stylus *(IIgs)*	339.
MDIdeas Digitizer Professional *(IIgs)*	139.
The Conserver *(IIgs Switched Surge Suppressor w/Fan)*	99.
SuperSonic *(Stereo Card for IIgs)*	49.
SuperSonic Digitizer *(IIgs)*	49.
Mouse Systems A+ Mouse *(IIc)*	65.
A+ ADB Mouse *(IIgs)*	85.
MousTrak MousePad 7"x9" Size	8.
MousePad 9"x11" Size	9.
MousePad L/F *(Low Friction)*	9.
Ribbons *Available colors: black, blue, brown, green, orange, purple, red, yellow, silver or gold*	
ImageWriter Ribbon-Color	4.
ImageWriter Ribbon-Black six pack	20.
ImageWriter II - 4 Color Ribbon	9.
ImageWriter Rainbow Pk. (6 Colors)	20.

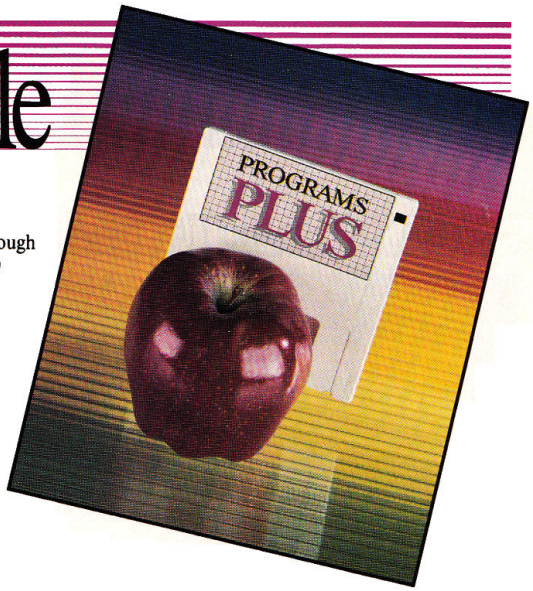
GraphicWriter III for the IIgs by Seven Hills



GraphicWriter III is the feature-packed desktop publishing package for Apple IIgs owners. *GraphicWriter III* offers word processing, graphics, and page layout in one user-friendly, integrated program! You'll have all the tools you need to design and create quality publications at your fingertips. It's Mac-like interface enables most users to start publishing less than one hour after booting up! But you won't have to duplicate your previous work because *GraphicWriter III* lets you import images from graphics programs like Paintworks Gold and text from AppleWorks and other word processors. You can design newsletters, forms, announcements, and just about anything else you can think of! GS/OS, sample style sheets, clip art and spelling checker are included free.

GraphicWriter III for the IIgs ..... **85.**

to Polish Up Your Apple

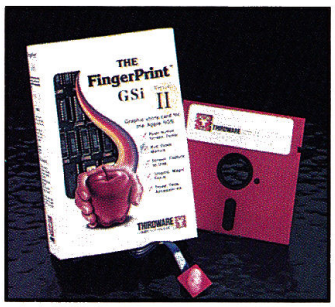


Specials good through
February 28, 1989

Communication Software

Activision		Grolier On Line Encyclopedia	32.
Teleworks Plus *(IIGS)*	66.	**Pinpoint**	
Checkmate Technology		Point-To-Point	74.
ProTERM *(IIGS, IIe, IIc)*	95.	**United Software Industries**	
Compuserve		ASCII: Express Pro: Prodos or Dos 3.3	72.
Compuserve Starter Kit	24.	ASCII: Express Mousetalk 1.5	69.

FingerPrint GSi by Thirdware



FingerPrint GSi is the graphics utility card that instantly captures and dumps screen images to your printer or disk. But *FingerPrint GSi* does much more - you can crop, rotate, stretch, invert, reposition and enlarge captured images up to 140 feet by 100 feet. You can also reload saved screen images into graphics programs, desktop publishing packages, and word processors that support imported graphics at the touch of a button! *FingerPrint GSi* comes with loads of extras - including three desk accessories (calendar, typewriter, and calculator), printer/ font utilities, and page formatting tools that help make you and your Apple IIGS more productive. Years of use are guaranteed by Thirdware's five year, no hassle warranty.

FingerPrint GSi for the IIGS ..... **79.**

Apple Compatible Computers

Video Technology		Laser 190A Printer	
Laser 128 Computer	379.	*(Imagewriter Compatible)*	239.
The Laser 128 includes an Expansion Slot, RGB Video Output, Parallel Printer Port, and a 10 Key Numeric Keypad!		Laser RGB Monitor	399.
		Laser Amber Monitor	99.
Laser 128EX Computer	459.	Laser 128 2nd Disk Drive	
The Laser EX includes a Built-in RAM Expansion Board, Universal Disk Controller, Built-In Expansion Slot, and Ports for all Peripherals!		*(5¼", ½ height)*	89.
		Laser 128 800K 3.5" Drive w/Controller	259.
		Laser 128 Cables	
		(Parallel, Serial, RGB or Modem)	16.
		Laser 128 Mouse	49.

Backup Utilities & Boards

Alpha Logic		**Central Point Software**	
Locksmith 6.0	36.	Copy II Plus *(5.25" & 3.5" Bit Copy)*	23.
Apple		**FWB Software**	
GS/OS *(IIGS)*	34.	Disk Util II *(IIGS)*	52.

2400 Classic II & 2400 Mini Modems by Epic Technology

2400 Classic II *(Internal)* and ***2400 Mini*** *(External)* modems are designed to make the most of your communications dollar. Both modems come bundled with ProTERM software, the most powerful and flexible communications software package on the market! Each modem offers auto dial/ answer, auto baud capability, call progress detection, data to voice switching, and redial on busy to make your communicating efficient and simple. Complete self-test support makes troubleshooting a breeze, and Epic backs it modems with an ironclad five year warranty. We recommend the *Epic 2400 Classic II* internal modem (for Apple II+, IIe and IIGS) where portability is important, and the *Epic 2400 Mini* external modem if you use more than one computer.

2400 Classic II ..... **179.**
2400 Mini ..... **179.**

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Then merge the new text with the old template.

If you use a GS, format a 3½-inch disk with the GS/OS (System Disk version 4.0 or later) Finder, with a 2:1 interleave (which works for all GS/OS-compatible 3½-inch program disks). Then copy Springboard Publisher to that disk. Disk access will be about one-third faster than a standard ProDOS disk. This also works for SCSI (small-computer-systems interface) hard drives, but only if you have the Apple-brand SCSI card.

Create an empty Springboard document called MY.LIBRARY (or whatever) and use it to store custom page elements you've created. You might also design a library of assorted headline constructions or bylines.

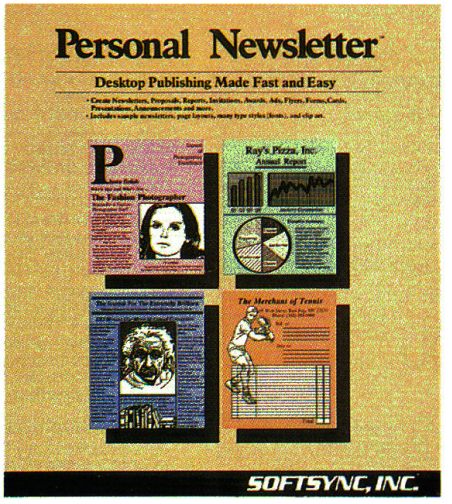
To create odd-sized documents, such as a 5½-by-8½-inch manual, start with a standard page and insert empty text regions to block off the page dimensions to the desired size. After you've finished your document, you can photocopy the printed pages and have them collated at a copy store for a nominal fee, or trim them yourself.

If you want to create text-based graphics such as lists that need to be aligned in columns, use Messenger in the Springboard Publisher Fonts package.

THE LAST PAGE

In a single year, the state of desktop publishing on the Apple II has advanced from party banners to serious productivity. Tools available today can change the way you conduct your business or educational affairs—letting you communicate in a more professional way without investing an inordinate amount of time or money in the process. Apple II publishing software isn't the equal of that available for the Macintosh, but the Apple II can produce documents that will compete on the same playing field. If you don't need a high-end machine and commercial-grade design, but would like to turn out attractive correspondence, promotional pieces, or newsletters, your day has arrived.■

Joe Abernathy
Houston, TX



Personal Publishing

PERSONAL NEWSLETTER 2.0

Softsync Inc., 162 Madison Avenue, New York, NY 10016, (212) 685-2080
Desktop-publishing program; 128K Apple IIe with extended 80-column card and enhanced ROM, IIc, or IIGS
$59.95, 5¼-inch disk
$9.50 plus original system disk, 3½-inch disk
Rating: ■■■

If you wanted to get into desktop publishing in 1985 you needed a Macintosh, a laser printer (preferably Apple's own Postscript LaserWriter), and Aldus' PageMaker program—for a heavy investment. Today you can create professional-looking documents on an 8-bit or 16-bit Apple II—and Personal Newsletter version 2.0 promises to enhance the machine's reputation for ease of use at a reasonable cost.

Why is desktop publishing on the Apple II so popular? It affords small businesses, schools, and ordinary folk the opportunity to create sophisticated, multiple-column documents in a variety of fonts, type styles, and sizes.

Most Apple II desktop-publishing packages combine text-editing options with graphics tools, letting you add original illustrations. Others come with their own clip-art collections. A few let you import graphics from other programs.

Continued

Math and Me (December 1988, p. 113, by Peg Brown), Davidson & Associates, 3135 Kashiwa Street, Torrance, CA 90505, (213) 534-4070, $39.95
Rating: ■■■■

Math and Me introduces children to numbers and presents several basic mathematical concepts in an entertaining, interesting way. The suggested age range is 3–6, but any household, preschool, or kindergarten classroom should find it a popular addition.

Math and Me covers four areas—shapes, numbers, patterns, and addition. Three games in each subject area make for a total of 12 selections. (If you had to think about that one, perhaps you should play Math and Me.) Games feature colorful graphics, rewarding sound effects, and nonrepeating sequences, so that children can get a lot out of this program. Keep your eyes (and ears) open for talking versions of this program and Davidson's Reading and Me for the GS.

Paintworks Gold (November 1988, p. 26, by Carol Holzberg), Activision, 3885 Bohannon Drive, Menlo Park, CA 94025, (415) 329-7699, $99.95
Rating: ■■■■

Paintworks Gold is currently the "Cadillac" of the GS paint circuit. Its many features set Paintworks Gold apart from other GS paint programs—you can play with perspective and manipulate object position and shape, for example. Using pull-down menus, you can cut, copy, paste, mix colors, flip and rotate images, and bend and distort images for special effects.

If you want to do animation, Paintworks Gold gives you two techniques. You can compress a series of pictures into a single file, or cycle a series of colors through an individual picture.

With Paintworks Gold's "slippy" colors, you can move objects without leaving a hole in the background. You can mask colors to protect them from alteration, and you can make colors transparent. You can also change the intensity and brightness of the red, green, and blue shades in your working color.

Paintworks Gold lets you print on the Epson series (in draft mode). The program also comes with a clip-art disk.

Managing Your Money 3.0 (November 1988, p. 34, by Gregory Glau), MECA Ventures Inc., 355 Riverside Avenue, Westport, CT 06880, (203) 222-9150, $149.95
Rating: ■■■■

The latest version of Managing Your Money builds on the program's initial strengths and successes. It now comes on both 3½- and 5¼-inch disks; you can send your financial data to other

Continued

Continued

programs; and the software now incorporates the latest tax laws. There are also a newsletter and update service to which you can subscribe.

The program's structure is similar to that of a book. Each disk is like a chapter focusing on one area. The difference is that Managing Your Money gives you more than instructions—it also gives you the tools to put your financial matters in order. At the end of the year, the program summarizes all your transactions in as much detail as you need. Chapters include a notepad, checkbook and budget data, a tax estimator, insurance needs, a financial calculator, stock tracking, net worth, a card file, and a report generator.

The manual includes every help screen you might encounter in the program. Also, remember there will be plenty of disk swapping with 5¼-inch disks, and that can be confusing.

In all, Managing Your Money is an effective way to keep track of where you spend your money.

FingerPrint GSi (November 1988, p. 37, by James Trunzo), Thirdware Computer Products, 4747 N.W. 72nd Avenue, Miami, FL 33166, $99
Rating: ■■■■

FingerPrint GSi lets you save a screen image quickly by printing it. This graphics-utility card has been available to IIe owners for some time; the new version is designed for the GS.

You can install the FingerPrint card in five minutes—the manual contains step-by-step directions and it's impossible to plug it in the wrong way. Thread the ribbon cable out the front of the machine and attach the self-adhesive activator button (with a picture of a fingerprint on it) to the front of your GS.

After running two installation tests, you're ready to print a screen. Press the fingerprint button, then click your mouse or hit Return. The screen starts to print, and that's all there is to it.

FingerPrint gives you several printing options—color, zoom, 90-degree rotation, and cropping, among others. You can also add text.

SuperPrint (October 1988, p. 30, by James Trunzo), Scholastic Software, 730 Broadway, New York, NY 10003, (212) 505-3000, $39.95
Rating: ■■■■

Scholastic Software's SuperPrint is a useful, innovative program, with clip art, fonts, and "backgrounds" included. It offers the standard variety of options—graphics-enhanced signs, letterheads, banners, and greeting cards. It surpasses most programs, however, by printing giant posters, wall-sized calenders, and bulletin-board-sized signs.

The quality of the finished product—even at its largest—is excellent, especially if you don't print in draft mode. With horizontal and vertical scrolling, you can preview the design on screen in exactly the size the program will print it.

SuperPrint uses the same menu-driven commands to create all its various formats. The program is so intuitive the average user can run it easily without ever opening the manual. Documentation is clear and easy to use, except for a few errors in the tutorials.

MagnaCharta (October 1988, p. 41, by Gregory Glau), Third Wave Technology, 11934 Lorain Avenue, Cleveland, OH 44111, (216) 671-8991, (800) 223-WAVE, $59.95
Rating: ■■■■

MagnaCharta is a business graphics program that gives you two ways to handle your numbers: You can import text files from other programs, including AppleWorks, or use the program to create worksheets for the information you want to graph. It's a helpful, easy-to-use addition to your spreadsheet.

MagnaCharta lets you create nine different kinds of graphs, including a unique 3-D chart. You can print your graphs in two sizes, and rotate the images on paper to make them look better. The program has pull-down menus that are easy to understand and work with. It lets you use your keyboard, mouse, and joystick simultaneously, for maximum flexibility.

MagnaCharta displays any number over 999 exponentially, which means $1000 is shown as 1e3. If you're not used to this, you'll have to work harder to interpret the figures on your worksheet.

Documentation is included with the package, and technical support is available via a toll-free telephone number.

Mathtalk Fractions (October 1988, p. 43, by Jack Emberly), First Byte, 45 Temple Avenue, Long Beach, CA 90806, (213) 595-7006, $49.95
Rating: ■■■■

Mathtalk Fractions features a friendly approach designed to interest kids in drill-and-practice problems covering fractions, decimals, and percentages. The program is motivating and effective, even though it doesn't include any tutorials. Make sure you have enough RAM, though—this one requires 768K just to get off the ground.

The first several pages of the documentation define terms such as *fraction*, *lowest terms*, and *decimal*, while the remainder explain how to convert and reduce fractions. I'd much rather see a disk tutorial. Kids who don't understand fractions aren't likely to stop playing long enough to refer to a wordy text.

You can choose one of four activities—Problem Factory, Fraction Shuffle, Fun House, and Team Challenge. Problem Factory is the least impressive of the exercises, while the other three make the most of the GS' graphics to attract students to fraction problems.□

Personal Newsletter (version 2.0) is a full-featured desktop publisher that lets you do all this—and then some.

IMPROVEMENTS AND OPTIONS

Given the prevailing price of a Macintosh desktop-publishing system, Personal Newsletter is a real bargain—especially when you consider all the goodies it has to offer. Version 2.0 is quite an improvement over the original. It now includes a headline option for creating large-point text in any of six fonts, a double-strike type style for higher-quality output, and a new laser-printer driver that supports the GS, IIe, and IIc. (Or you can save your files on a 3½-inch disk and export them to a Macintosh.)

The manual recommends making backups of every disk in the package. For the 5¼-inch version, that means the System Disk, the Fonts/Samples disk, and the double-sided Clip Art Volume One disk. Version 2.0 also comes bundled with Clip Art Volume Two, adding 200 new pictures and three new fonts to the program's graphics repertoire.

You can eliminate the jumble of floppies by copying all files to a 3½-inch disk with a commercial utility program such as Copy II Plus. To get everything onto one disk, though, you'll have to place all the clip art in a subdirectory. Also, remember to format a few ProDOS floppies to use for data. You'll need these disks to store your files, and there's no formatting option within the program.

Once you've completed the backup and disk formatting, configure the System Disk to work with your printer. Personal Newsletter doesn't include a printer driver for the ImageWriter LQ, nor does it offer the GS serial port as one of its approved interface cards. If you have an ImageWriter LQ and plan to use it with a GS, select the ImageWriter II and Apple Super Serial card as printer-setup options. GS users with analog RGB monitors should also change the display from color to monochrome. Otherwise, text will be difficult to read.

Continued on p. 86

A WINNING

APPLE IIS AND PUBLISHING

We saw more than 1000 entries in *inCider*'s desktop-publishing contest. Out of that number we selected 30 winners, and only two grand-prize winners (profiled below). What made for a winning entry?

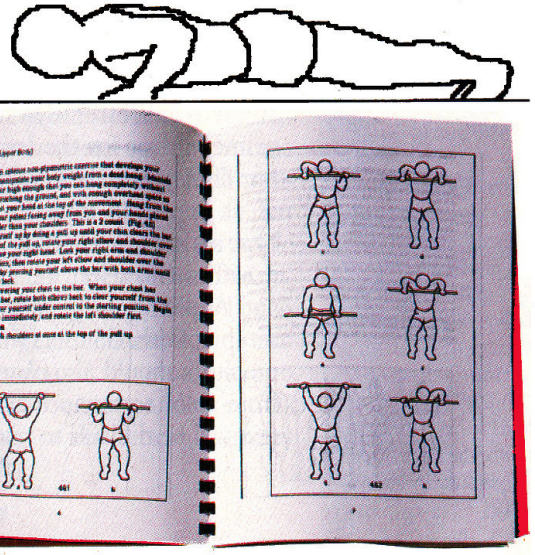
Simplicity was the theme all winners shared. Books, magazines, newsletters, and pamphlets look best if they don't try to accomplish too much. With one or two fonts and a consistent style you'll communicate more than by racing the engine of your desktop-publishing program—using every feature just for the sake of using it.

Fancy equipment was no guarantee. Not all winners used laser printers—most used an Apple ImageWriter II and Timeworks' Publish It!. In fact, the "most wanted hardware" among the winners wasn't a printer, but Thunderware's ThunderScan optical digitizer, which works with the ImageWriter. Our winners are a patient lot—they've learned to use what they have, rather than complain about their hardware. We congratulate them, and all the other entrants, too. See you next year.

by Paul Statt, Senior Editor

FULL POWER

by Vinny Napple



Vinny Napple's a Navy man. He didn't learn the art of design in the Navy, but maybe long days at sea left him time to develop it. "I've always liked art," he notes. "But as far as my design sense goes, I've learned the most from just looking at a lot of other books."

As his exercise manual, *Full Power*, shows, Vinny's been leafing through some well-designed books—he credits *Looking Good in Print* ($23.95, Ventana Press, Chapel Hill, NC) for a lot of it.

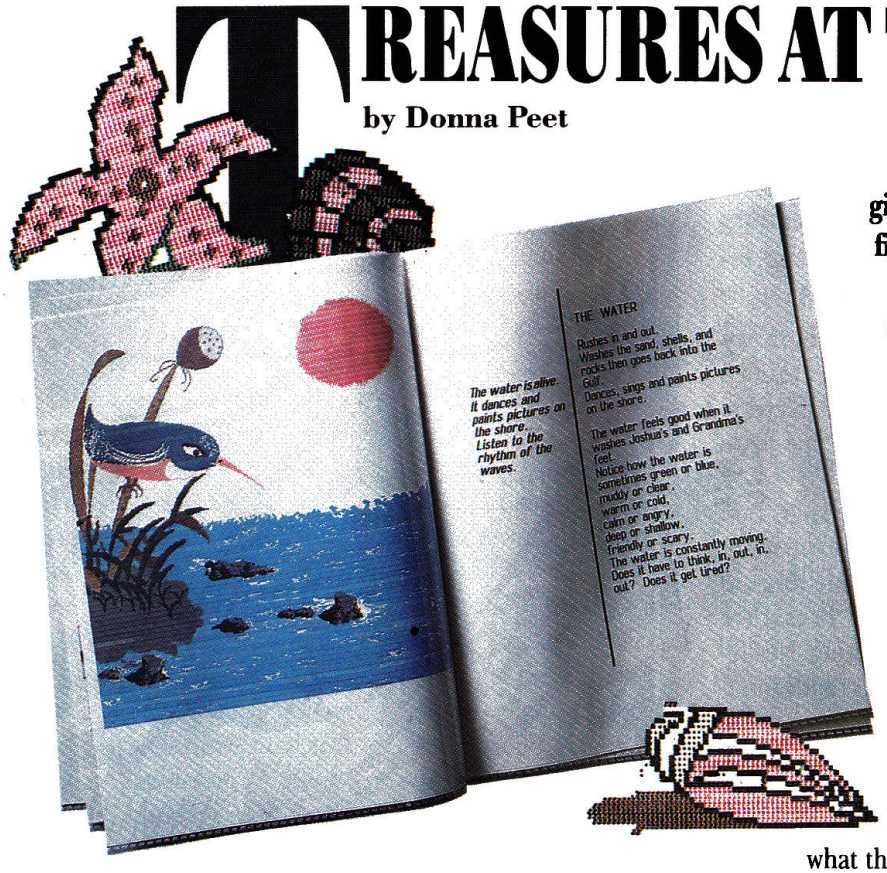
Vinny proves that you don't have to be rich to be a desktop publisher, just good. His Apple IIc came second-hand to him, and he created the artwork for *Full Power* with MousePaint, a graphics program (by Bill Atkinson of MacPaint and HyperCard fame) that's a freebie when you buy an Apple mouse.

Vinny stresses simplicity. "I wasn't able to use a template figure [a pattern used as a guide for repeated drawings] for all the pictures," he explains, "but for related exercises, I created a template for the parts of the body that didn't move. The simplicity was certainly to my advantage."

COMBINATION

TREASURES AT THE BEACH

by Donna Peet



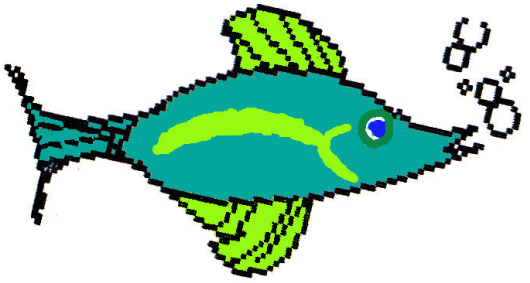
Treasures at the Beach **was a grandmother's gift to a three-year-old grandson before his first visit to Florida's Gulf Coast.**

Donna Peet, author, artist, and designer of *Treasures at the Beach*, is a social worker in Dunedin, Florida. She cares for the elderly in her work, but obviously cares for art and children as well. She went back to college in 1981 to get a master's degree in fine arts, but didn't get her Apple IIGS until 1988.

She might encourage a beginner to take art classes, but probably not classes in DeluxePaint (Electronic Arts). "Don't ask somebody how to do it," she advises. "Be patient."

Donna trusts herself and the documentation. "I'm a manual person," she says, "and it's important to know exactly what the program is capable of. It can do more than I can do with pencil and paper, but no matter how long I stick with it, it can't do everything." When Donna wanted to print her book, she knew that DeluxePaint wouldn't do it, so she bought Publish It! to lay out the pages.

Donna stresses that her background in fine arts—she's a potter and a photographer—taught her two important lessons for all desktop publishers: "Use white space and simple fonts" to produce a clean layout that will be attractive to the eye and easy to read. Donna "just said no" to font abuse and clutter; that and her engaging artwork won her the top prize in the 16-bit category.



Photography by White/Packert

STEP BY STEP PUBLISH IT!

BY CYNTHIA E. FIELD, PH.D.

Promoting your business has never been easier, thanks to the Apple II and inexpensive desktop-publishing (DTP) programs. Whether you dream of designing letterhead stationery or an eye-catching advertisement, today's DTP software offers the capabilities you need.

Witness the Carousel Dinner Theatre in Boothbay Harbor, Maine. Last season, Carousel's Peter McKenney teamed up with **The Print Shop** from Broderbund Software to create colorful promotional pieces, playbills, dinner menus, and place cards for nearly 21,000 theatregoers.

And farther down the coast in Ellicott City, Maryland, Don and Penny Rascoe use **Publish It!**, the page-layout program from Timeworks, to design literature promoting Nestlé-Beich's candy fund-raisers for schools, churches, and civic organizations.

For small-business owners handling their own mailings and promotions, Apple II page-layout software's the greatest invention since the drafting table. Here's an easy-to-follow Publish It! project to get you started.

Those are just two examples of the thousands of small-business professionals across the country who are making desktop publishing an indispensable part of the office team. Whatever *your* business, there's almost no limit to the kinds of publications you can create on an Apple II.

Illustration by David Frampton

GETTING STARTED

For now, let's focus on one all-purpose project: the postcard. Retailers implement these inexpensive missives to announce special sales; dentists send them to remind patients of appointments; businesses use them to extend holiday greetings or to

IN BUSINESS

send "we've moved" or "new hours" notices.

With computer-designed postcards, once you've set up and saved the basic template (the layout of the card), you can edit text or graphics any way you'd like—often creating a new "publication" in less than an hour's time. What could be simpler? You'll sidestep graphics-design and typesetting costs; you'll maintain total control over layout and production; and you'll enjoy the personal satisfaction most do-it-yourselfers cherish.

THINK SMALL TO SAVE BIG

Thinking small can translate into big savings in business DTP projects. It doesn't take sophisticated spreadsheet analysis to calculate the benefits: If you have hundreds or thousands of customers on your mailing list, you can save a surprising amount of money by opting for 3½-by-5½-inch postcards, for 15 cents' postage apiece.

The template presented here, designed with Publish It! (version 2, scheduled at press time for release in January 1989 and supporting extended memory), accommodates three postcards on a single 8½-by-11-inch page. (See the accompanying **Figures**.) Make all three postcards identical, or add variety with different graphics or messages. For upcoming holiday promotions, for instance, you might use a generic spring-season graphic for some customers, Easter clip art or a Passover illustration for others.

FIRST THINGS FIRST

Start Publish It! and select Size to Fit viewing mode from the Special menu for a complete page-at-a-glance view.

Select the text-area tool (it looks like an uppercase *T*) from the tool palette on the left-hand side of the screen. Move the cursor to the uppermost left corner of the page and "rubberband" a text area (hold down the mouse button while dragging the device across your desktop) about 5½ inches wide by 3½ inches high, measuring with the program's built-in scale rulers. Don't worry about precision when you're creating objects.

Because the U.S. Postal Service "worries" about precision, though, pull down the Objects menu and click on Show Specifications. A window on screen opens to display exact measurements for Left Start, Top Start, Width, and Height of the object you just created. Edit these figures if necessary so that they correspond to the following values: 0.000, 0.000, 5.500, and 3.500 inches, respectively.

If you're using Publish It! 2, select the Frame Border radio button by clicking on it. Version 2 draws lines automatically around text frames. These lines can serve as guides when it's time to cut the postcards to size after printing.

If you're using an earlier version of Publish It! you can't include automatic borders, but you can pencil in cutting guides prior to duplication or use the ruler guide built into many paper cutters.

If you're experienced with Publish It! you've no doubt found yet another way to put a frame around the postcard: create a large rectangle with that shape tool and superimpose the text area on top of it. With so many ways to accomplish the same effect, it's no wonder business owners of all kinds have come to appreciate the Apple II's flexibility.

TAKING SNAPSHOTS

You could repeat the layout steps described above to create postcards 2 (middle) and 3 (bottom), but that's tiresome. Here's a quicker way. Select the pointer tool (the arrow) from the tool palette, and click on the text area (the blank postcard) you've already created. Clicking on an object activates it—notice the little "handles" in the corners—and alerts the program that you intend to manipulate the object.

Pull down the Objects menu and click on Copy. Publish It! takes an invisible snapshot of the object and keeps that picture in memory. Pull down the Objects menu again and click on Paste. A copy of the postcard appears! Using the mouse, drag the copy and position it under the first postcard. Again, don't worry about precision. To fine-tune your work, use the program's Show Specifications function, together with the accompanying **Table**, a list of complete specifications for all objects in ►

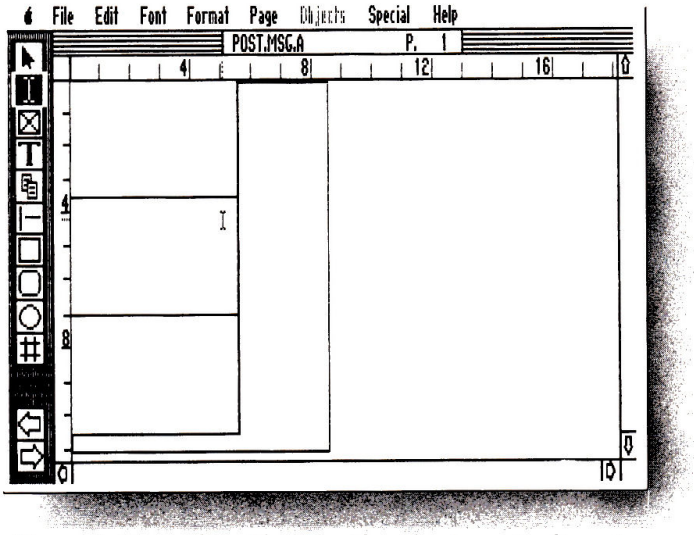


Figure 1. Screen shot of basic template showing outer dimensions of triple-postcard layout.

this project. Use these specifications as guides, but feel free to experiment.

"Paste," drag, and "show specifications" again to create postcard 3. That's all there is to it. Save this template (**Figure 1**). In fact, it's a good idea to get in the habit of routinely saving any work in progress. Use a different filename at each juncture. Name your blank postcard Postcard.A; the next template Postcard.B; the next step Postcard.C; and so on.

If you make an irreconcilable gaffe in a layout, you can reload the previous template and begin again without starting from scratch. If these security measures seem like overkill, keep in mind that page layout takes precious time, one commodity most businesses can't afford to waste.

Now print a sample copy. You may need to adjust the paper in your printer so that postcard 1's frame border begins precisely at the left and top edges of the page.

On your sample printout make pencil sketches of your ideas. Where would you like to place text? What about titles, announcements, and other details? Where would you like to include illustrations? What kinds of graphics are appropriate?

"Whatever your business, there's almost no limit to the kinds of publications you can create on an Apple II—and, when it comes to postcard promotions, thinking small can translate into big savings."

Designed for a florist hoping to increase Valentine's Day sales, the postcard in **Figures 2** and **3** incorporates the company's name (Floral Endeavor), the items it's promoting (Roses Galore, Houseplants in Full Bloom, Custom Bouquets), its holiday message (Show You Care on Valentine's Day), special pricing and services (10% Discount for Students & Senior Citizens, Flowers Worldwide), and company information (hours of operation, address, and telephone number).

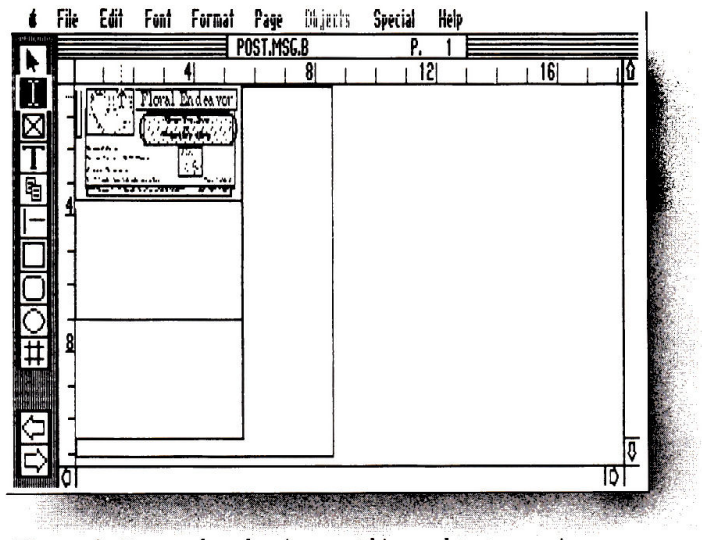


Figure 2. Screen shot showing graphics and text areas in postcard 1.

Do all work in the top postcard (postcard 1) for now. As you progress, your layout should look increasingly like **Figure 2** and the card in **Figure 3**.

Create two new text areas: a smaller one for the company name; a larger one for the body of the postcard. Switch to Show Full Size mode (Special menu). Select the I-beam tool (it looks like an uppercase *I*) from the tool palette. Place the I-beam in the company-name text area.

Pull down the Font menu and choose Select Font. For "Floral Endeavor," I used 36-point Ravinia, a style appropriate for florists. You might favor a more serious-looking font. (Version 2 even offers reverse type—white on black. See the accompanying sidebar, "Design Considerations," for a word of advice on layout.)

Position the I-beam and type product information in the body-

text area in 12-point Deerfield bold. (Use the Font menu to make these size, face, and style selections.) Enter the discount information in 10-point Deerfield italic; create the next line (store hours and worldwide service) in 9-point Deerfield. Experiment with type size to vary emphasis or conserve space.

To make the company's address and phone number stand out, create a bordered text area. You may want to switch to Size to Fit mode to create this area, then revert to Show Full Size to enter text. Don't forget to place the I-beam in the text area before typing.

Enter the information in 10-point Deerfield bold. Use the spacebar to create the gap between zip code and telephone number. Use scroll bars, as necessary, to see different parts of your postcard.

Motivate people to patronize your business by enclosing a holiday or "do it now" message inside a pattern-filled round rectangle. You may find it easier to work in Show Half Size mode (Special menu) to lay out and position this area. Select the round-rectangle shape tool from the tool palette and rubber-band the area into place.

"Getting involved in business desktop publishing is not only productive, it's creative. Sure, there's a payoff, but once you're hooked, the improvement in your company's bottom line is just frosting on the cake."

Select Set Fill Pattern from the Objects menu. The program's predefined patterns weren't as "lacy" as I wanted for this Valentine's Day postcard, so I edited an existing pattern (use the Define Pattern option under the Special menu) by removing pixels (clicking on selected black dots to turn them off).

Next, create a text area on top of the round rectangle. Version 2 of Publish It! has a Transparent feature (in the Show Specfications window), which lets the background show through text areas. Turn this feature on. Place the I-beam in this text area, select 18-point Ravinia bold and enter your message. To center it, drag the mouse across the text to inverse-highlight it, pull down the Format menu, turn on Center justification, and turn off Use Page Standard.

PICTURES WORTH A THOUSAND WORDS

Create two areas for drawings with the graphics tool. (It looks like an "X-in-a-box.") Select the pointer tool. Place a compatible art disk in the drive, activate a graphics area, pull down the File menu, and select Import Picture. (Version 2 users can also import Print Shop graphics—even DOS 3.3—via this menu.) The Valentine's Day template shown in the **Figures** includes ►

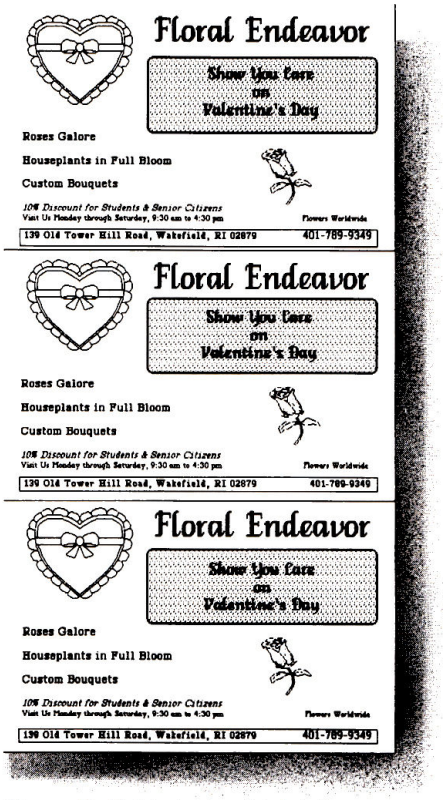


Figure 3. Triple postcard printed.

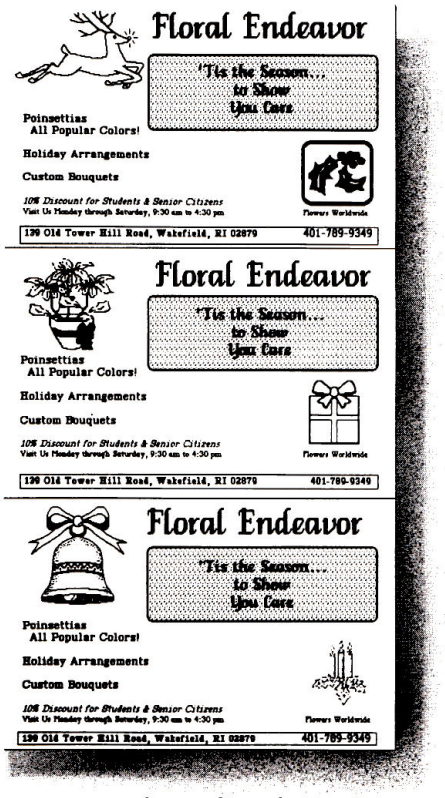


Figure 4. With varied graphics.

POSTCARD #1

Text Areas	Left Start	Top Start	Width	Height	Frame Border	Transparent
1 Blank Card	0.000	0.000	5.500	3.500	Y	N
2 Company Name	0.981	0.163	4.366	0.516	N	N
3 Message	2.208	0.940	2.870	0.797	N	Y
4 Body	0.275	0.863	4.883	2.306	N	N
5 Address	0.250	3.215	5.000	0.218	Y	N
Graphics						
A Heart	0.287	0.141	1.586	1.341	N	-
B Round Rectangle	2.025	0.772	3.234	1.069	-	-
C Rose	3.568	2.008	0.812	0.863	N	-

POSTCARD #2

Text Areas	Left Start	Top Start	Width	Height	Frame Border	Transparent
1 Blank	0.000	3.500	5.500	3.500	Y	N
2 Company Name	1.026	3.633	4.366	0.516	N	N
3 Message	2.175	4.302	2.870	0.797	N	Y
4 Body	0.266	4.300	4.884	2.306	N	N
5 Address	0.250	6.609	5.000	0.177	Y	N
Graphics						
A Heart	0.286	3.595	1.590	1.345	N	-
B Round Rectangle	2.025	4.150	3.233	1.068	-	-
C Rose	3.681	5.366	0.813	0.865	N	-

POSTCARD #3

Text Areas	Left Start	Top Start	Width	Height	Frame Border	Transparent
1 Blank Card	0.000	7.015	5.500	4.500	Y	N
2 Company Name	0.990	7.115	4.366	0.516	N	N
3 Message	2.213	7.819	2.870	0.797	N	Y
4 Body	0.283	7.850	4.900	2.306	N	N
5 Address	0.250	10.202	5.000	0.176	Y	N
Graphics						
A Heart	0.308	7.004	1.588	1.344	N	-
B Round Rectangle	2.025	7.668	3.234	1.069	-	-
C Rose	3.568	8.881	0.811	0.862	N	-

Table. Specifications for postcard objects (all dimensions in inches).

graphics from Publish It!'s art disks. Timeworks offers additional clip-art disks (**Education Graphics**, **Symbols & Slogans**, and **People, Places & Things**) with hundreds more choices.

Select the graphics file you want and use the arrow keys and open apple-arrow combinations to crop the desired illustration when it appears on screen. Press Return. If the illustration looks too small or too large after you import it, version 2 lets you resize it (shrink it or magnify it).

With all objects in place, you may have to make minor alterations to the layout by adjusting text or graphics. Make your job easier by moving among Show Half Size, Show Full Size, and Size to Fit modes and by using the program's scroll bars. Sometimes all that's required to fine-tune a layout is to add or delete a space or a carriage return (use the I-beam tool) or to make a slight shift in a text or graphics area's orientation (use the pointer tool).

If you want to get fancy, experiment with Publish It!'s kerning and leading capabilities. These features let you custom-space letters and lines, respectively, to suit your visual preference.

REPEAT AFTER ME

When the layout for postcard 1 pleases you, use the Copy/Paste twins in the Objects menu (for objects) and Edit menu (for text) to make "carbon copies" like those in **Figure 3**. Activate objects with the pointer tool and inverse-highlight text with the I-beam tool. When pasting text, be sure to first place the I-beam in the area intended for text.

Import the same graphics, or vary them from one card to the next, as in Floral Endeavor's Christmas promotion (**Figure 4**). Use the specifications shown in the **Table** as guidelines, but remember: The postcard should please *you*—and your customers, of course!

FINAL TOUCHES

You can even use the "extra" 3-by-8½-inch area left over on the right-hand side of the page to create other business DTP pieces. Alongside your triple-postcard layout, design a mini-template with text and graphics areas for a "Things to Do Today" form or a "Telephone Log." You could even lay out copies of your business card in this otherwise wasted space.

When your template suits you, print it on quality white paper. Use a fresh black ribbon and Publish It!'s Double Strike printing mode to get best results. (Version 2 is PostScript/LaserWriter compatible. See the accompanying sidebar, "Laser Options," for other ways to generate near-typeset-quality output.)

Take this master to your local printer or copy center. Printing services usually offer a wide variety of color card stock. Select a hue that fits the theme of your card: a pastel shade to promote an Easter bonnet sale at your boutique; orange to announce a special

Finishing Touches

Whether it's an employee handbook, an application for a business loan, or a year-end sales report, you want each of your company's publications taken seriously. Publications and reports, just like people, need to "dress for success." Except for temporary or informal use, paperclips and staples are out; desktop binding equipment is in. Depending on the types of documents or publications your business churns out, one of the following binding methods can help your printed materials look professional.

One popular system incorporates a round plastic spine or "comb." After you punch holes into the pages of your report with a special desktop device, the machine stretches the comb open and guides its curved "teeth" through the holes. Release a lever, and the comb returns to its original shape. In doing so, it binds the document's pages along with its front and back covers.

PRODUCT INFORMATION

Bind-It Corp.
150 Commerce Drive
Hauppauge, NY 11788
(800) 645-5110
(516) 234-2500

GBC 1-Step
General Binding Corp.
One GBC Plaza
Northbrook, IL 60062
(800) DIAL-GBC
(312) 272-3700
$99.95

Ibico
760 Bonnie Lane
Elk Grove, IL
60007-9808
(312) 640-7333

Standard Duplicating Machines
10 Connector Road
Andover, MA 01810
(800) 526-4774
(617) 470-1920

3M/Scotch
3M Center
St. Paul, MN
55144-1000
(612) 733-1110

Velo Bind Corp.
650 Almanor Ave.
Sunnyvale, CA 94086
(800) 433-3355
(800) 321-9447 (CA)

The biggest advantage of this spiral-like technique is that pages lie flat when the report is open. Another plus is that you can reverse the process easily to unbind a report if you need to make changes, additions, or deletions.

Velo Bind's systems are variations on this theme. These devices use a two-part plastic spine. One strip has straight teeth; the other, holes. With the document's punched pages sandwiched between, squeeze the two parts of the spine together.

Some manufacturers also offer thermal binding equipment. GBC's *1-Step*, for example, employs special adhesive covers and a small, portable binding unit. Place your report of up to 30 pages inside the covers; insert this package into the 1-Step unit. As the adhesive melts, it binds your report permanently.□ —C.F.

Design Considerations

Professionals in the field of page design shudder nearly every time they see a newsletter produced through the "miracle" of desktop publishing. To them the miracle would be someone bothering to read it. You can avoid the visual tornado that seems to be the hallmark of desktop publishing by adhering to a few basic principles of clean design.

Less is best. The standard newsletter page should include no more than four distinct design elements. No newsletter needs more than two fonts. If you do use more than one, use fonts of the same style—serif, sans serif, and so on. Variation in point size and inclusion of graphics elements will create all the visual excitement your reader can stand.

Be modular. Every story or story/art package should form a distinct visual rectangle on the page. Stories that "dogleg" (drape around) art and ads are difficult to follow and often will be abandoned by readers. Make sure graphics images are clearly a part of the story they illustrate. Try to avoid "jumping" stories from page to page.

White space is a graphics element. Paraphrased, a cluttered page is an unread page. Don't be afraid to use a block of white space to call attention to news of importance. On the other hand, don't trap dead air in the middle.

Good design serves the news. Before you design anything, draw up an outline of the news you'll be offering, graded by importance. You can then create a design that will serve and emphasize the news properly, instead of forcing it into a design whose only justification is that it's handsome.

Be consistent. If you're publishing a newsletter that features columnists, lay out their stories coherently; make it apparent to the eye that these are regular columns. If you run news briefs, choose a design that will make them stand out for what they are in every issue.

Don't borrow, steal. After you've finished reading this issue of *inCider*, read it again with an eye toward design. Note the treatment of featured columnists, reviews, and classified ads. Read your favorite newspaper for its design. Good design is everywhere, and you'll soon come to know it when you see it.

Be focused. If you're running a mug shot of a newsmaker, crop the image so that his or her face is all you see. If you're running a picture of a rally, crop it so that the central figures are in the middle of the graphics image. (Don't crop a picture in a way that changes its content or design, though.) If elements fight for your attention, tone one of them down or remove it entirely.□ —Joe Abernathy ►

Laser Options

If you think your business desktop-publishing projects look sharp printed on an ImageWriter II or Epson, wait 'til you see what happens when you generate that same newsletter or advertisement on a laser printer!

But in lieu of spending $5000–$7000 for the latest LaserWriter model, what can a business of modest means do to dress up its documents with near-typeset quality? Try *mail-order* laser-printing services.

SOFTSYNC

Softsync (162 Madison Ave., New York, NY 10016, 212-685-2080) offers a laser-printing service for registered owners of the company's desktop-publishing program, Personal Newsletter. The charge per work order is $7.50 for the first page printed, $1 thereafter. Laser printing a four-page newsletter for just over $10 is a real bargain compared to the price of professional typesetting.

According to Softsync's Rod Campbell, the company supplies guidelines to help you avoid some of the pitfalls of long-distance laser printing. If you've failed to leave a margin, for example, the company will send your file back for revision. You then resubmit it at additional cost. At Softsync's discretion, the company may perform minor fix-ups the first time around.

LASERDIRECT

LaserDirect (6831 W. Howard Ave., Milwaukee, WI 53220, 414-543-9923) can print documents created with a variety of Apple II programs, including AppleWorks, Berkeley Softworks' GEOS products, GraphicWriter, MouseWrite, MultiScribe, and Springboard Publisher.

According to the company's free publication, *Laser Printers' Informational Kit*, LaserDirect charges $3–$5 for the first page and 50 cents to $1 for each additional page.

LaserDirect offers on-site correction and reprinting services billed at a rate of $24 per hour. If you prefer, you can authorize the company to perform minor touch-ups or to implement complete design changes.

Like Softsync, LaserDirect aims for a 24-hour turnaround time and provides overnight delivery by UPS, Federal Express, or ExpressMail in addition to regular first-class mail service. Both Softsync and LaserDirect accept credit cards and personal checks from individuals or purchase orders from businesses once credit is established.

INDULGE YOURSELF

If you're accustomed to dot-matrix output, laser-printing services like those offered by Softsync and LaserDirect may spoil you. Your business deserves the best—the clean, crisp quality of laser printing isn't just impressive, it's astounding.□ —C.F.

PRODUCT INFORMATION

AppleWorks 2.0
Claris Corporation
440 Clyde Ave.
Mountain View, CA 94043
(415) 960-1500
$249
Reader Service No. 312

Personal Newsletter
Softsync
162 Madison Ave.
New York, NY 10016
(212) 685-2080
$59.95
Reader Service No. 313

The Print Shop, $49.95
The Print Shop GS, $59.95
Broderbund Software
17 Paul Drive
San Rafael, CA
94903-2101
(800) 527-6263
(415) 492-3200

Publish It!
1.1, $99.95
2, $129.95
Clip-Art Disks:
Education Graphics
People, Places & Things
Symbols & Slogans
$39.95 each
Timeworks
444 Lake Cook Road
Deerfield, IL
60015-4919
(800) 535-9497
(312) 948-9200
Reader Service No. 314

Springboard Publisher
Springboard Software
7808 Creekridge Circle
Minneapolis, MN 55435
(612) 944-3915
$139.95
Reader Service No. 315

Thanksgiving buffet at your eatery; red to boost Christmas sales at your toy emporium. Of course, there's nothing wrong with white or beige, if those colors suit your business style.

Each piece of card stock may cost about 15 cents, or about a nickel per postcard, for small press runs. You should be able to negotiate discounts on larger orders. Keep costs down by cutting the postcards yourself. Office suppliers sell reasonably priced paper cutters, including a personal model (#FPTC, $19.95) from Falcon Safety Products (1065 Bristol Road, Mountainside, NJ 07092, 201-233-5000), which uses common single-edge razor blades in lieu of the "guillotine" lever most cutters employ.

Print mailing labels from a database program such as **AppleWorks**, apply them to your postcards, add stamps, and mail. Getting involved in business desktop-publishing projects is not only productive, it's creative. Sure, there's a dollars-and-cents payoff, but once you're hooked, the improvement in your company's bottom line is just frosting on the cake.■

Cynthia Field is a free-lance journalist specializing in computer-related topics. She is a contributing editor and the author of Press Room, inCider's *bimonthly column on desktop publishing, and Field Trip, our column on educational software. Write to her at 60 Border Drive, Wakefield, RI 02879. Enclose a stamped, self-addressed envelope if you'd like a personal reply.*

Best Action / Strategy Game!! - Software Publishers Association

"We respectfully request permission to blow you out of the water"

Some of history's most brilliant naval commanders want to pick a fight with you. They'll let you choose from among 11 classic naval campaigns. They'll even let you decide which of them you're willing to challenge. After that, it's no holds barred.

Get ready for a rousing blend of real-time action and strategic planning. In **The Ancient Art of War at Sea**™, your opponent will fight using his own characteristic style and tactics. It's up to you to plan your fleet's movements skillfully. Zoom in to take command of individual ships. Lead your boarding party in hand-to-hand fighting.

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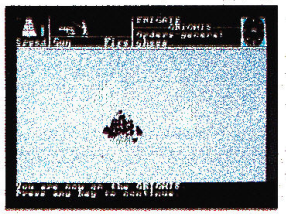

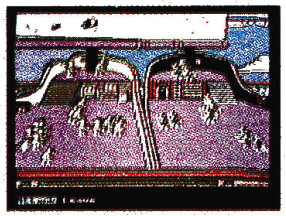

The Ancient Art of War at Sea is available for Apple IIe (128K), IIc, IIGS (Requires extended 80-column card for IIe); Macintosh 512, Plus, SE; IBM PC/Tandy & 100% compatibles for $44.95.

Three ways to buy: Visit your software dealer or call (800) 527-6263, 8am-5pm PT for credit card purchases and order-by-mail details.

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For more information, write to Brøderbund Software Direct, P.O. Box 12947, San Rafael, CA 94913-2947.

67CID

STEP BY STEP PUBLISH IT!

BY ESTEBAN ZAPIAIN

Looking for a project your whole class—or your family—can work on together? Try creating your own newsletter. Whether it's for a class, club, family reunion, alumni association, fraternal organization, or church, you'll find putting a newsletter together enjoyable and educational. *Publish It!* is the page-layout program featured here (version 1.1), but the basic concepts apply to most other desktop-publishing packages. Experiment with the format, encourage your fellow students or teachers to write for it—once you try it there's no end to the fun.

A few hints on style before we start. For clarity try to limit yourself to one or two type sizes and fonts. Be consistent in your use of boldface, underline, outline, shadow, or italics in your subheadings. Using these options too often makes reading the newsletter a chore. The same is true for the use of lines and boxes: When in doubt, leave it out. (More on that later. See also the sidebar "Design Considerations" in the accompanying article, "Publish It! in Business: Step by Step," p. 36, for other tips.)

Get into print—publish a newsletter! It's a fun way to develop your creativity and learn something new. For great ideas for school or home, check the Publish It! template presented here.

Check your public library or local bookstore for information on desktop publishing. One of my favorite books is *Design for Desktop Publishing* by John Miles, published by Chronicle Books of San Francisco, ISBN: 0 87701-479-5, $16.95. Another suggestion is *Looking Good in Print: A Guide to Basic Design for Desktop Publishing*, by Roger C. Parker, Ventana Press, Chapel Hill, North Carolina, $23.95.

Illustration by David Frampton

IN THE CLASSROOM

Don't be afraid to use a copy machine to make reductions of hand-drawn art. Sometimes the best cut and paste is accomplished with scissors and glue.

MAKING A TEMPLATE

A *template* is the pattern you'll use for all subsequent newsletters. Once you establish the basic format, including your banner and regular columns, save it as a template. **Figures 1** and **2** show a template for *The Dragons' Breadth*, a newsletter produced by students at Decoto Elementary School, Union City, California. (The text you see there is *not* part of the template.)

First decide on the number of columns you want. From Publish It!'s Special menu, click on Select Guides to set up column rules: 1 by 1 for one rectangular guide per full page; 2 by 2 for two-column format; 3 by 3 for three-column text (as in this newsletter); and 4 by 4 to divide each full page into 16 rectangles. To see a whole page and get a full view of the guides press Open apple-4 from the keyboard or click on Size to Fit in the Special menu. If you've turned on the snap-to guides from the Special menu, each text box will pull itself into shape around the guides.

To begin laying out the banner area, first click on Select Guides from the Special menu to toggle them off. Choose the Text tool, *T*, from Publish It!'s Tool Box. Position the cross hair at the top left corner of the first guide. Drag the mouse across the page to the right and down, allowing what you estimate to be enough space for the banner's letters. If it's too big, you can resize it later with the pointer tool.

Next, type in the text of your banner. Choose the I-beam tool and position it in the banner's box. Press Open apple-1 or click on Show Full Size in the Special menu to see part of your page. Next, press Open apple-W or click on Select Font in the Font menu. Pick at least a 36-point font and type in your banner text. (**Figure 1** shows 36-point Wilmette.) Drag the I-beam across the banner to highlight the title.

On the Format menu click to choose Justificat it dialogue box, click on Center to turn on cente k on the Use Page Standard box to toggle it off. Click on OK and the banner should center itself.

Create your first column just as you did the banner, but make it tall, not wide. Now is the time to reserve spaces in your layout for regular columns. Make their text boxes separate from the boxes for the body of your news stories (**Figure 1**). Press Open apple-4 or click on Size to Fit from the Special menu. Line up the cross hair with the top left corner of the column guide, but below your banner. Drag it across to the lower right corner of the column guide. Don't worry about getting it exactly right—you can always make it more precise later with Open apple-M or Show Specifications on the Objects menu. This valuable feature specifies measurements such as column width in inches, up to three decimal places.

To add a page to your newsletter template (**Figure 2**), click on the right arrow near the lower left of the screen. Make text boxes on each new page. To make all columns the same size, make one, choose the Select tool (the arrow), then click on the column. Press Open apple-C to copy to the clipboard, then Open apple-V to paste from it. Press Open apple-X to cut to the clipboard. (Cutting doesn't delete your column.) Point and drag it into place with the mouse.

Repeat this process as often as necessary. Try to plan one more page than you think you'll use. If you import text you may find it exceeds the space you'd planned. Deleting pages is easier than adding, but you can add them later if you have to.

"Link" columns with the Linking tool, the icon that looks like two pages, one superimposed on the other. Click the mouse in the boxes where you want the text of your news stories to flow. Avoid boxes reserved for regular columns. If you have multiple pages continue this process on each one. Linking is the whole point of electronic publishing—it lets text flow automatically from one column to another without laborious cut and paste.

Now click on the I-beam and choose the Page menu, which lets you set justification, spacing, margins, indentation, and kerning for each page. If you're a novice at newsletter publication, play with justification, but leave the other settings at ►

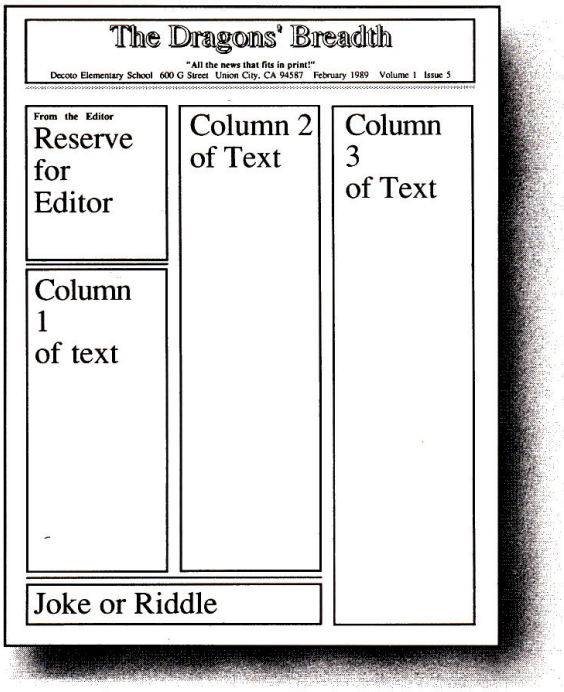


Figure 1. *First page of template. Note banner box, reserved areas, and news areas.*

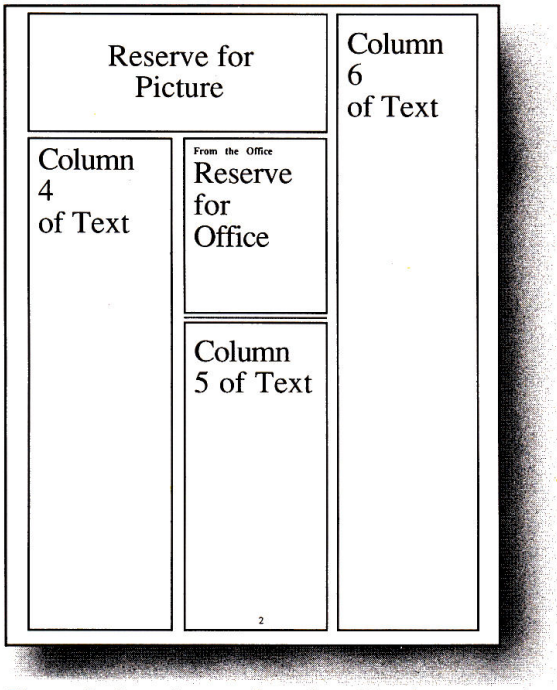


Figure 2. *Second page of template. Note box reserved for graphics.*

their defaults. (These settings are good for the whole page, but can be overridden, as they were when we typed the banner.) Most newsletters show full or left justification; sometimes full justification makes reading difficult by spreading words apart to force lining up along the right margin. Experiment to find what looks best.

Next, fine-tune the sizes of your banner and text boxes. Click on the pointer box at the far left of the menu bar, then click on the area you want to work on. Choose Show Specifications from the Objects menu. Four choices are listed: Left Start, Top Start, Width, and Height. This is the best way to line things up.

The default unit of measure is inches; if you're comfortable with that, use it, but you may find picas less cumbersome. To switch select Unit Measure from the Special menu, click on Picas, then click on OK. Because many fonts come in 12- or 36-point sizes, estimating height becomes simple arithmetic. Remember, 12 points equal one pica; therefore each pica equals one line of 12-point text (the body of the newsletter) and three picas equal one line of 36-point text (the banner of the newsletter).

"Whether it's for a class, club, family reunion, alumni association, fraternal organization, or church, you'll find putting a newsletter together enjoyable and educational."

Now save your blank template. To make sure it stays blank, use your utility program to lock the file. Locking prevents you from saving newsletter text on your template by accident. The template now becomes your starting point each time you begin laying out an issue of your newsletter.

GRAPHICS ADD FLAIR

The first step in adding graphics is to choose the Graphics Frame tool, the X in a box within a larger box, from Publish It!'s Tool Box. From the top left corner of the area in which you want the picture to appear drag the cross hair to the bottom right corner. The box will appear gray until you import a picture and view it in Full Size (Open apple-1). If you place an illustration inside an active text box, the text will rearrange itself around the graphic. If it overlaps one or more text boxes the graphic may cover your text.

Your Apple II can't rescale graphics. You can't diminish large graphics proportionally or enlarge small graphics. You can crop them; that is, you can designate part of the picture to be used. You can add standard double-high-resolution graphics to your newsletter; Publish It! comes with 32 files of high-quality graphics. Once you've chosen your illustration, it will remain a con-

stant size, so reserve space for graphics before you add text.

One good source of clip art is **Graphic Images**, a unique assortment of double-hi-res digitized pictures in several volumes from Oltrad Graphics. The company states that the accompanying manual was laid out with Publish It!.

A word on importing text and pictures: If your "old faithful" word processor or favorite computer-graphics collection is DOS 3.3 based, don't put it out to pasture yet! You can probably convert your files with a utility program such as Apple's System Utilities or Central Point's Copy II Plus for use with Publish It!. ProDOS upgrades may be available, too.

ALL THE NEWS...

Why import text anyway? Publish It!'s word processor is good, but because the program must keep track of columns, graphics, fonts, sizes, and styles, and display them on screen, too, it probably can't keep up with your typing. And letting your contributors use their own word processors cuts down on the number of new things they have to learn. Only the students and teachers interested in laying out the paper need to learn Publish It!—everyone else will be happy with his or her word processor.

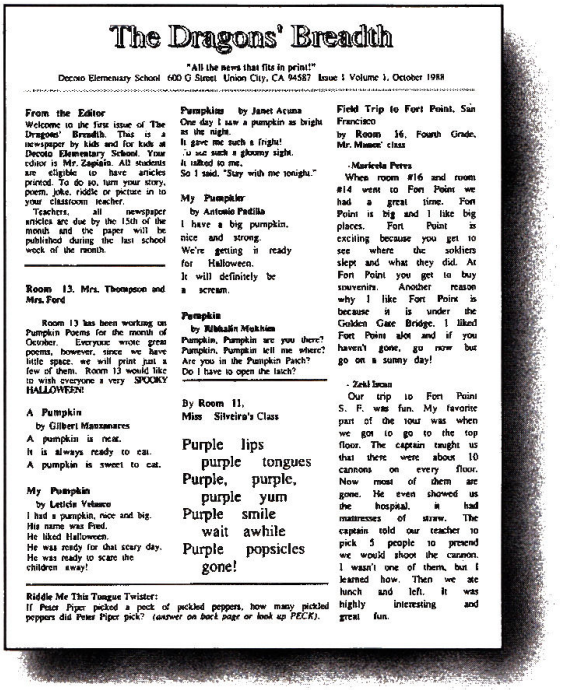
> **"A newsletter is a great way for kids, parents, and teachers to develop their computer skills—and there's no substitute for the satisfaction that comes from working together on a top-quality product."**

Publish It! can read files directly from AppleWorks, Bank Street Writer III, FrEd Writer, or any other ProDOS ASCII file. Once you've set up text boxes, choose to import AppleWorks, Bank Street, or ASCII files. A number of filenames will appear if you've made the right selection. If the program says it can't find any files, make sure it's seeking the right drive, directory, or subdirectory. Once you've chosen the right file, press Return and it will begin to fill your linked text boxes.

Getting the right font can be tricky. Sometimes you forget the font you used last, but your Apple doesn't. As an editing practice, it may be helpful to type the name of the font into the text box and press Return *before* importing any text. Next, highlight the font name by dragging the mouse over the name; press Open apple-W and choose the font you want before importing text.

If you've filled your text boxes and need more, set up another page and use the linking tool to flow text from the last box filled to the first of the new ones. Continue to link text boxes and pages as needed.

Print a copy of your issue as you complete major areas ►



The Dragons' Breadth

"All the news that fits in print!"

Decoto Elementary School 600 G Street Union City, CA 94587 Issue 1 Volume 1, October 1988

From the Editor

Welcome to the first issue of The Dragons' Breadth. This is a newspaper by kids and for kids at Decoto Elementary School. Your editor is Mr. Zagaio. All students are eligible to have articles printed. To do so, turn your story, poem, joke, riddle or picture in to your classroom teacher.

Teachers, all newspaper articles are due by the 15th of the month and the paper will be published during the last school week of the month.

Room 13. Mrs. Thompson and Mrs. Ford

Room 13 has been working on Pumpkin Poems for the month of October. Everyone wrote great poems, however, since we have little space, we will print just a few of them. Room 13 would like to wish everyone a very SPOOKY HALLOWEEN!

A Pumpkin
by Gilbert Manzanares

A pumpkin is neat.
It is always ready to eat.
A pumpkin is sweet to eat.

My Pumpkin
by Leticia Velasco

I had a pumpkin, nice and big.
His name was Fred.
He liked Halloween.
He was ready for that scary day.
He was ready to scare the children away!

Riddle Me This Tongue Twister:
If Peter Piper picked a peck of pickled peppers, how many pickled peppers did Peter Piper pick? *(answer on back page or look up PECK).*

Pumpkins by Janet Acuna

One day I saw a pumpkin as bright as the night.
It gave me such a fright!
To see such a gloomy sight.
It talked to me,
So I said, "Stay with me tonight."

My Pumpkin
by Antonio Padilla

I have a big pumpkin,
nice and strong.
We're getting it ready
for Halloween.
It will definitely be
a scream.

Pumpkin
by Rikhain Mukhim

Pumpkin, Pumpkin are you there?
Pumpkin, Pumpkin tell me where?
Are you in the Pumpkin Patch?
Do I have to open the latch?

By Room 11,
Miss Silveira's Class

Purple lips
purple tongues
Purple, purple,
purple yum
Purple smile
wait awhile
Purple popsicles
gone!

Field Trip to Fort Point, San Francisco
by Room 16, Fourth Grade, Mr. Mineos' class

-Marisela Perez

When room #16 and room #14 went to Fort Point we had a great time. Fort Point is big and I like big places. Fort Point is exciting because you get to see where the soldiers slept and what they did. At Fort Point you get to buy souvenirs. Another reason why I like Fort Point is because it is under the Golden Gate Bridge. I liked Fort Point alot and if you haven't gone, go now but go on a sunny day!

- Zeki Ercan

Our trip to Fort Point S. F. was fun. My favorite part of the tour was when we got to go to the top floor. The captain taught us that there were about 10 cannons on every floor. Now most of them are gone. He even showed us the hospital. It had mattresses of straw. The captain told our teacher to pick 5 people to presend we would shoot the cannon. I wasn't one of them, but I learned how. Then we ate lunch and left. It was highly interesting and great fun.

Figure 3. First page of laser-printed newsletter. Lines delimiting text and graphics areas have disappeared.

-Malle Newman

On October 12, 1988 rooms 14 and 16 went on a field trip to Fort Point, in San Francisco. We went over the Bay Bridge. When we got to Fort Point there were a few soldiers. One of them took us on a tour. He showed us how they used to load the cannon. Some of us got to load it. We walked up a staircase with no rail, we had to hold onto the wall. Also we got to see where the soldiers slept. 24 soldiers slept in one room, 4 people slept on one bunk bed. My favorite part was when we walked up the staircase. I had a great time at Fort Point.

Halloween by **Room 17.**
Ms. Young's Reading Class lead by Mrs. Forer

Halloween is a blood raising experience. The streets are filled with many hairy hunchbacks. One hears the scrape of Freddy's nails. The sky is filled with lightning bolt knives. The living dead begin their moans. Your blood will raise when you experience things that go bump in the night

From the Office.

Mr. Fivestad, Mrs. Uyemoto, Henri, Esther and Leslie

Thanks for your cooperation at the assemblies. That's really showing the Decoto Spirit! If you would like to be a teacher's helper or an office helper, always look for a "help wanted" sign in the window. If there is no sign, that means no help is needed.

Skin and Bones

A Kentucky Folksong

There was an old woman all skin and bones.
Oo-oo-oo-oo!
She lived down by the old graveyard.
Oo-oo-oo-oo!
One night she thought she'd take a walk.
Oo-oo-oo-oo!
She walked down by the old graveyard.
Oo-oo-oo-oo!
She saw the bones a-layin' around.
Oo-oo-oo-oo!
She went to the closet to get a broom.
Oo-oo-oo-oo!
She opened the door and BOO!

2

Horrorscopes
by Dinny Dragon

Aries (March 21-April 19): Daydreaming could be hazardous to your grades. Keep your mind on what you're doing. NO airheads, please!

Taurus (April 20-May 20): Be a kind friend - no one likes a bully!

Gemini (May 21-June 20): If you're ever wearing two different socks, remember, you've got a pair just like them at home!

Cancer (June 21-July 22): Watch out for crabs and never be one!

Leo (July 23-Aug. 22): Like the lion, you have great strength. Lions also sleep most of the time. To work hard, you must also get plenty of sleep.

Virgo (Aug. 23-Sept. 22): Virgo represents our mother earth. Please be clean and listen to your mother!

Libra (Sept. 23-Oct. 22): Have you returned your library books? Always turn them in on time!

Scorpio (Oct. 23-Nov.21): Be careful around straight pins and other sharp objects, you might get stung!

Sagittarius (Nov. 22-Dec.21): If your energy seems to sag before lunch, try to eat a bigger breakfast.

Capricorn (Dec. 22-Jan. 19): Be a good listener and try to keep from interrupting - butting-in.

Aquarius (Jan. 20- Feb. 18): Life can be like an aquarium - someone's always watching! Always behave.

Pisces (Feb. 19-March 20): If something is fishy, keep your eyes on the hook and not the worm!

Riddle answer: If Dry Quarts

Figure 4. Second page of finished newsletter.

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Circle 103 on Reader Service Card.

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Circle 280 on Reader Service Card.

The LaserWriter, AppleTalk, and the GS

The LaserWriter and the Apple IIgs are a marvelous team. Put them together with AppleTalk and you may have found the working relationship you've been waiting for.

First press Open apple-S to save your work, then Open apple-Q (Quit) from the File menu. Now set the GS Control Panel. Press Open apple-Control-Escape to change the Slots option as follows: Press Return for slot 1 (your card) and slot 7 (built-in AppleTalk). Turn off your GS. Connect the AppleTalk cables from the LaserWriter to the GS printer port and turn on the printer.

Boot up Publish It!. (First make sure you've modified the startup disk with Timeworks' LaserPak, $39.95 if you have Publish It! 1.0 or 1.1, already on the program disk if you have version 2.) From the Apple menu, choose Select Printer and click on LaserWriter; for Font Widths, click on OK. Next, choose Select Interface from the Apple menu and pick AppleTalk, Slot 7. Click on OK. You're set to print.

Press Open apple-P (Print) from the File menu. You'll see the following options:

Print All or From page_ to page _
Start page number at page_
Copies _
Manual Feed
Smoothing and Font Substitution

Don't choose Manual Feed unless you want to place each blank sheet of paper by hand into the LaserWriter. Do click Smoothing off: Your LaserWriter can't smooth Publish It! fonts or graphics. Generally, you'll want to Print All and make one (1) copy. Click on OK.

To center your screen page for the LaserWriter, press Apple-4, then choose Select Tool and the arrow. Select all text and graphics boxes by dragging the cross hair across the entire page. Place the cursor inside the selected area. Drag the selected area nearly to the right edge and up halfway to the top of the page—a movement of perhaps one-sixteenth of an inch on screen, but it'll make a big difference on the printed page.

If you've made font substitutions, you may have to rearrange your text or columns after running the first draft. You can turn off the font substitutions to avoid this, but you may get "jaggies" even on the LaserWriter—the step-like edges common to dot-matrix letters.

Here's a big plus if you publish often: The LaserWriter is perfectly silent! Only the computer screen tells you it's working. While it's operating you'll see several screens such as Status: Idle; Initializing Printer; Status: Busy; Source: AppleTalk; Job: Publish It!; Document: (your document's title); Status: Busy. And when your newsletter page is done, it glides from the printer, crisp and clean.☐

—E.Z.

PRODUCT INFORMATION

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Reader Service No. 343

Publish It! 1.1
Timeworks
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Deerfield, IL 60015-4919
(800) 535-9497
(312) 948-9202
$99.95
Reader Service No. 314

(**Figures 3** and **4**). Draft early and draft often. To speed up the program, Publish It!'s screen isn't exactly WYSIWYG (what you see is what you get). The letters are in the right places, but they don't appear in the exact font. Also note that text- and graphics-box lines don't appear in print.

OUTLINES

Lines, boxes, and ovals can clarify and focus your articles. Unfortunately, they can have the opposite effect if poorly used.

Boxes and ovals around text or pictures require special handling. To your Apple, a box or an oval is a solid object. Placing a box around text or pictures "covers" the text. Choose the Select tool and click on Move to Back from the Objects menu to move the outline to the background and make the text reappear in front of the box. Don't forget: Your box or oval must be larger than the text box or graphic you want to outline.

The same holds true for lines. When lines are invisible on your hardcopy, move them to the back or move text to the front; shrink the text box; or enlarge the frame.

Publish It!'s Objects menu also lets you choose the thickness of your outline or line with Set Line Weight. Another option, Set Pen Pattern, lets you choose a solid line or a dotted line. In addition, you can customize patterns within these options. Notice the two widths and patterns in *The Dragons' Breadth*: one below the banner and the other setting off vertical sections of text. (See the **Figures**.)

Print your final copy. An effective newsletter impresses students, teachers, parents, friends, and the community. It informs your school, town, or family of events and experiences in a positive way. A newsletter is a great way for kids, parents, and teachers to develop their computer skills, too—and there's no substitute for the satisfaction that comes from working together to create a top-quality product.■

Esteban Zapiain is an elementary-school music and science instructor and has conducted numerous computer-training sessions for teachers. Write to him at EZ Computing, P.O. Box 1811, Union City, CA 94587-6811. Enclose a stamped, self-addressed envelope if you'd like a personal reply.

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THE HANDLERS. A combination of the Word Handler word processor, List Handler file manager and Spell Handler spelling checker. Powerful and flexible, yet easy to learn and use, this best seller is well suited for home, school and professional use.
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SEND TO: Advanced Logic Systems Inc., 1211 Alderwood Ave. Sunnyvale, CA 94089 or call (408) 747-1988 to order by phone. Orders outside the US add $15.00.

Circle 258 on Reader Service Card.

Remember when this board meant power and speed?

A majestic nine feet ten inches long and a shade under fifty pounds, the 1966 Big Boy surfboard represented the epitome of power and speed. Today, there's AE's new RamKeeper™.

Imagine. Turn on your IIGS and instantly the finder comes to life! All the speed and RAM power your IIGS was meant to have, packed into one, affordable "electronic hard disk."

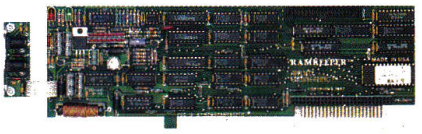
Applied Engineering's RamKeeper. A system that works like a hard disk, only better. It retains stored programs *and* data while your computer is turned off (like a hard disk), but gets up and running five times faster. RamKeeper is solid state, has no moving parts and, unlike a hard disk, has no heads to crash and no parts to wear out. And RamKeeper saves wear and tear on your disk drive, because you don't need it nearly as often.

RamKeeper even powers up to two memory cards *simultaneously* while your computer is off. And the battery backup we include keeps power to the boards, even during power failures.

Your programs and data remain stored in a permanently accessible state, always ready to run. Your computer waits for *you* . . . instead of you waiting for it.

Superior power backup.

RamKeeper comes complete with sealed Gel/Cell batteries for emergency backup in the event of a power outage. Gel/Cell's are by far the most reliable backup power source in this application. Unlike the Ni-Cads others use, Gel/Cell batteries don't lose capacity if not discharged periodically.



RamKeeper lets you keep programs and data in permanent, "electronic hard disk" memory. Turn your Apple IIGS on and you're ready to work.

Our Gel/Cell pack gives you up to six hours of total power failure backup. And the sealed battery pack stays *outside* your computer case, where an unlikely leak won't ruin your computer circuitry.

RamKeeper uses a Switching Power Supply — the same technology used by Apple for the IIGS power supply. This design uses energy much more efficiency to keep your Apple running cooler.

Powers two memory cards in the same slot.

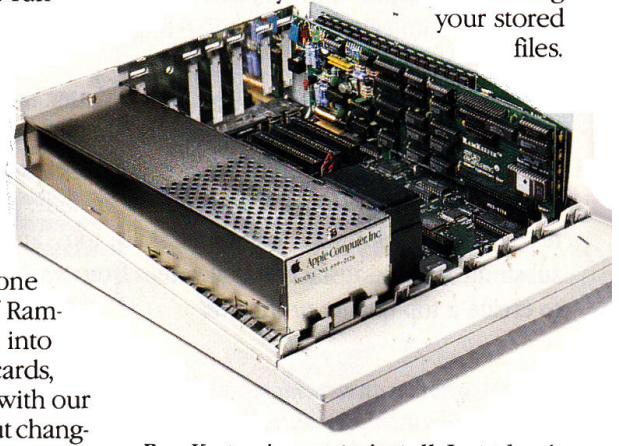
Have Apple's memory card, but now want the features of Applied's GS-RAM card? With RamKeeper, both cards act as one larger card. In one slot. Just attach one memory card to each side of RamKeeper and plug RamKeeper into the slot. And even with two cards, you can still keep slot 7 open with our optional Slot-Mover. All without changing the way either your memory card or your software now operate.

RamKeeper also works fine with only one memory card.

Makes all your memory usable memory.

RamKeeper powers up to 16 Meg. of memory. You can also mix and match different types of memory cards. For example, an Apple card that uses 256K RAM chips and an Applied Engineering card using 1 Meg. RAM chips. RamKeeper firmware automatically configures for two cards when the second card is installed. No need to manually move jumpers.

RamKeeper configures memory linearly to avoid memory gaps that can cause crashes. And *you* decide how much memory to devote to ROM and to RAM from the IIGS Desk Accessories menu. You can configure Kilobytes or Megabytes of instant ROM storage for your favorite programs. And you can change ROM and RAM sizes at any time without affecting your stored files.



RamKeeper is easy to install. Just plug it in. Even when you use two memory boards, you don't have jumpers. You can have two memory boards but use only one slot.

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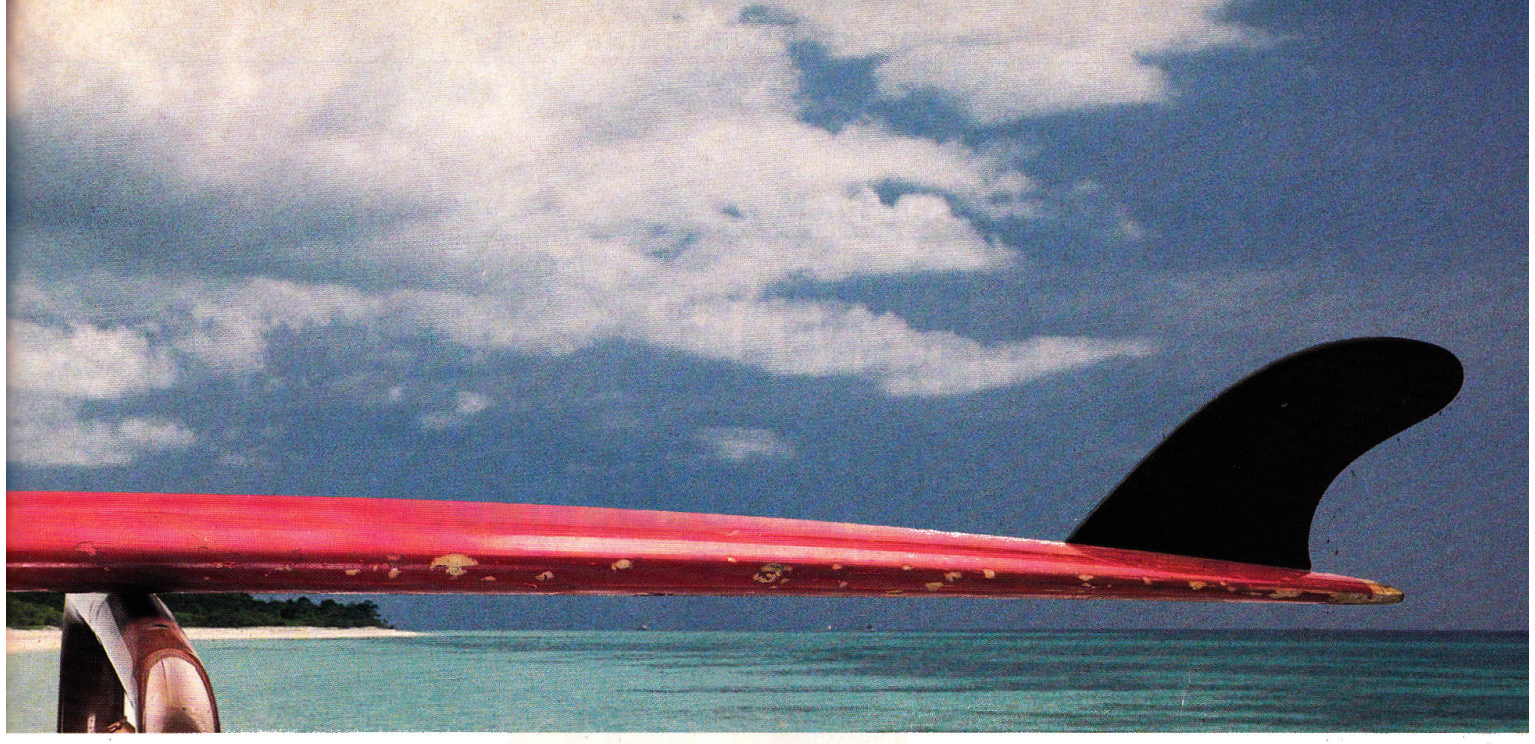


Protect from program crashes.

Reinstalling operating software is not fun. With RamKeeper you'll never have to. Since RamKeeper controlling firmware is in an EPROM, a program crash can't take out the operating software.

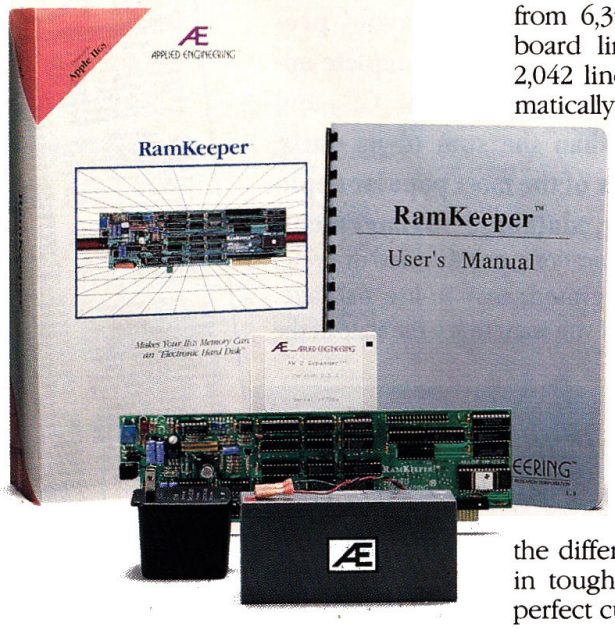
Verifies data security.

RamKeeper firmware uses optional startup checksums to verify that no data was lost while the power was off. The firmware also runs ROM and RAM memory tests without disturbing data on the card.

Significant differences.

Applied Engineering's longer experience with battery-backed memory boards shows in the way we designed and built RamKeeper. There are significant differences between RamKeeper and other systems:

- RamKeeper includes a Gel/Cell battery for 6 hours of total power failure backup, other use the shorter-life Ni-Cads and charge extra for them
- RamKeeper powers up to 16 Meg., others power only up to 8 Meg. maximum
- RamKeeper permits mixing and matching different memory cards and chip sizes, others have more limited combinations
- RamKeeper automatically configures for two cards, others have manually-moved jumpers
- RamKeeper configures linearly to eliminate memory gaps, others don't
- RamKeeper includes EPROM-protected operating software, others use floppy installation



It all comes with RamKeeper ... board, Gel/Cell battery pack, easy-to-understand instructions, and Applied's powerful AppleWorks Expander software.

- RamKeeper's software expands AppleWorks internal limits, others don't
- RamKeeper includes disk-caching software, others don't

Free AppleWorks Enhancement software.

Applied Engineering's powerful AppleWorks Enhancement software comes free with RamKeeper. It's well worth the purchase price alone. Our software makes AppleWorks faster and far more powerful by eliminating internal memory limits. Word processor limits increase from 7,250 to 22,600 lines. Database limits increase from 6,350 to 22,600 records. Clipboard limits increase from 255 to 2,042 lines. Our software even automatically segments large files so you can save them on multiple floppies

In addition, RamKeeper comes with the most powerful disk-caching program available anywhere. The cache tremendously accelerates access time to the Apple 3.5 Drive. Creating, in effect, a speed booster on top of a speed booster . . . a potent combination that runs most applications up to *seven times faster.* That's the difference between paddling out in tough chop and surfing in on a perfect curl.

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APPLEWORKS GS

IS IT THE ULTIMATE IN DESKTOP PUBLISHING?

BY JEFF CABLE

What do you get when you surround a full-featured page-layout program with five other complete applications? AppleWorks GS—and the whole truly is greater than the sum of its parts. AppleWorks GS combines six of the most popular applications—word processing, database management, spreadsheet calculation, communications, painting and drawing, and page layout—in one integrated, easy-to-use package. AppleWorks GS does it all—but if you want to see the state of the art in Apple II computing, pay special attention to the page-layout module. The interface is easy to use; it's powerful; and you'll be producing top-quality newsletters, flyers, memos, catalogues, and correspondence in no time.

The most popular Apple II program ever has gone three steps further—and that's good news for desktop publishers, old hands and novices alike.

Top, condensed print with graphic stretched vertically; middle, condensed print and graphic; bottom, standard print and graphic.

NEW KID ON THE DTP BLOCK

We've seen a number of page-layout programs for the GS this year, but none has the usability of AppleWorks GS. If you've seen Aldus' PageMaker for the Macintosh or the IBM PC, you know why it's considered the industry standard for desktop publishers. Now Claris has developed the same type of program for the Apple IIGS.

AppleWorks GS takes full advantage of the sophistication of the machine for which it was designed. The screen shows super-high-resolution color with pull-down menus and windows, and, ►

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On Balance 128K ... 39
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Print Shop GS ... 39
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P.S. Graphics Library Party Edition GS ... 23
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S.S. Basketball 128K ... 24
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Sub Battle Sim. GS ... 32
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World Games GS ... 14

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Reader Rabbit ... 24
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Pirates GS ... 25
Silent Service ... 23
Silent Service GS ... 25

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Ultima 4 ... 36
Ultima 5 ... 39

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Jeopardy ... 10
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Wheel of Fortune II ... 11

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King's Quest 1,2,3 ... ea. 32
Leisure Suite Larry GS ... 25
Leisure Suit Larry 128K ... 24
Mother Goose 128K ... 19
Mother Goose GS ... 19
Police Quest GS ... 32
Smart Money 128 ... 49
Space Quest GS ... 32
Space Quest 128K ... 32
Space Quest 2 GS ... 32
Space Quest 2 128K ... 32
Thexder GS ... 23

SIR TECH
Deep Space ... $24
Return of Werdna ... 39
Wizardry Series:
Knight of Diamonds ... 32
Legacy of Lylgamin ... 32
Proving Ground ... 32

SPRINGBOARD
Certificate Maker ... $24
C.M. Library Vol. 1 ... 19
Newsroom ... 32
N.R. Clip Art #1 or #3 ... 17
N.R. Clip Art #2 ... 23
Publisher 128K ... 84

SSI
Kampfgruppe ... $39
Phantasie 1,2,3 ... ea. 26
Questron 2 GS ... 29
Questron 2 ... 26
Roadwar 2000 GS ... 29
Wizard's Crown ... 26

SUBLOGIC
Flight Simulator 2 ... $32
F.S. Scenery Disks ... Call
Jet ... 26

TIMEWORKS
Publish It! 128K ... $65
Publish It! 2.0 ... 82
Publish It! Clip Art
Font Pack 1 ... 24
People Places & Things ... 24
Symbols & Slogans ... 24
4 In 1 pkg. ... 79

THUNDER MOUNTAIN
Dig Dug ... $ 8
Pac Man ... 8

UNISON WORLD
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unlike the older 8-bit program, this special version utilizes all the GS' fonts and desk accessories. The software is mouse driven, with many commands having keyboard equivalents.

The layout module can handle up to 99 pages per document, allowing you ample room for large brochures or manuals. You'll see many familiar tools on the left side of the screen, including line-drawing, box, oval, and pointer icons, but note the new items, too—automatic page numbering and date stamping. To the right of the tools and below the menu bar you'll find the AppleWorks rulers, one of which always shows the position of your mouse, which helps when you're lining up areas of text or graphics.

The lower left-hand corner of the screen reveals page icons. When you open a new document, AppleWorks GS defaults to a one-page document along with one "Master Page," a tool that lets you define repeated features such as page numbering or three-column format. Choose Left/Right Master Pages from the Options menu to set separate defaults. If you want to dispense with your Master settings for any particular page within your document, choose "Ignore."

One of AppleWorks' most impressive features is the smooth way it pours text into columns. Just set the number of columns (one to nine) and each one's measurements; the mouse pointer turns into a text-object icon and you're ready to add text to the page. (You can import text from the AppleWorks GS or 2.0 word processor, or any of a number of other programs.) If you don't want columns, designate a text area by dragging the text-object icon to create a customized size and shape.

If you find you have more than a column's worth of text, select that column and point to the "link tag" at the bottom; the mouse pointer again becomes a text-object icon to permit "text flow"—pouring text into another column. If you add a line of text to the first column or remove one, each column linked to the first changes appropriately. Text can flow between columns on the same page or on successive pages. Despite the sophistication of this operation, its speed is remarkable.

After you pour text into a document, you can change the font, increase or decrease the size of the type, change the style or color, or adjust the spacing. You can also set left, right, or full justification whether your text falls into a single column or several. Unlike other desktop-publishing programs, which redraw fully justified text slowly onto the GS screen, AppleWorks does its thinking behind the scenes, then pops the text almost instantly into place.

To see and work on your whole page, choose "Fit into Window" from the Options menu. Here you can manipulate columns and graphics fully, but you can't edit text. You'll find this feature particularly useful when you set up each page initially with columns or "guide lines," on-screen rules that help you line up objects or text areas. You can make them "magnetic" so that nearby objects are attracted to them and "snap" into place, eliminating a lot of guesswork. You can hide or show your guide lines on screen, but AppleWorks never prints them.

WRAPPING IT UP

Now that your text is in place, it's time to import some graphics, either from AppleWorks GS' own painting/drawing module or another program such as Paintworks Gold or DeluxePaint II. (These images are hi-res graphics in 640 mode, not medium resolution in 320 mode.) When you import a picture, the pointer becomes a graphics-object icon and you can place the image anywhere on the page. You can then crop it, resize it, move it, duplicate it, flip it, or rotate it, or even place it behind or in front of other graphics or text.

Whether you're working with text or illustrations, AppleWorks offers direct paste between modules. When two windows are open on screen at the same time and you want to cut and paste information from one document to another, just press the control key while selecting the item. The pointer changes to a "bolt of lightning" and you can drag the picture or text from window to window and drop it into the other module directly—without going to the menu bar.

Time to print. You have a choice of Apple's ImageWriter II, or the LaserWriter for smoother graphics and text. Output looks beautiful, but it's a little slow in coming. For the ImageWriter, expect to wait about five minutes per printed page in medium-quality mode, 13 in high-quality, even longer for color.

PRODUCT INFORMATION

AppleWorks GS
Claris Corporation
440 Clyde Avenue
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(415) 962-8946
$299
$169 upgrade from MultiScribe
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AppleWorks GS comes with two easy-to-read volumes—a *User's Guide* and a *Reference Manual*. That's more than 700 pages of reading—no simple task for one night at your computer. Don't shy away from this program, though—its amazing abilities are worth it. With a little patience and some top-notch support from Claris, AppleWorks GS will become the most useful and popular package in your business, school, or home software library—and the page-layout module the most fun.■

Jeff Cable is an application specialist and free-lance computer consultant. Write to him at Wolf Computer, 105 North Santa Cruz Avenue, Los Gatos, CA 95030. Enclose a stamped, self-addressed envelope if you'd like a personal reply.

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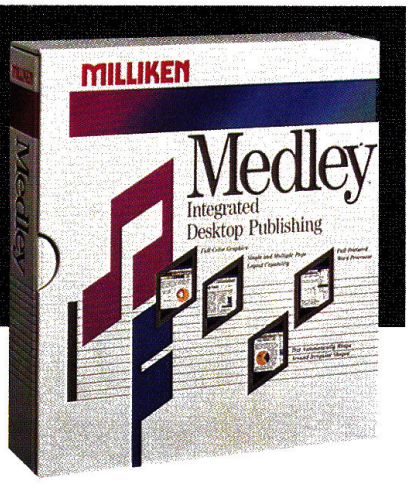
POWER OVER SPEED MEDLEY

BY JAMES V. TRUNZO

Desktop publishing's hard work, both for you and for your page-layout program. You have to come up with the ideas; your software has to help you put them on paper. The computer revolution hasn't made creativity any easier to come by, but one thing good software *can* do for you is handle the cutting, the pasting, and all those other mundane but time-consuming tasks.

The creativity's all yours—but Medley's blend of word processing, page layout, and graphics gives you the electronic tools to turn your designs into professional-looking documents.



You're looking for *power* in your programs, but you're also looking for *ease of use*. Now Medley, Milliken's new desktop-publishing package for the Apple IIGS, offers you both.

The Medley package consists of four 3½-inch disks, two of which contain the actual program—integrated word-processing, paint, and page-layout modules. The others house an 80,000-word dictionary and 500 pieces of clip art.

You can run the entire program from a single 3½-inch drive; be prepared for a lot of disk swapping, though. One of Medley's drawbacks—and there aren't many—is that the program also consumes memory at a fierce rate. If your GS is equipped with only a megabyte and a quarter, you'll have to set your RAM-disk size to zero; the program then loads segments as needed, flushing the previous module when it needs a new one.

Using two 3½-inch drives alleviates 90 percent of the disk manipulation; employing a hard drive solves the problem completely, although neither reduces disk access. You can install Medley on a RAM disk, but the catch is that you'll need 2 megabytes of memory. Considering the cost of chips today, buying a hard drive might be cheaper.

At press time, Michael Moore, vice president of Milliken Publishing, reported that the company was readying a new version of Medley, 1.1, to be shipped free of charge along with style sheets and Apple System Disk 4.0 to all registered users. According to Moore, version 1.1 operates three times faster in operations such as text wrap and typing, and sports speedier disk access, as well.

WORDS INTO TYPE

A close reading of the 200-plus pages of Medley's documentation reveals that the program is built around the word processor. If that's true then a good portion of Medley's success hinges on that module's efficiency.

If by *efficiency* we're talking about speed, the program falls short. It's slow, as are many graphics-based word processors on the market. Sluggish reformatting is tolerable, but fast typists are going to have to get used to waiting for print to appear on screen or risk numerous errors typing ahead.

But if we're also talking about the program's range of capabilities and the effectiveness of its output, Medley's a winner. All standard features are included, but what makes it special are the extras that distinguish it not only from other word processors on the market, but also from other desktop publishers.

For example, Medley allows for the use of *gutters*, *kerning*, and *leading*, advanced formatting techniques more often associated with typesetting and advanced desktop publishing than with word ►

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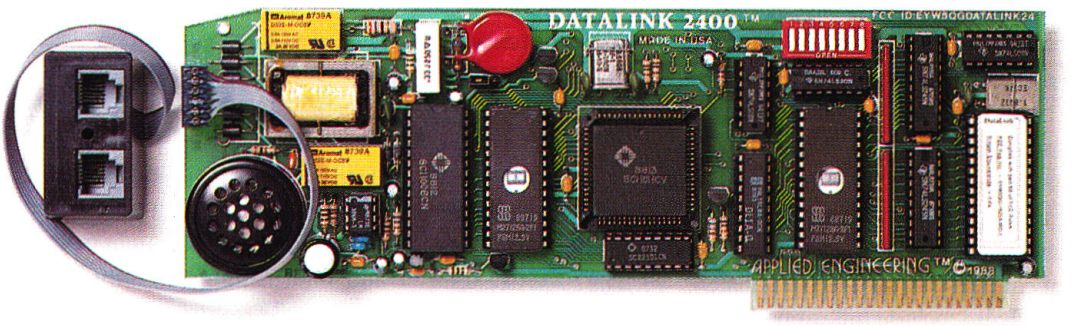

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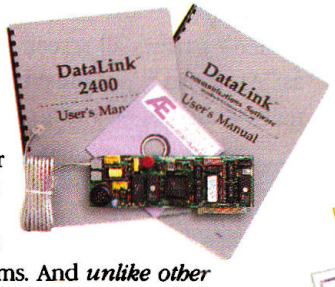

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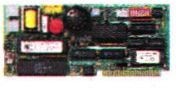

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processing. Gutters permit wider inside white space for the purpose of binding pages together while keeping marginal text accessible. Kerning is the variance of space between letters for the sake of appearance and readability. Leading is a definable option that lets you dictate the amount of space between lines in increments much smaller than single, double, or triple spacing.

Medley offers a number of other optional features—among them, extra leading between paragraphs and three types of leaders (dots, dashes, or a solid line to fill the space between tabs, as in a table of contents). According to Milliken's Michael Moore, Medley 1.1 will also include full support for condensed printing, complete with art and ruler rescaling.

One of Medley's most notable qualities is the thoroughness with which it deals with even the most mundane word-processing functions. Page numbering is a good illustration. Medley employs a dialogue box to set page numbers, making the process simple and visual at the same time. Box sections give you total control over placement and style of numbers. One part shows eight miniature page representations, each with a number positioned in a different place; just click on the page icon of your choice to position numbers in your document. Another portion presents six numerical styles (Arabic, Roman, and so on).

The same dialogue box let you define the pages that will be affected by your choices, whether or not numbering should appear on only odd or only even pages, what text (if any) should surround the page number, and the page on which to start numbering. Medley's attention to detail is indeed impressive.

"Medley can handle the simplest design or the most sophisticated. Because it's so easy to use, you'll want to experiment with its advanced techniques."

The word-processing module also contains a spelling dictionary and a thesaurus, two elements that are becoming necessary for a program of this type to be considered full-featured.

In spell-checking mode, when the program encounters a word it doesn't recognize, it stops, opens a dialogue box, and presents the questionable word within the context of the sentence in which it appears. Standard choices are available: You can ignore it, substitute a word from an alternative-spelling list, replace it manually, or add it to either the main dictionary or an auxiliary dictionary. A horizontal "thermometer" tracks the progress of the spell-checking process.

The way Medley's thesaurus operates will impress English teachers everywhere. Instead of simply listing all possible synonyms, the thesaurus names the parts of speech the word represents in different contexts, defines the word within the context of its use, and lists synonyms according to the number and tense (if applicable) of the original word. For example, searching for a synonym for *sound* calls up three dialogue boxes: one defining *sound* as *stable or firm*, the next *noise*, and the last *to declare or announce* ("sound the alarm").

One last comment on Medley's word processor. It can import AppleWorks documents intact—without going through an ASCII "middleman." When importing an AppleWorks file, Medley is compatible with 98 percent of the original file's formatting commands; and Medley can duplicate those not supported. Anyone who has gone through the cumbersome mechanics of ASCII transfer and reformatting will appreciate Medley's relationship with AppleWorks.

CUT AND PASTE

Once you've completed the text of your document, you can move on to page layout. Medley can handle the simplest design or the most sophisticated—because it's easy to use you'll be encouraged to experiment with the program's more advanced techniques.

Medley treats all screen sections other than the blank page as "Art Areas." You must place each into your document manually, although you can copy similar areas from one place to another with a few keystrokes. Art Areas can be rectangles, ovals, or polygons of any size; once you place them you can modify them in any number of ways before printing.

For example, begin resizing an Art Area by clicking on it to activate it, then drag one of its "handles," small black boxes that appear at various locations around the Art Area, in the chosen direction. If you want to move an Art Area rather than resize it, click in the middle of the area and drag it to a new location. No matter where you place an Art Area, your text wraps around it automatically.

A large part of Medley's versatility resides right there—in its powerful ability to wrap text around any shape, not just squares or rectangles. Ovals and polygons present no obstacles. In addition, the program lets you determine whether text wraps vertically or horizontally around each Art Area. Vertical wrapping drops text to the next line when it meets an Art Area, while horizontal wrap prints "across or through" the area, surrounding the art on all sides.

Medley's Global Art command is another powerful, time-saving page-layout feature: You designate Art Areas to appear in the same place on every page of your document. If you'll want to move an area later, the Global command means you won't have to create each Art Area from scratch.

Don't forget Global Art when you lay out columns, the most ►

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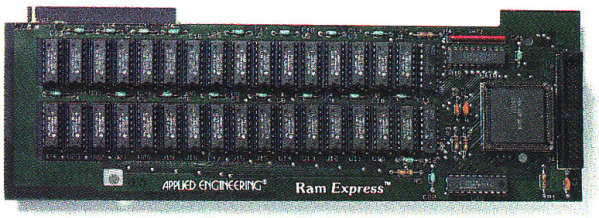

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basic formatting technique and one that Medley has redesigned. Most programs let you simply select the number of columns you want on a page. Medley, on the other hand, creates columns with its Add Art Rectangle option, drawing long, thin boxes and extending them down the page.

While the latter method may seem cumbersome at first, it has advantages that aren't readily apparent. With Medley there are no imposed restrictions on the length of a column, the width

PRODUCT INFORMATION

Medley
Milliken Publishing Co.
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GraphicWriter 3.0 Preview

While Publish It!, Springboard Publisher, geoPublish, and Personal Newsletter do battle for 8-bit desktop-publishing honors, a new contender called GraphicWriter 3.0 is emerging to challenge Medley in the GS arena. Not only does GraphicWriter, from Seven Hills Software, claim to be able to do everything Medley does, it claims to do it *faster* and in *512K*.

GraphicWriter 3.0 is a redesigned edition of a product that offered excellent potential, but failed to receive the recognition it deserved. Acquired recently by Seven Hills, it has undergone a major facelift and boasts numerous improvements and added functions (prerelease version discussed here).

The program offers several impressive and innovative features. For example, you can define page size when you boot the software; it doesn't default to 8½ by 11 inches. GraphicWriter also employs Apple's new GS/OS operating system, in addition to recognizing ProDOS. It keeps up with speed typing, with no discernible lag despite its graphics orientation.

Other features promised by GraphicWriter 3.0 include sample templates, full support for document importation with formatting intact, four text-wrapping options, multiple printer support, and selectable font menu.

According to Seven Hills, GraphicWriter owners who purchased the product before August 1, 1988, may upgrade to 3.0 by mailing in the original program disk and $25. Those who purchased the package on or after August 1 will be charged only $5 to cover shipping. Look for a complete review in an upcoming issue of *inCider*. □ **—J.T.**

of the gap between columns, or where on the page a column starts, horizontally or vertically. Most programs that ask you to designate number of columns per page lock you in.

If you do want to create a standard number of columns per page, however, you can do it quickly and easily with Medley's copy command in conjunction with Global Art. Just create one column, designate it as Global Art, place it, and copy it to another location if you need more than two.

Only your needs and imagination limit the number of purposes Art Areas serve. Typically you'll use them to place pictures, either those you've created with Medley's Paint Module, or clip art or digitized graphics imported from other paint programs.

Medley comes with its own Clip Art disk, containing detailed drawings representing approximately 60 topics. The program is compatible with pictures saved in either Apple Preferred Format or as a single-screen file, making a wealth of art available.

Medley also includes a command that converts an area after you've created it. You can toggle borders on and off or change a text area into an Art Area and vice versa. When you convert an Art Area into a text area, you actually turn the Art Area into a miniature page subject to all the rules of Medley's word processor. For example, you could create a full-page graphic; place a large oval Art Area in the middle of it; convert the oval to a text area; and type a saying, proverb, or other suitable text into it.

PAINTBRUSHES AND PALETTES

Medley's third segment, its Paint Tool module, rivals many stand-alone programs on the market. It's not the equal of a sophisticated package such as Paintworks Gold, perhaps, but it has more than enough features for most would-be artists, including a full spectrum of colors and patterns you can edit.

Medley's drawing tools include standard but powerful features: You can magnify an area, type text into Art Areas, use Fill and Spray tools, select from 48 brush shapes and a dozen line types, and so on. And if the program fails to satisfy your artistic bent, you can export to other packages the paintings or drawings you've started in Medley; once you've modified them further you can transfer them back to a Medley Art Area.

Medley's graphics editor is as easy to use as the word processor. Two clicks of the mouse, one to activate the area and the second to select a Special Effect, give you resizing, moving, duplication, or inversion.

There's no denying Medley's slow—that's the price you pay for a non-text-based, graphics-oriented program. But Medley's power is exciting. Its versatility, its easy learning curve, and its impressive output make it well worth the cost.■

James Trunzo is a free-lance journalist and a frequent contributor to inCider's *Reviews section. Write to him at RD 2, Box 376, Leechburg, PA 15656.*

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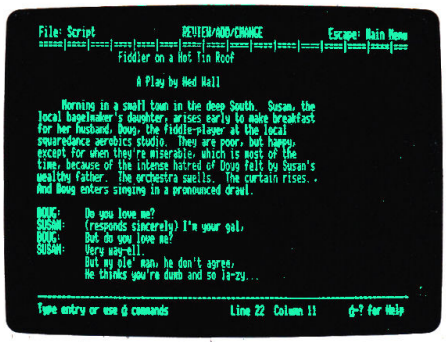
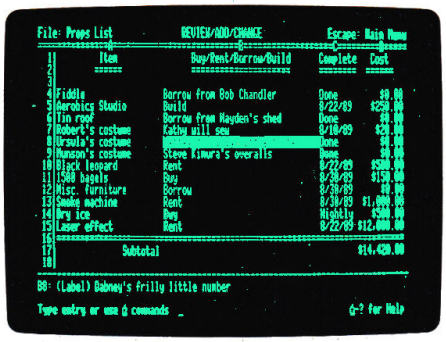
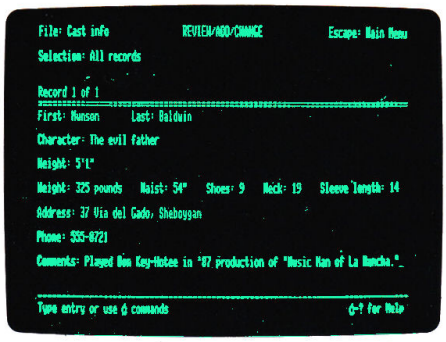


With a word processor, spreadsheet and database in one package, AppleWorks has just about everything an Apple II owner could want.



You can jump from one program to another in the blink of an eye. Which makes AppleWorks an exceptional choice for fast-paced businesses.



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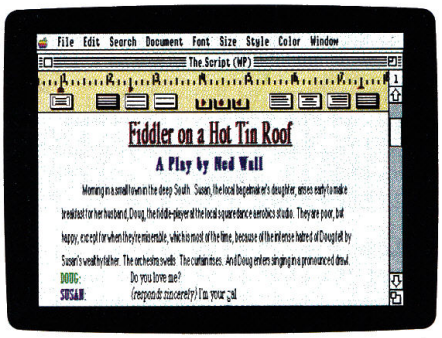
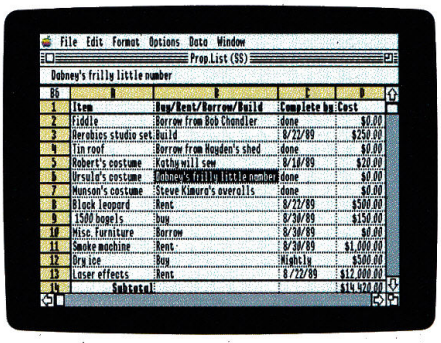
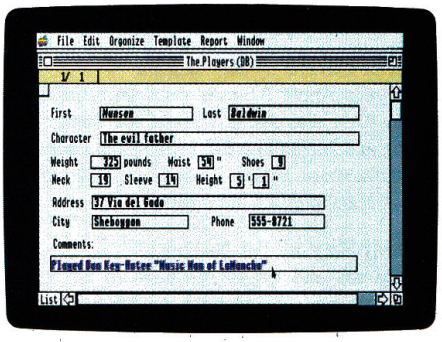


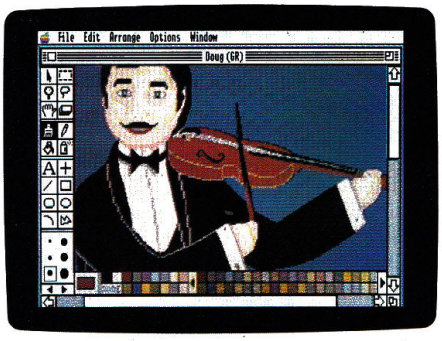
Like AppleWorks, AppleWorks GS offers a powerful word processor. And you can enhance your work with type styles, sizes and fonts.



AppleWorks GS can read all your AppleWorks files. And when you transfer your spreadsheets to AppleWorks GS, you can add boldface.



The database lets you store and sort thousands of business, school or home records. And now you can use a mouse and pull-down menus.



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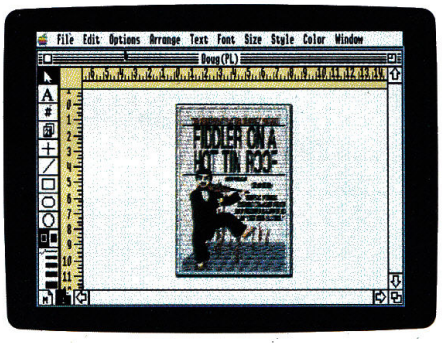

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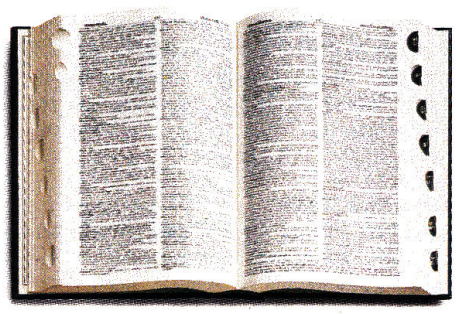

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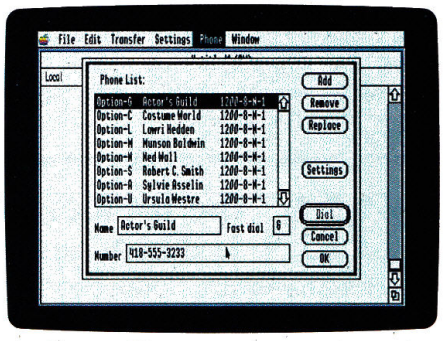

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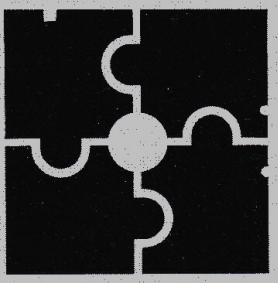

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Retirement Planning Pays Off

by Ruth K. Witkin

If indeed "youth is wasted on the young," let's not squander our later years. Early retirement planning can pay off in terms of financial security and peace of mind, and, like it or not, the time to get the ball rolling is when you first enter the work force. By starting early, you're buying the future on the installment plan: The more installments you make, the rosier your retirement is going to be. Also, the *lower* the payments are going to be, because you're spreading them over a longer period of time.

The accompanying **Figure** shows an AppleWorks retirement-planning spreadsheet that works for anyone of any age who's not yet retired. Plug in your current income, projected income level at retirement, life span after retirement, and post-retirement income and savings, and the formulas produce the following: total income needed after retirement, expressed in today's dollars; income needed from sources other than savings; income needed from savings and investments; amount you must save before retirement, in today's dollars; what your current savings will grow to by retirement; amount you still need to save before retirement; and amount you need to save each year.

The formulas work with three lookup tables in rows 34 through 41. These tables contain factors with a built-in inflation adjustment that assumes your savings will earn a conservative 2 percent after inflation and taxes, both before and after you retire.

	A	B	C	D	E	F	G	
1				RETIREMENT SAVINGS ANALYSIS				
2								
3	*** YOUR INPUT:							
4								
5	Current annual gross income						70,000	
6	Income level at retirement (% of current income)						70	
7	Years before retirement						5	
8	Expected life span (in years) after retirement						20	
9	Annual social security income						19,440	
10	Annual pension						5,230	
11	Amount already saved (IRA, Keogh, bank deposits, stocks,						150,000	
12	mutual funds, vested profit-sharing, thrift plans, etc.)							
13	Amount from sale of assets after retirement						60,000	
14								
15								
16	*** THE RESULTS:							
17								
18	Annual income needed after retirement (in today's dollars)						49,000	1
19	Annual retirement income from sources other than savings						24,670	2
20	Annual retirement income needed from savings and investments						24,330	3
21	Amount you must save by retirement (in today's dollars)						406,311	4
22	What your current savings will grow to by retirement						165,600	5
23	Amount you still need to save before retirement						180,711	6
24	Amount you need to save each year						34,697	7
25								
26								
27	*** LOOKUP TABLES:							
28								
29	Expected Life Span							
30	After Retirement			Years Before Retirement				
31								
32	Years	Factor A		Years	Factor B	Years	Factor C	
33								
34	11	10.0		5	1.104	5	.192	
35	15	13.1		10	1.219	10	.091	
36	20	16.7		15	1.346	15	.058	
37	25	19.9		20	1.486	20	.041	
38	30	22.8		25	1.641	25	.031	
39	35	25.5		30	1.811	30	.025	
40	40	27.9		35	2.000	35	.020	
41				40	2.208	40	.017	
42								
43								

Figure. *AppleWorks spreadsheet calculating how much you need to save for retirement.*

ABOUT LOOKUP TABLES

Each lookup table consists of two columns of information (A and B, D and E, F and G). One column in each table (A, D, and E) contains scan numbers; the other columns (B, E, and G) contain corresponding numbers. Formulas you'll soon enter in G20, G21, and G23 will search the scan cells for the number you designate and retrieve the corresponding number, saving you the time of looking it up and typing it in. The basic structure of a lookup formula is @LOOKUP (number cell, range of scan cells).

Each table on this spreadsheet is in a column arrangement, so the formula searches the scan cells from top to bottom until it finds the largest number less than or equal to the designated number. It then retrieves the number from the cell to the immediate right. If, instead, the table were in a row arrangement, the formula would search the scan cells from left to right, and when it found the cell containing the designated number, retrieve the number from the cell immediately below.

All this will become crystal clear as you create and work with the retirement-savings spreadsheet. Honest!

A SPREADSHEET FROM SCRATCH

Now use the AppleWorks Startup and Program disks to make a new file for the spreadsheet. Name the file RETIRE. You should now see the spreadsheet Review/Add/Change screen with the cursor in A1. Use the following summary to get the spreadsheet started.

•Long lines. Enter a line across row 2 from columns A through G: Place the cursor on A2 and type quotation marks; hold down the equal-sign key until the sign reaches the right edge of the highlight in G2, and hit Return. Leave your cursor on A2 and copy the row containing the line to the clipboard: Press OA-C to start the Copy command; type **T** to select *To clipboard* and press Return.

Next, copy the row containing the line from the clipboard: Place the cursor on A15; press OA-C and type **F** to select *From clipboard*. Now place the cursor on A26. Again, press OA-C and type **F**. And finally, place the cursor on A42 (don't be concerned that the line appears in row 43 in the **Figure**), press OA-C, and type **F**.

•Column width. Each column is now nine characters wide. Use the Layout command (OA-L) and *Columns* option to increase the widths of columns A through G to ten characters each.

•Short lines. Use a minus sign to enter the line in A31 and B31: With the cursor on A31, type quotation marks, then hold down the minus-sign key until the sign reaches the right edge of the highlight in B31. Don't bother to press Return. Simply move the cursor to D31. Now enter the line in D31 through G31 the same way, then hit Return.

Now copy row 31 to the clipboard: With your cursor still on D31, press OA-C, type **T**, and hit Return. Copy from the clipboard: Place the cursor on A33, press OA-C, and type **F**. Finally, separate the two tables under *Years Before Retirement*: Place the cursor on F33, type quotation marks, hit the spacebar once, press the minus sign nine times, and hit Return.

•Labels. Enter all labels shown in the **Figure**, including those in the lookup tables. (Ignore the numbers in column G, rows 5 through 13 and 18 through 24, which either the formulas generate or you'll generate shortly.)

Here are some special instructions to make entering labels easier. Before a label starting with an asterisk (that is, **** YOUR INPUT:* in A3, **** THE RESULTS:* in A16, and **** LOOKUP TABLES:* in A27), type quotation marks first. In row 12, type quotes, and press the spacebar twice to indent before the rest of the labels. In A30, type quotes, and hit the spacebar once to indent.

You don't need to press Return after each label. Just move the cursor to the next cell containing a label, and AppleWorks will enter the label you just typed into its cell. After the last label, move the cursor to A34.

•Lookup-table numbers. Enter the numbers in the lookup tables in rows 34 through 41 (you'll format them momentarily), moving the cursor to the next cell instead of pressing Return. If you feel comfortable about it, you can simply copy the numbers you type into D34 through D41 as a block into F34 through F41. After you type the last number, press Return.

•Formats. Use the Value command (OA-V) to set a standard *Value format* of *Commas* with zero decimal places. All numbers in the lookup tables are now integers, but don't be concerned. Use the Layout command (OA-L) to format these cells as follows: B34 through B40 for Commas with one decimal place; E34 through E41 and G33 through G40 for Commas with three

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decimal places. Finally, center the labels in row 32. Now press OA-S to store the spreadsheet on disk.

ENTERING FORMULAS

Next, enter the formulas in the locations shown in the **Figure**. First, read how the formula works. Then place the cursor on the cell receiving the formula. Move the cursor to the cell locations shown in the formula description, and type everything else.

When the formula is complete, compare your results with the description. If they agree, press Return. If something's amiss, press Escape and start again.

FORMULA 1: INCOME NEEDED AFTER RETIREMENT

Formula 1 multiplies your current annual income (G5) by income level at retirement (G6) to produce the annual income needed after retirement in G18.

Cell location: G18
Description: +G5*G6/100

FORMULA 2: OTHER SOURCES

Formula 2 adds Social Security income (G9) and pension (G10) to produce retirement income from sources other than savings in G19.

Cell location: G19
Description: +G9+G10

FORMULA 3: SAVINGS AND INVESTMENTS

Formula 3 subtracts income from sources other than savings (G19) from income needed after retirement (G18) and enters the retirement income needed from savings and investments in G20.

Cell location: G20
Description: +G18−G19

FORMULA 4: MUST SAVE BY RETIREMENT

Formula 4 multiplies the income needed from savings and investments (G20) by the factor it finds in lookup table A, based on the expected life span you enter in G8. The result is the amount you must save by retirement, in today's dollars.

Cell location: G21
Description: +G20*@LOOKUP (G8,A34.A40)

Because the lookup function doesn't have the information it needs to work with, *NA* (*not available*) appears in G21 instead of the zero you saw in the other cells.

FORMULA 5: CURRENT SAVINGS GROWTH

Formula 5 multiplies the amount already saved (G11) by the factor it finds in lookup table B, based on the number of ►

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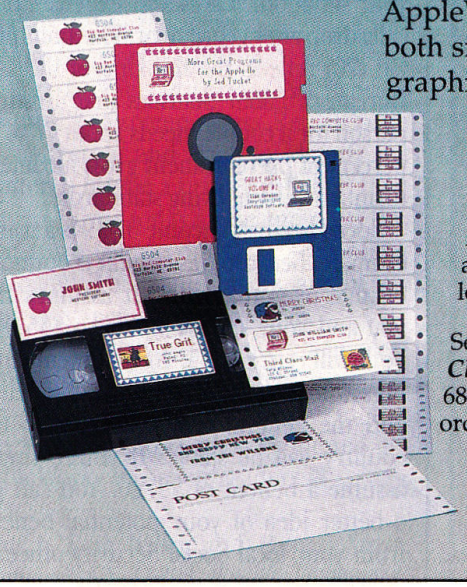

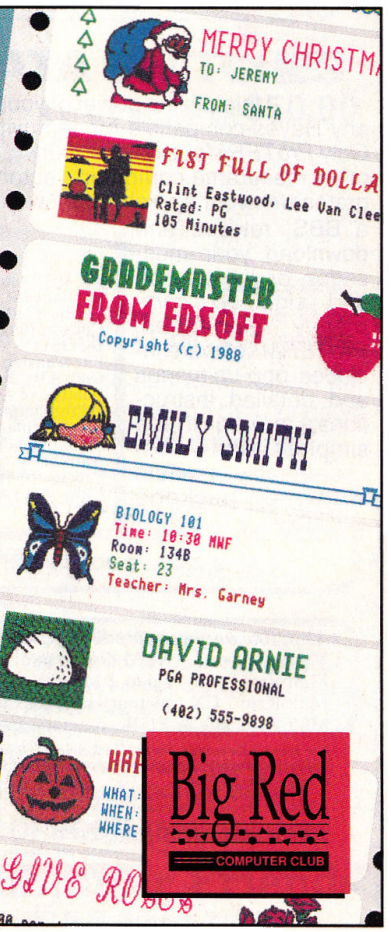

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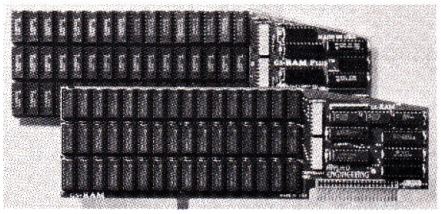

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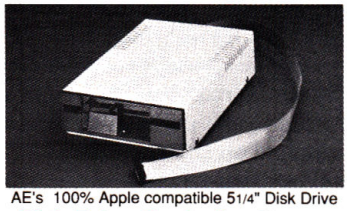

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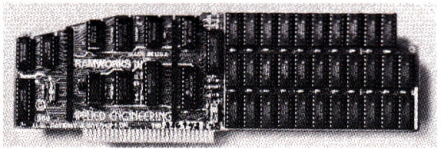

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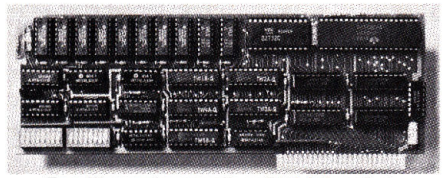

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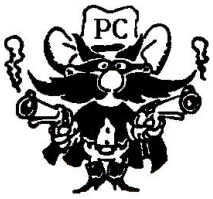

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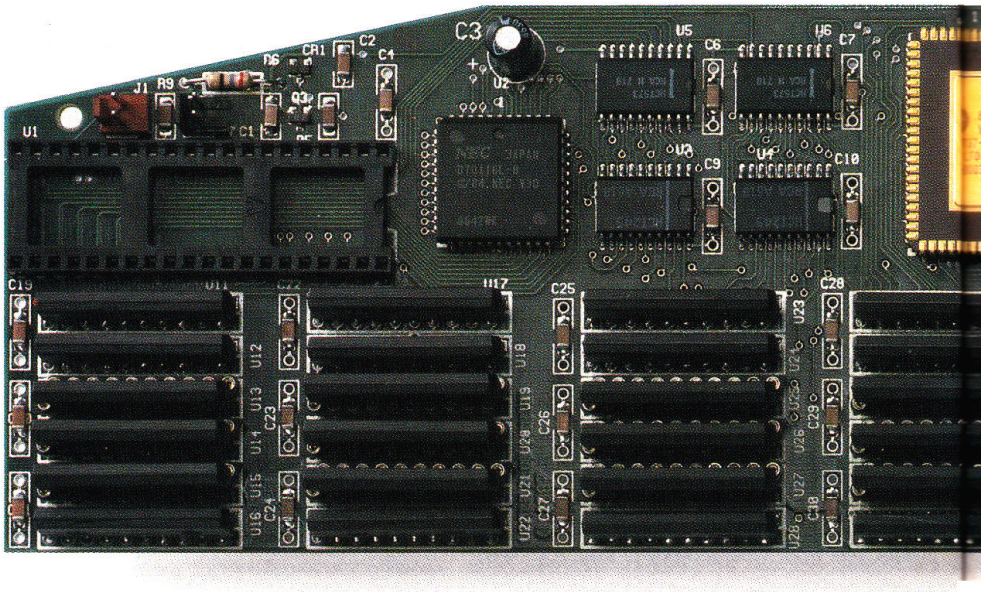

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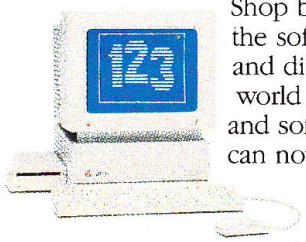

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You don't have to be a programmer.

PC Transporter was designed by experts, so you don't have to be one to use it. The design team includes the former project managers for the Apple IIe and IIc, the co-designer of the Apple II disk controller and the author of ProDOS.

We include clear, understandable installation instructions, "pre-boot" software and even an installation video to help.

PC Transporter acts as a universal disk drive controller, enabling your Apple 3.5 Drive to run MS-DOS or ProDOS and to shift instantly from ProDOS to MS-DOS.

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Tailor your configuration.

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There's even a socket on PC Transporter for an 8087-2 Math Coprocessor chip to speed you through spreadsheets.

Call Applied Engineering or ask your dealer for more details on your specific needs.

"An excellent solution for at least half a million people who enjoy Apple II computing at home and endure MS-DOS at work."
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A few words about cost.

Compare the price of a PC Transporter — you'll find it about on par with even the cheapest, stripped-down IBM clones.

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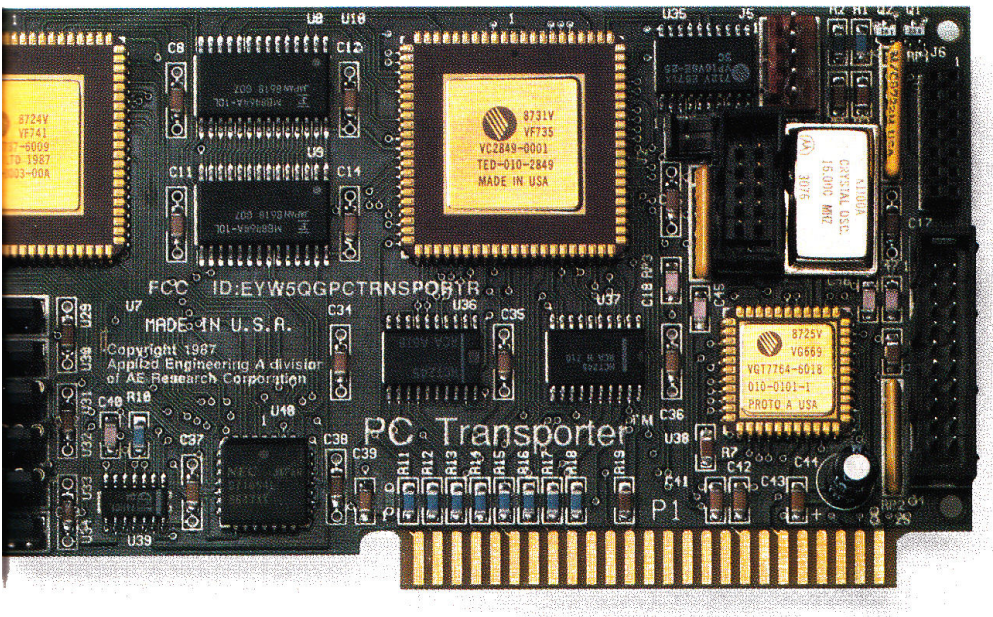

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Add in the cost of the peripherals you'd need for that "cheap" clone, and you'll see the price of a PC Transporter start to look very attractive indeed.

"PC Transporter has created quite a stir. It's accuracy guarantees a whole host of uses . . . a masterpiece of engineering."
— Apple Soft

A few more considerations - you can access up to 768K of extra RAM for use with your Apple programs. PC Transporter conforms to the Apple II Memory Expansion Card protocol when in Apple mode. That's a $500 value even if you never use the card for MS-DOS.

PC Transporter comes with our exclusive AppleWorks Expander™ program that dramatically enhances the capacity, speed and capabilities of AppleWorks.

"When you buy a PC Transporter, you're not just giving your Apple the ability to act as a PC clone, you're upgrading your computer in a big way for all your Apple II computing."
— Nibble

The Expander increases word processor lines, database records, clipboard capacity, automatically segments files, provides a built-in print buffer and much more.

RAM in Apple mode	RAM in IBM mode	Price
768K	**640K**	**$679**

Note: The IBM mode is 128K less because the PC Transporter uses 128K for system memory.

IIGS Installation Kit	**$49**
IIe/II+ Installation Kit	**$39**
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BBSs: Something for Everyone

by Tom Sherman

You say you're bewitched by the occult? Puzzled by cryptography? Ravenous for recipes? Whatever your interest, chances are you'll find an electronic bulletin-board system (BBS) to intrigue you. BBSs focus on diverse subjects ranging from advertising and artificial intelligence to philosophy and photography. And the list goes on! To find BBSs and people who share your interests, check out BBS listings from computer-user groups, dealers, national on-line services, and, especially, from BBSs themselves.

In the last *inCider* On Line ("The Electronic BBS: Getting Started," November 1988, p. 104), we explored an imaginary system to learn what you'll encounter when you connect to a BBS for the first time. We looked at standard BBS features—electronic mail, message areas, and file libraries—but also realized the impossibility of a standard BBS. System operators (sysops) can choose among a variety of programs to run Apple II BBSs, and many sysops develop variations on those off-the-shelf programs to suit their own purposes. Like neighborhood taverns, each BBS has its own character, based on its focus, the sysop's personality, and the regulars who hang out there.

Let's narrow our scope this month. We'll look at five BBSs with diverse aims. Each system runs different BBS software, so although this isn't a review of BBS programs, you'll get a sense of their strengths and weaknesses.

Whet your appetite for telecommunications with a look at five very different BBSs.

APPLE GENERAL INTEREST

When telecommunications was the province of technical experts, most BBSs were devoted to computer-related interests. Today, BBSs continue to be a major source of information and entertainment for Apple II owners. **Softy's** BBS in Sacramento is one example. This system provides help files and displays a map to assist your navigation to its major sections, including technical issues, public interests, file library, and games.

Although Softy's focuses primarily on Apple II information, it also provides material of interest to other users. A longtime programmer, sysop John "Softy" Hagen encourages questions and answers about computer hardware and software and maintains an extensive library of programs and files.

On Softy's BBS, prompts ("tickle any key") and banners ("Pony Express Mail and Telegraph Office") make it clear that you don't have to speak assembly language to feel at home. At last count, 17 games were available to play on line, and bulletin-board discussions ranged from Jokes and Entertainment to Science and the Bible. In Softy's Voting Booth, you can register your opinions in several surveys, including a revealing questionnaire about software piracy.

Softy's BBS runs **Prime** software and supports other Prime sysops in private sections of the board. For instance, sysops who modify Prime systems (a feature of all BBS programs written in Applesoft BASIC with ampersand routines) can share these developments through BBSs such as Softy's. Sysop support is also available on the **SmokeSignal Software** (Prime's developer) BBS.

USER GROUPS AND SCHOOLS

Like many organizations, the Boston Computer Society's Apple Users Group maintains a BBS to exchange information, discuss issues, and manage club business. Open to nonmembers, the **Apple/Boston Connection** is a public system whose 800 users benefit from sections devoted to Apple II topics, games, and programming. The AUG has created separate areas for public debate and private Apple/Boston activities.

Many BBS programs organize messages by subject in subboards, storing downloadable programs and files in a separate library section. Apple/Boston's **Elite** BBS software, however, sets up areas called "roundtables," similar to those on GEnie. Each roundtable can have 63 message sections; each section can have 64 categories. A category, in turn, can have 255 topics and each topic can have 512 messages. Each roundtable has its own library, also categorized by topic.

In the Apple Roundtable, for example, you'll find messages posted on topics such as AppleWorks, GS Music, Disk Drives, AppleFest, and Buying Guide. Among the Apple II library categories (there's a separate section for the IIGS) are AppleWorks, Business, Education, and Utilities ►

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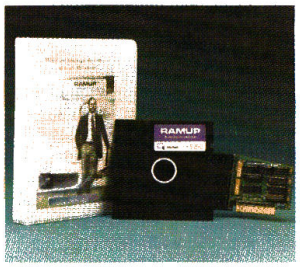

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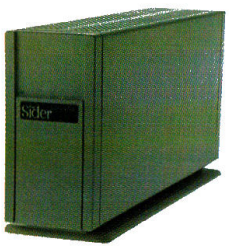

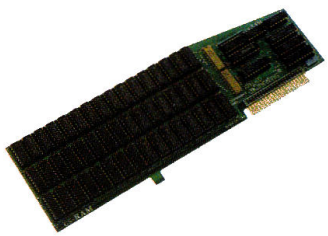

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for DOS 3.3, ProDOS 8, and ProDOS 16. From the roundtable menus, you can move directly to the e-mail post office and to other on-line areas.

Most Apple/Boston BBS features are accessible to everyone, but the group reserves one area for special membership activities. In the Apple/Boston Activists Roundtable, authors can upload articles for the group's newsletter, work on a catalogue of public-domain software, and manage other projects. The busy volunteers who manage most Apple user groups appreciate those local BBSs that enable members to transact club business at convenient times of the day (and night).

Look closely at the Apple/Boston main menu (**Figure 1**) and you'll see another important feature of Elite software (which you can download from **GEnie**'s **Protree** roundtable). The conference-room and who's-on-line commands reveal that Elite is a multi-user system, which lets people who are connected at the same time exchange messages.

Figure 1. *Apple/Boston main menu.*

```
                The Apple/Boston Connection
                    Information System
                       -------------
                         Main Menu
                       -------------

A - About this system                    C - Goto to the Conference Room
E - Electronic Mail                      F - The public forum
G - Goto Roundtables                     H - System Help Section
M - Map of the system                    O - Off - Hang up/terminate call
P - Page Dr. Bob (uh-oh)                 R - Read all System Bulletins
T - Time Remaining                       U - Goto User Utilities
W - Who's on-line right now

cmds=ACEFGHMOPRTUW
Main Menu
Command (?=menu)
```

The system requires a computer and modem for each caller, connected through SCSI (small-computer-systems interface) cards and cables to a dedicated server computer and hard drive. It's no surprise that a system with this many features requires a knowledgeable sysop and users willing to learn. As sysop Chris Spencer tells BBS newcomers, "You will find it extremely complex and confusing at first, but after using it for a short while, you will get the hang of it." He's right!

Academia is taking advantage of BBSs for sharing information, solving prob-

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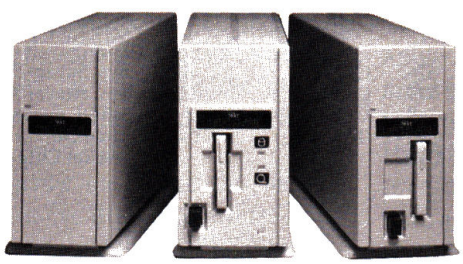

It seems like it happens year after year. The leading publications to the Apple II marketplace, in product reviews and round-ups, single out First Class Peripherals and *The Sider* for special praise.

This year, the accolades read like this:

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INCIDER MAGAZINE, DECEMBER 1988

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Figure 2. *Menu on ZIA BBS.*

```
KIVA/CLASSROOM/CLASSES/CON.ED/SPED501

1. SYLLABUS
2. ASSIGNMENTS
3. INBOX
4. OUTBOX

H)elp  E)xpand P)revious menu  M)aster menu _
```

Figure 3. *Using Let's Talk's E)xpand command.*

```
1. SYLLABUS: Course outline for SPED501: Special students in the classroom
2. ASSIGNMENTS  is a menu
3. INBOX  is a menu
4. OUTBOX: Leave your questions and comments about the assignment or the class
```

lems, and developing new uses for telecommunications technology. (See "Electronic Education," September 1988, p. 92.) Educational systems range from a single school's BBS serving a few hundred people to networked BBSs connecting thousands of teachers and students in schools throughout a district.

The **ZIA** BBS (named for a local Indian sun symbol) is divided into two major areas, one public, the other private. In the public Plaza area you'll find features such as a calendar of events, a post office for electronic mail, boards for posting classified ads, and a system map. Especially helpful for off-campus students, the Plaza connects computerists and other special-interest groups, such as the Eastern New Mexico Powderhounds planning ski trips and the International Educational Exchange program announcing foreign-study opportunities.

The Kiva section (named for a private ceremonial place) serves more specialized purposes, such as enrollment information and software reviews. In different subsections, university teachers answer questions from distant high-school students; remote teachers receive tips on good, affordable software; and students submit work assigned in a Spanish course.

The ZIA BBS runs **MultiTalk**, the multi-user version of **Let's Talk** BBS software, on a Control Data network connecting Apple IIe and Laser computers with a 20-megabyte hard drive. The university's equipped three computers with modems so that three callers can connect to the BBS simultaneously. According to ►

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PRODUCT INFORMATION

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Apple Users Group
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Apple to Eden BBS
Public Interest Media Project
P.O. Box 14066
Philadelphia, PA 19123
(215) 829-0334 (modem)

Diversi-DIAL
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download from ProTree Roundtable
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Reader Service No. 321

GBBS Pro
L&L Productions
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Arvada, CO 80005-0354
(303) 420-3156
(303) 420-3568 (modem)
$125
Reader Service No. 322

Let's Talk, $70
MultiTalk, $795
Russ Systems
1344 Pacific Avenue, Suite 103
Santa Cruz, CA 95060
(408) 458-5080
(408) 425-INFO (modem)
Reader Service No. 323

Magic City Micro
SofTools, Inc.
8306 Mills Drive, Drawer 262
Miami, FL 33183
(305) 271-6644
(305) 271-7402 (modem)
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(shareware based on ModemWorks)

Prime
SmokeSignal Software
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(modem, Pro-Sol BBS)
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ProTALK BBS 2.1
P.O. Box 124
Gwynedd Valley, PA 19437
(215) 540-9811
(modem, Nuclear Escape BBS)
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(modem, Apple Rebel BBS)
freeware

Softy's BBS
(916) 383-5244 (modem)

ZIA BBS
Eastern New Mexico University
Station 34
Portales, NM 88130
(505) 562-2285
(506) 562-2224 (modem)

former sysop Eric Jorgensen, even newcomers find the system very easy to use, as the menu in **Figure 2** reveals.

Because Let's Talk menus are automatically constructed from ProDOS subdirectory and filenames, you can easily see from the menu's first line that you're four levels deep in the Kiva section. To use the system, you need to know only seven major commands: Control-S to stop scrolling, Spacebar to resume scrolling, Control-X to exit any text-file display, and the four single-letter commands displayed with the menu. H)elp, P)revious ►

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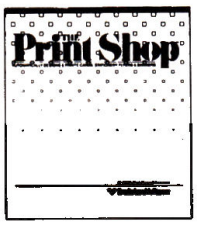

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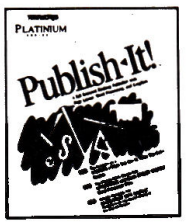

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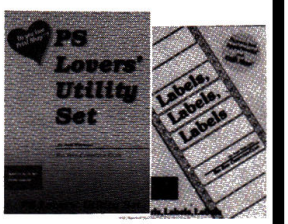

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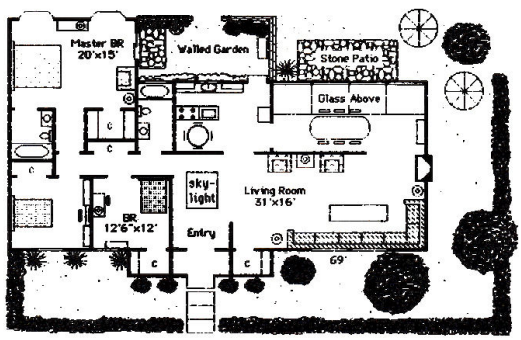

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menu, and M)aster menu are obvious. The E)xpand command identifies the menu choices as either submenus or text files, as shown in **Figure 3**.

Like other BBS software, Let's Talk offers flexible password protection, opening different areas to appropriate users. It limits XModem downloads to binary files, however, and lacks several other features available in more complex BBS programs. These include jumping quickly from area to area, listing posted messages, and marking messages to read as a batch. To see the most complete MultiTalk installation with searchable AppleWorks databases, call developer Russ Systems' business BBS, **Santa Cruz Info-Line**.

SPECIAL INTERESTS

Increasing numbers of Apple II owners are purchasing modems to connect with others who share their concerns. Today's communications software makes it much easier for novices to get on line, and, consequently, many BBSs now focus on non-computer topics. Unlike more general systems, these BBSs may not offer games and programs, concentrating instead on information and discussion.

Established initially to deal with environmental concerns, the **Apple to Eden** BBS in Philadelphia now promotes discussion of a wide variety of social and political issues. The Public Interest Media Project, a local nonprofit organization providing technology resources to other nonprofit groups, manages Apple to Eden. The project uses equipment donated by Apple Computer Community Affairs and First Class Peripherals.

Cultural organizations use the BBS to publicize upcoming performances and exhibits. You're also likely to find announcements of, say, housing-rehabilitation workshops or new publications for neighborhood gardeners, or perhaps discussions of anthropologists' views of social action.

Apple to Eden runs **GBBS Pro** software, although the BBS doesn't require all the program's many features. GBBS Pro is written in ACOS, a language designed for communications, which lets sysops write almost anything to appear

on line. Supporting both XModem and YModem protocols, GBBS systems can be modified to support ProTerm's special terminal emulation. This lets the sysops manipulate your Apple's sounds and mousetext screen display. Sysop programmers have written several modules, increasing terminal emulation and file-transfer capabilities. At press time, the distributor of GBBS Pro software expected to announce details soon of a multi-user version called **MultiPro**, to work with **ProLink**, a new program connecting separate systems in long-distance networks.

Beagle Bros, which first set up a BBS for customers to order its software, now uses its **Pro-Beagle** system to answer questions and to share programs and information with software developers, program testers, and user-group contacts. Sysop Mark de Jong reports that it's often more efficient for both users and support staff to have problems and solutions written in an on-line message than to try working out the solution in an expensive telephone conversation. Users often post valuable macros and solutions to others' problems. Pro-Beagle also lets registered owners receive updated versions of Beagle Bros programs.

The Pro-Beagle BBS runs **ProLine**, which brings to the Apple II conferencing features familiar from larger, more powerful systems.

These five BBSs give just a hint of the useful information and exciting connections now only a phone call away. Other BBS programs are available, and more are being developed to expand the networks. Bulletin-board systems, enabling new kinds of on-line communities, might some day support significant educational and personal change.■

Tom Sherman is a communications consultant specializing in computer-related activities. Write to him at 224 South Chester Road, Swarthmore, PA 19081, or contact him on line through GEnie (SHERMAN), CompuServe (72010,12), The Source (CPA177), Delphi (Sherm), The WELL (sherman), PeaceNet (tsherman), and PARTI on NWI, Unison, and The Source (Tom Sherman).

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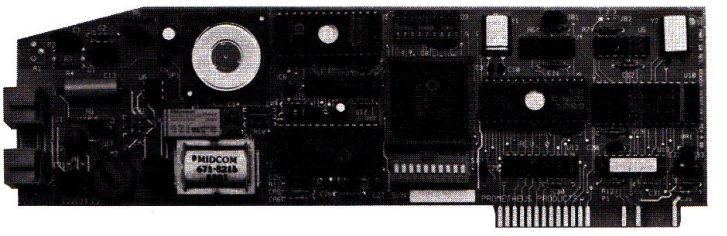

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by Lou Wallace

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The heart of the language is its compiler. While interpreted languages such as Applesoft translate program code into machine code one line at a time during execution, Micol Advanced BASIC and other compiled languages convert your entire program to 65816 machine language *before* running it. Compilation makes your program run faster than any interpreted code, but not as fast as efficient code written directly in assembly language (machine code).

Program speed is only part of the Micol package—efficient program design plays an important role, too. For example, gone are those bothersome Applesoft line numbers (although they're still available as an option). Included as part of Micol's integrated programming environment is a full-screen 80-column text editor for program writing, containing all expected features, such as block copy, delete, and move; search and replace; and jumps to the beginning and end of your file.

Even more important is how well the editor is integrated with the language's compiler and linker, which appends various system-related program-code fragments and other programs you specify to your main program. Within the editor you can save, compile, link, and execute the program in memory by pressing a single key. Moreover, if the compiler discovers an error, it can return you to the editor with your program intact—just correct the problem and continue.

How can you write a BASIC program complete with branching statements like GOSUB without using line numbers? You name your subroutines and refer to the name, not a line number, much the way you do in other structured languages, such as Pascal and C.

One way to create these named subroutines is with Micol's new command ROUTINE [your subroutine name]. You supply any name you want, then access it with a simple GOSUB. For example, if you create a subroutine that waits for a keypress, you might say GOSUB WaitForKey. That's a lot easier to remember than GOSUB 678. And, if you renumber your lines, you don't have to change the GOSUB reference.

Even more powerful is the language's ability to create more complex subroutines called *procedures*, which let you pass parameters with a subroutine call. Procedure variables are local—they don't affect the main program. Micol resembles Pascal here; it's one of the language's best features.

Advanced BASIC offers other techniques for creating highly structured, readable programs. A number of program-control statements, for instance, including IF/THEN/BEGIN/ELSE and CASE OF (see the accompanying **Table**), make it easier to perform complex decisions during program execution. CASE OF is particularly important, because it lets you pick from many options with minimal programming.

GRAPHICS AND SOUND

On a computer like the GS, one of the most important aspects of any language is how well it handles graphics and sound. In this area Micol Advanced BASIC gets a mixed review.

First, Micol offers low- and high-resolution graphics that are very similar to those found in Applesoft—a plus, because it's easier to translate your older programs and routines.

The language also supports a high-resolution 320-by-200 16-color mode and a super-high-resolution 640-by-200 six-color mode. That's nice, but it doesn't represent the best the GS can do by a long shot. Among the few graphics commands implemented directly are HCOLOR, HPLOT, and DRAWSTR (print text to the graphics screen). Additional support must come from the Toolbox.

The scope of Micol's graphics support isn't impressive, although the speed of its drawing commands is acceptable. Your GS' Toolbox, however, includes a large ►

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set of user-callable routines that offer the programmer the ability to create a Mac-like environment. Advanced BASIC accesses these routines with the TOOLBOX command, which lets you select which of the 28 sets of GS tools you want to use, as well as a specific routine within the toolset. Depending on the particular routine you select, you follow the command with some number of parameters that are meaningful to that routine.

Toolbox accessibility makes up to some extent for the language's decidedly few graphics commands, but one drawback is that Micol's manual doesn't supply a list of available tools. While it does mention a couple (frame, paint, and erase), without a good reference book you'll find the TOOLBOX command of little use. (The documentation includes a list of suggested source books.)

Micol includes six commands you can use to generate music or a variety of sounds: INSTRUM (create additional instruments—not yet completely usable), MUSIC (start the sound), NOISE (for sound effects), WAVE (define the waveform buffer), QUIET (turn off a voice), and SILENCE (turn off all sound). When you combine all six commands you can generate some very effective sounds—and when the INSTRUM(ent) command is fully documented you'll be able to create even better music and sound.

Table. Structured programming commands in Micol Advanced BASIC.

IF..THEN..ELSE
IF..THEN BEGIN..ENDIF
IF..THEN BEGIN..ELSE
  BEGIN..ENDIF
ON expression GOTO LABEL
  [,LABEL] [,LABEL] etc
CASE OF..DO..ENDDO..ENDCASE
FOR..NEXT
FOR..UNTIL
REPEAT..UNTIL
PERFORM..UNTIL
WHILE..WEND
FUNC..ENDFUNC
PROC..ENDPROC
ROUTINE..RETURN

One additional feature that will make this language of interest to scientists and engineers is its support of an extended level of mathematical precision, up to a full 20 digits of accuracy. Using the floating-point option doesn't slow your program perceptibly, either.

Advanced BASIC programs you're distributing require the Micol Runtime Library (a series of GS system-related utilities needed to run your program outside the Micol editor/compiler), but the company doesn't charge a fee for including it with your programs, as long as you retain the copyright message when your program is booting. If you don't want the notice to appear, Micol will sell you a separate runtime module with no message displayed.

Micol Advanced BASIC is exactly that—a sophisticated, modern implementation of Apple BASIC. It's close enough to Applesoft to make conversion easy, yet it supports a large number of new and powerful features. Surprisingly, it's weakest in its direct support for GS graphics, but you can overcome this limitation with Toolbox routines. Overall, Micol Advanced earns about a B.■

Lou Wallace is technical manager at RUN *magazine (IDG/Peterborough). Write to him c/o* inCider, *80 Elm Street, Peterborough, NH 03458.*

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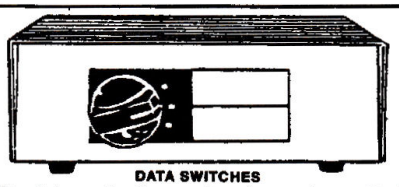

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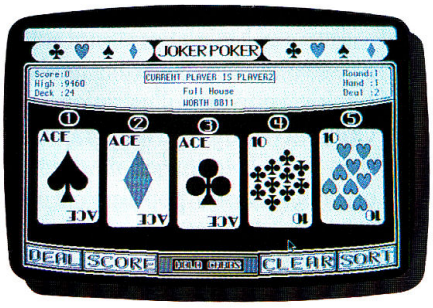

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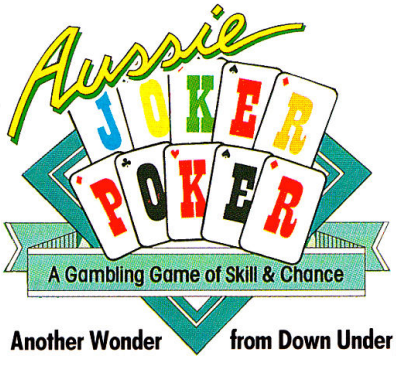

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JP24A

Continued from p. 33

GET TO WORK

The Personal Newsletter work screen is divided into three regions. The first is the upper work area, 80 percent of the screen, where you actually create and format your document. The lower portion of the screen is a command line. A status line indicating the amount of space left on the page and the location coordinates of the cursor separate the work space and the command line.

The command-line interface is easy to use, even though it's not the Mac-like interface many Apple II users have grown to appreciate. On-screen instructions guide you to press the option key (or solid-apple key on a IIe or IIc) in conjunction with other letters to carry out general commands such as (E)dit, (F)ile, (G)raphics, (P)review, (H)eadline, and so on. Each of the general commands in turn invokes another command-line menu. For example, when you press Option-W, you enter Window mode and you're ready to define the position and size of what will eventually become a printed page.

Windows can contain headlines, text, and original or imported graphics illustrations. You set their size and shape to suit your needs, then frame each window with a variety of border styles. Personal Newsletter lets you import ASCII text files from any ProDOS word processor into any designated window. If the imported text exceeds the window space, it will flow over into the next window.

To move the cursor to the beginning or end of a word, line, or paragraph, or to the top or bottom of the work screen or window, press the open-apple key in conjunction with another coded key. GS users who expect total mouse support will be disappointed: Commands activated by the open-apple and option keys function only if entered from the keyboard; there are no mouse-supported equivalents. The program does, however, offer full mouse support in graphics mode.

Headline handling may have been the weakest point in the earlier versions of Personal Newsletter. Version 2.0 has certainly remedied that problem. Now you can create headlines in any of six fonts with nine widths and heights. There are also 25 drawing brushes from which to choose. After placing headlines in the document, you can edit, flip vertically or horizontally, and increase the height of a headline up to four times. You also can copy, delete, or move a headline to another location.

Personal Newsletter comes with an impressive array of drawing tools for designing your own illustrations. Pressing Option-G brings you into graphics mode; then press D to draw a new picture. Another screen will pop up complete with work area and drawing options. The program offers a palette of 25 brush shapes and 30 patterns. You can draw lines, ovals, and rectangles; sketch freehand; enter text; fill a shape; undo your last action; and zoom in to fine-tune an area

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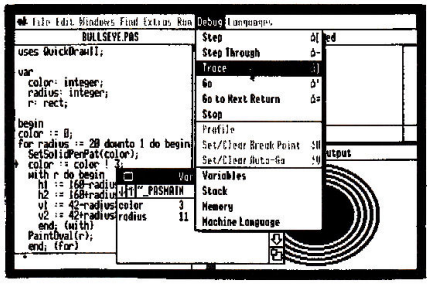

The **ORCA/Pascal Samples Disk** (free with ORCA/Pascal) is filled with programming samples and complete source code, giving you working examples of the Apple IIGS toolbox programming tools. Included is a commercial quality Reversi game. The source code for this will answer many of your questions concerning the intricacies of pull down menus, multiple windows, sizing, and much more. Requires an Apple IIGS with 768K of memory and one 3.5" disk drive.

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pixel by pixel. Choose edit and you can select a rectangular area of the graphic for additional work. You can erase what's in the rectangle, invert it, fill it with a pattern, whitewash it, or black it out.

If you'd rather modify graphics imported from other sources, you can still use all drawing tools and options. Personal Newsletter lets you import standard or double-hi-res graphics from its own clip-art disks. You can also import clip art from any ProDOS Print Shop, Newsroom, or Dazzle Draw picture file. To use clip art from a DOS 3.3 application, you'll first have to convert it to ProDOS format.

Desktop publishing with Personal Newsletter is really quite simple. The program offers a WYSIWYG (what you see is what you get) display, so you have a pretty good idea of what the finished document will look like before you print it. Because the display lets you see only a 2-by-8½-inch segment of the page at one time, you can press Option-(P)review to get a general idea of what the entire document looks like. Another nice feature is that you can cancel printing by pressing the escape key. You'll return to the program without having to wait for the printer to finish the page.

WEAKNESSES

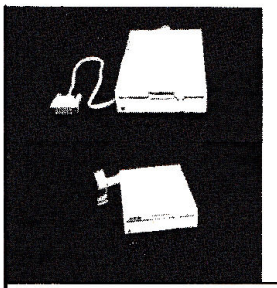
Personal Newsletter isn't perfect. Full mouse support is sorely missed. The program lets you work with only one font in each window. If you want to use another font, you have to change to another window area. The manual lacks a summary reference sheet. There's no automatic smoothing feature to get rid of the jagged edges on fonts in large point sizes or on graphics you've enlarged. Files consist of single-page layouts, so for documents longer than one page, you have to load and print each file separately.

Another problem I encountered is the awkwardness of loading graphics from a subdirectory. First press Option-(F)ile, then type P for *path* and the ProDOS pathname (complete with slash bars and prefix). Then type D for *directory* and make your file selection.

There's no way to catalog the ProDOS volumes in your disk drives or list the files in your subdirectories if you don't already know their full pathnames. So if you plan to save files to a volume other than the program disk, be prepared to do some disk swapping or keep a list of all appropriate pathnames for quick reference.

Personal Newsletter isn't the most powerful Apple II desktop publisher on the market, but it's also not the most expensive. It can use text files and graphics from other applications easily, and it includes a variety of drawing tools to whet your creative appetite. Before long, you'll be producing hardcopy to rival the quality of professional typesetters. For the price, it's a good introduction to the world of desktop publishing.■

Carol S. Holzberg, Ph.D.
Shutesbury, MA



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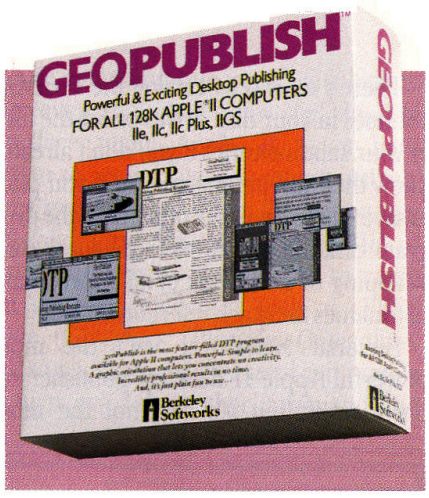

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Berkeley Softworks, 2150 Shattuck Avenue, Berkeley, CA 94704, (800) 443-0100 extension 432, (415) 644-0883

Desktop-publishing program; 128K Apple IIe, IIc, IIGS; 5¼-inch drive, two recommended; joystick optional, mouse recommended; 256K RAM-expansion board recommended

$99.95

Rating: ■■■■

Desktop publishing on an Apple II used to mean designing simple flyers, signs, banners, awards, and newsletters with Broderbund's Print Shop or Springboard's Newsroom and Certificate Maker. Recently, however, Apple II users have become more sophisticated, and their desktop-publishing tasks more demanding. The software industry has responded by developing programs that let you publish near-typeset-quality documents with a "look and feel" that rival those of pages produced by professionals.

Berkeley's new geoPublish is a prime example of the latest breed of high-end desktop publishers. It offers a level of power and sophistication you might not have thought possible on an 8-bit, 128K Apple II. GeoPublish combines word processing with WYSIWYG (what you see is what you get) page-layout capabilities. You can mix text with graphics for placement in up to four columns on a single page.

GeoPublish also sports a Page Graphics toolbox with several object-oriented drawing tools that can import photo scraps directly from the program's clip-art module or from other packages such as The Newsroom, PrintMaster, The Print Shop, and Dazzle Draw. You can also draw original line objects in a variety of patterns and brush widths, sketch geometric shapes with variable border thicknesses, and fill them with patterns. Page Graphics tools let you add text as well in a variety of fonts, styles, and sizes.

Build a template for your geoPublish document in the Master Page layout mode; the guidelines you set and the design elements you define will appear on every page of the published document. Use the Page Layout mode to mark regions for graphics and text on any other geoPublish page. Text wraps around graphics automatically, flows from one column to the next, and spills over onto subsequent pages when necessary. Create single-page documents in the Overlay Graphics mode, then add text and graphics unique to that page.

THE DESKTOP

The first screen you see when you boot geoPublish is the GEOS desktop, which consists of a Command menu bar with pull-down options, a series of drive icons (listing the disks currently inserted), a printer icon with the name of the selected model and its interface card, and a wastebasket for trashing unwanted files.

The large white area in the middle of the screen is the Disk Note Pad containing information about the currently selected disk—its name and the number of bytes used and free. The title bar on the Disk Note Pad sports a Close icon to close the disk and a Folder icon to navigate through the folders on the desktop. Double-click on a folder icon to display its contents, or on an application, desk accessory, or file icon to open it. The geoPublish graphics interface integrates icons, dialog boxes, alert boxes, windows, and scroll bars into the on-screen display—just like the GS or Macintosh interface.

To familiarize yourself with the geoPublish environment, open the demo on the Resources disk to get a bird's-eye view of program features. Then work through the tutorials as specified in the manual. If you're operating from a 3½-inch disk, though, ignore all references to creating work disks.

The tutorials are well written and easy to follow, explaining how to use the program's graphics tools to place pictures on your document page; how to cut, copy, and paste graphics; navigate around the program's various functional modes (Master Page, Page Layout, and Overlay Graphics); edit text objects; manipulate the x- and y-coordinates for layout guidelines; enable ratcheting from the Set menu (to restrict the pointer to one-half-inch increments on the page); activate snapping from the Set menu so that the pointer gravitates towards the guidelines; change the font size; select a font style; set up column guidelines; add headlines; zoom in to view a portion of the page in detail; and many other geoPublish functions.

Among the program's other capabilities are options to stretch and fit bit-mapped graphics within a designated region, and eliminate jagged edges around enlarged graphics and text (called *smoothing*). Check out the library files to get sample master pages; overlay graphics (such as headlines); and standard layout formats for newsletters, reports, flyers, and stationery. You can create master pages for both left- and right-facing book pages, with larger margins on the inside edge to accommodate the text binding.

While geoPublish certainly isn't difficult to use, the program's operation isn't quite intuitive. Be prepared to spend some time reading the manuals, running the tutorials, and experimenting with its many tools and options.

SOME COMPROMISES

Even with all its bells and whistles, geoPublish doesn't rank as my favorite Apple II desktop publisher. It's saddled with a proprietary operating system, GEOS, for one thing. While the graphics interface doesn't affect geoPublish operation and all GEOS applications can indeed read ProDOS files, ProDOS applications can't read GEOS files, and any drive containing a GEOS application doesn't show up as a disk icon on the GS desktop. You will, however, be able to install geoPublish on a large-capacity hard disk or RAM disk to boot from ProDOS.

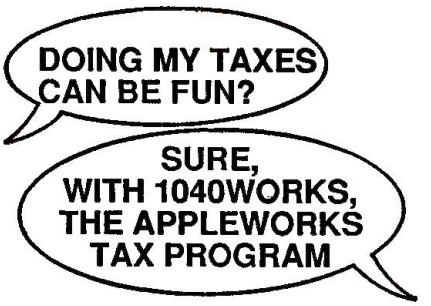
True, the geoPublish Text Grabber application converts AppleWorks, MultiScribe, and WordPerfect documents to geoWrite documents automatically for easy positioning in a geoPublish layout. Formatting instructions from these original word processors are preserved in the translation, but files from nonsupported word processors will lose their formatting information in conversion.

There are several other nettlesome geoPublish features to consider. GeoPublish saves a file automatically when you close, without inquiring whether to keep the changes you've made; there's no eraser in the graphics toolbox; you have to select an object first with the arrow icon, then cut it by selecting the scissors; once you pull down a window from the Command menu bar, you can't drag the mouse to another command to pull down its window automatically—you need to click again.

You can't have two disks with the same name on the desktop. This means you can't easily copy a file from one disk to its namesake. Disk-access time is very slow, even on a GS with 1.75 megabytes of RAM. Every time geoPublish scans your disk drives (which happens more frequently than you'd expect), you hear loud grating and whirring when it checks out an empty 5¼-inch disk drive. I usually insert a "dummy" disk just to eliminate the harsh sounds.

Despite these few inconveniences, though, Apple II users who long for the GS/Macintosh interface will appreciate the GEOS family of "fully integrated productivity software." The geoPublish application may be just the page-layout package you need to inspire creativity and fuel your 8-bit computer's newfound productivity.■

Carol S. Holzberg, Ph.D.
Shutesbury, MA



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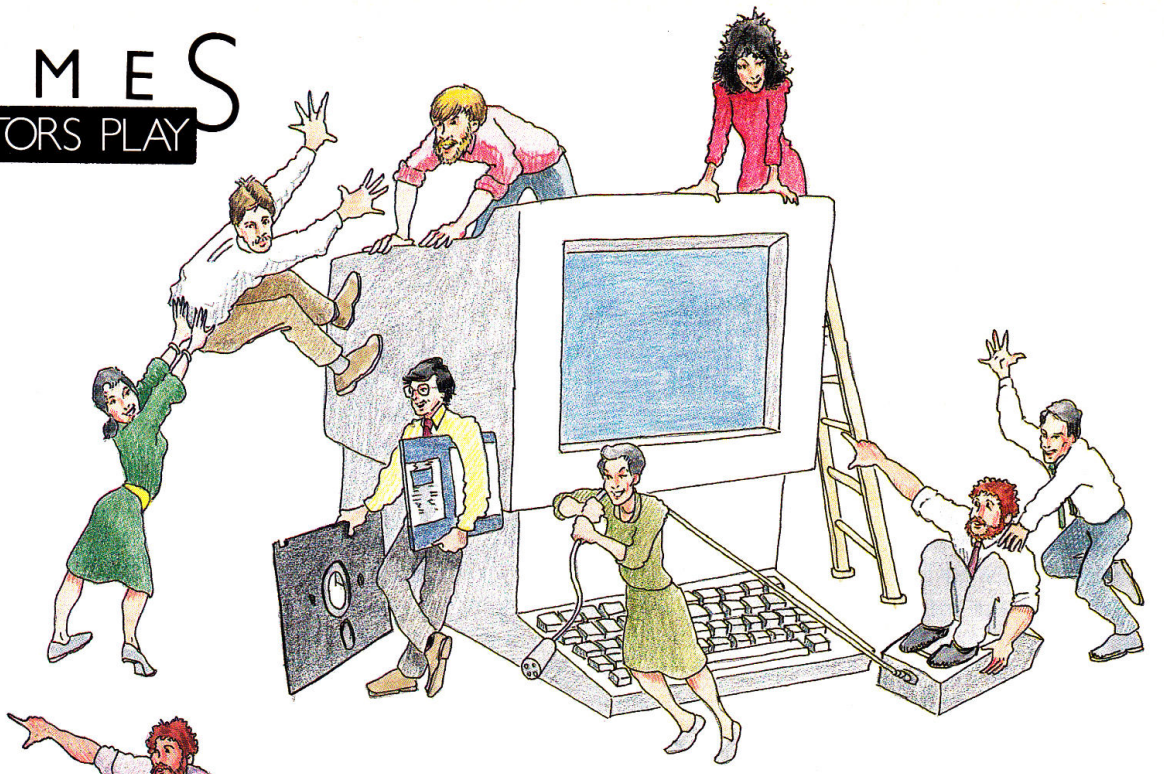


Lafe Low plays...

California Games GS, *Epyx, P.O. Box 8020, 600 Galveston Drive, Redwood City, CA 94063, (415) 366-0606, $44.95*

From the opening theme of *Louie, Louie* to the scrolling mountains and curling waves, California Games is better than ever. The GS version of this already outrageous six-pack is even cooler than the first—and that's no small feat.

Each event—half-pipe skateboarding, surfing, roller-skating, footbag, BMX (bicycle motorcross), and flying disk—looks and sounds a whole lot better. You'll play the same way, but the experience is enhanced by super graphics and radical music.

Surfing was my favorite event in the first edition, and continues to be in the new version. The sound of the surf and the deep blue color of the water make you feel as though you're really cutting turns on a wall of water. The only things missing are sunburn and salt spray.

Paul Statt plays...

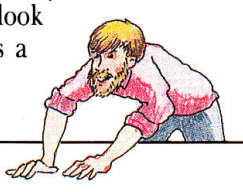
Mini-Putt, *Accolade, 550 South Winchester Boulevard, Suite 200, San Jose, CA 95128, (408) 296-8400, $39.95*

Mini-Putt is as aptly named as its competitor, Zany Golf (Electronic Arts). To the best putter go the spoils in this one. It's like endless hours on the Mean 18 (also Accolade) putting greens, to which some mad groundskeeper has added vertiginous hills and deep lakes, not to mention windmills and elephants.

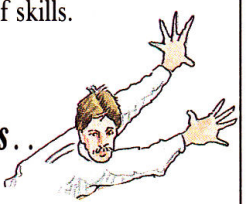
Zany Golf is zanier, with ludicrous music and comical animation. It's also three-dimensional, while you play Mini-Putt on a map. None of the Mini-Putt holes is impossible; they're more Roman than Byzantine. Zany Golf's complex labyrinths take up lots of disk space.

Mini-Putt has four minimalist courses of nine holes each, four times as many as Zany Golf. Do four times the holes equal four times the fun? Not necessarily. Zany Golf's more fun to look at, but Mini-Putt's a tougher athletic challenge. It uses the Mean 18 interface—put the cursor where you want the ball to go, click once to set the power, click twice to set the direction, and let go to let it fly.

Miniature golf an "athletic challenge"? Did I say that? If you agree—and somebody's market research must say that "90 percent of Apple IIGS owners think miniature golf will replace television in the 1990s"—you'll want both Mini-Putt and Zany Golf. Zany Golf's zany, but Mini-Putt really tests your mini-golf skills.



Dan Muse plays...



Fourth and Inches, *Accolade, 550 South Winchester Boulevard, Suite 200, San Jose, CA 95128, (408) 296-8400, $44.95*

Football is a complicated sport, which makes it a challenge to come up with realistic, entertaining computer football games. Game makers seem to have two directions in which to go—they can attempt to realistically simulate the intricacies of dozens of offensive formations and defensive

sets or they can create a fast-action arcade game.

Accolade has taken the latter approach. Fourth and Inches is a simple but fun game that uses the same interface as the company's enormously successful Hardball. If you're familiar with Hardball, you'll be returning kicks and running sweeps in no time.

I consider myself a football purist. I enjoy the subtleties of blocking schemes and zone defenses. In that sense, Fourth and Inches leaves me wanting more. You do select plays and defenses, though, and unless you want to get down to the nitty-gritty there's probably enough strategy to satisfy most game players. My only real complaint is that when you send your receivers on long pass routes, they run off screen and you have to estimate when and if they're open.

Fourth and Inches isn't the ultimate computer football game, but it's the best one I've seen on the Apple II. What it lacks in detail it makes up for in ease of use and entertainment.■

Short Takes . . .

Skate or Die
■■■■
Electronic Arts, 1820 Gateway Avenue, San Mateo, CA 94404, (415) 571-7171, $39.95
Skate or Die's got all the "rad" happenings—twist and turn in a downhill run through the park, crank out some outrageous aerials in the half pipe, soar in the high jump. It's great to try all this stuff without worrying about losing your knees. Skate or Die will bring back a lot of memories—even if you never wore spiked leather gloves or a fuchsia mohawk. (See Games Editors Play, January 1989, p. 88.)

The Last Ninja
■■■
Activision, 3885 Bohannon Drive, Menlo Park, CA 94025, (415) 329-0500, $44.95 GS, $34.95 He/Ilc
You're the sole survivor of the Brotherhood of the White Ninja, out to find the murderous Shogun who slaughtered your brethren and has taken over the palace. Facing Samurai guards, monsters, and an assortment of natural hazards, you'll discover the power in your bare hands and feet as well as the deadly weapons and tools you pick up along the way. You've got six island regions to cover in your search, but we found ourselves stalled in the wastelands with one very hungry dragon looking on. (See Games Editors Play, January 1989, p. 88.)

Zany Golf
■■■■■
Electronic Arts, 1820 Gateway Drive, San Mateo, CA 94404, (415) 571-7171, $39.95 GS only
Zany Golf adds garish colors, bizarre challenges, and whacky music to a game that requires considerable skill. The mouse interface is so simple you won't need instructions; the action's fast, too. It's silly, fun, imaginative, and accessible to all. (See Games Editors Play, January 1989, p. 89, as well as the comparison above under "Mini-Putt.")

Ticket to Hollywood
■■■
Blue Lion Software, 90 Sherman Street, Cambridge, MA 02140, (617) 876-2500, $39.95
Your goal is to deduce the name of a famous movie star from ten clues. To find the clues, you'll track down leads to find the director first. Nostalgia's the thing—you'll move through 80 years of Hollywood history to find your answers. (See Games Editors Play, December 1988, p. 117.)

Sub Battle Simulator
■■■
Epyx, P.O. Box 8020, Redwood City, CA 94063, (415) 366-0606, $49.95
Sub Battle Simulator is historically accurate—you can command a German or American submarine against a variety of enemies—and the graphics screens are fantastic. It won't sink Silent Service, but it's sure to attract a whole new fleet of recruits. (See Games Editors Play, December 1988, p. 116.)

A Question of Scruples: The Computer Edition
■
Leisure Genius/Electronic Arts, 1820 Gateway Drive, San Mateo, CA 94404, (415) 571-7171, $39.95
Answer a series of questions designed to test your morality level, and let the other players guess whether you're telling the truth. This game will even analyze your personality for you. I can't see any reason to play it. (See Games Editors Play, December 1988, p. 116.)

Anchorman
■■■■
Virginia Real Software, P.O. Box 8545, Norfolk, VA 23503, (804) 587-4952, $39.95
With Anchorman, you can bowl a few frames without ever leaving your desk. You can play with either keyboard or joystick. Either way, it's not as easy as it sounds. (See Games Editors Play, November 1988, p. 46.)

Club Backgammon
■■■
California Dreams, 780 Montague Expressway, Suite 403, San Jose, CA 95131, (408) 435-1445, $39.95
Club Backgammon is a realistic adaptation of the popular board game of the same name. You can ask your computer opponent to play as a beginner, intermediate, or expert. A fine choice when you can't find a friend to play. (See Games Editors Play, November 1988, p. 46.)

Soko-Ban
■■
Spectrum Holobyte, 2061 Challenger Drive, Alameda, CA 94501, (415) 522-3584, $29.95
Soko-Ban means "warehouseman" in Japanese. This maze game makes moving boxes around as much fun as it can possibly be—more fun than you'd think, but it does become mindless quickly. (See Games Editors Play, November 1988, p. 47.)

Tetris
■■■■■
Spectrum Holobyte, 2061 Challenger Drive, Alameda, CA 94501, (415) 522-3584, $39.95
The Soviets are just pretending to *perestroika* and *glasnost*, because Tetris is a subtle Commie plot to bury us with colored blocks. Once you start, you won't stop. As addictive as Shanghai, but takes more strategy and coordination. (See Editors' Choice, October 1988, p. 120.)

Test Drive
■■■
Accolade, Inc., 550 South Winchester Boulevard, Suite 200, San Jose, CA 95128, (408) 296-8400, $34.95
Test Drive will provide plenty of scope for your automobile fantasies. Choose your vehicle, then roar off up a winding mountain road. Just don't get stopped by the cops! (See Games Editors Play, October 1988, p. 106.)

Pirates GS
■■■■■
Microprose, 180 Lakefront Drive, Hunt Valley, MD 21030, (301) 771-1151, (800) 645-8632 (orders only), $44.95
The extra graphics and sound effects Microprose has put into the new version of Pirates make this already great game even better. Live out your playing life as a pirate—boarding vessels, dueling with captains, and finally retiring to a life ashore. (See Games Editors Play, October 1988, p. 106.)

Tomahawk GS
■■■■
Datasoft, 19808 Nordhoff Place, Chatsworth, CA 91311, (818) 886-5922, (800) 245-4525 (orders only), $39.95
Tomahawk simulates the complex controls and intricate maneuvers required to fly an Apache attack helicopter. The game has plenty of authentic details, including especially realistic sound effects. (See Games Editors Play, October 1988, p. 106.)□

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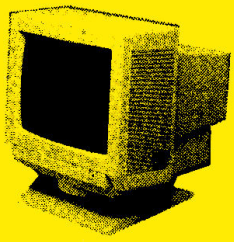

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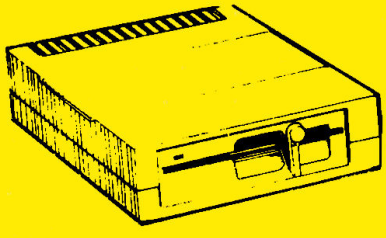

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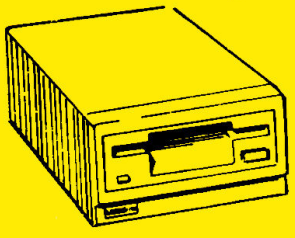

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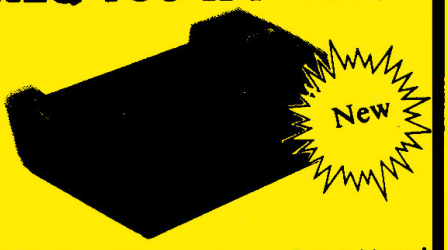

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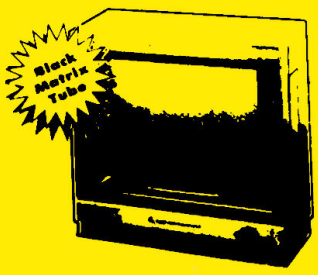

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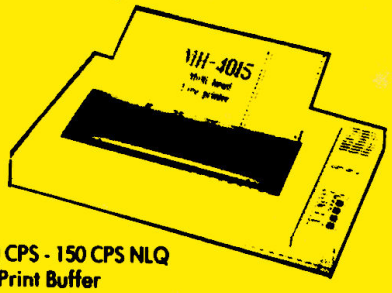

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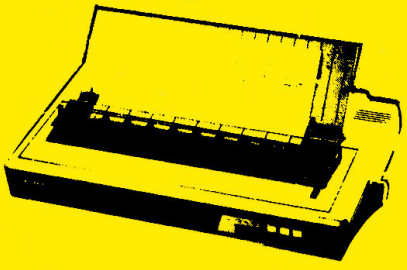

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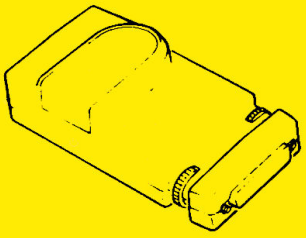

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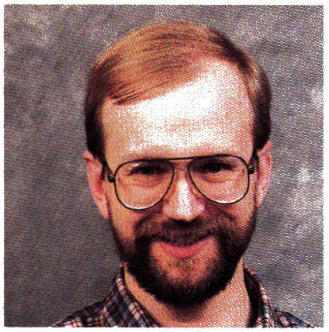

by Scott Mace

"Can Dungeons and Dragons computer fantasies keep players as entertained as human dungeon masters do?"

They depict fantasy, yet the new generation of dungeon games also look and sound more realistic. Whether you're exploring on a GS or on an older Apple II, dungeons have gotten deeper and darker, and their inhabitants have grown meaner and uglier.

DESCRIPTIVE DANGER

Dungeon Master (FTL Games, 6160 Lusk Boulevard, Suite C-206, San Diego, CA 92121, 619-453-5711, $39.95) is one of the latest fantasy role-playing adventures for the IIGS. Visual designer Andy Jarso spent much time ensuring that the rooms in this game appear vividly real, and his effort shows. Even the smallest details on the dungeon's gray walls, such as stone-carved lettering, stand out beautifully.

There are no lengthy room descriptions in Dungeon Master. You can click on items to examine them, but the notes are short and to the point. Because you don't need a large window to display text, the graphics depicting each room practically fill the screen.

At the beginning of the game, the user interface is simple. Click on a scroll to read it. Click on a button by a door to open it. Click on the arrows next to the graphics to move forward, step backward, or turn left or right.

You run into the game's biggest problem after assembling your party of four in the Hall of Champions. Be prepared for the ambitious visual interface you'll use to control your group—it's a totally new element in computer games.

The screen is divided into three main areas, with menus for controlling them to the right. The large area at left center shows either a view of the dungeon or the inventory for a particular player.

Bar graphs show food and water supplies, health, stamina, and a magical energy called Mana. By displaying each warrior's left and right hand continuously at the top of the screen, Dungeon Master makes it easy to click on objects to move them from person to person.

Dungeon Master contains too many marvelous graphics innovations to mention. Among the most intriguing, though, are the torches, which burn brightly for a while, then start to die out. As they dim, the ends turn black and the entire room begins to fade into darkness. Light another torch, and the room returns to total brightness.

There are also some chillingly good animation scenes. Arrows fly true to their targets when you fire them. And when an army of mummies attack, with suitable mouth-hissing sound effects, it's a sight to see. It's also often the last sight you see!

The game's system of magic is a bit too complex for my taste. Using it requires learning a series of runic letters, then stringing them together in a sentence. After many hours of playing, I hadn't mastered any of this mumbo-jumbo.

Like any dungeon game, there are keys to find, doors to open, and trap doors to avoid. You'll also come across scrolls, flasks, weapons, and bones of dead warriors. Your ability to see these objects, rather than merely read about them, sets this game apart. ►

Dungeon Master's exciting, innovative graphics screens bring fantasy to life.

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MACE ON GAMES

ON A ROLE

By now Apple IIe and IIc owners are probably wondering whether the magic's over for your machines. It isn't. Strategic Simulations, Inc. (1046 North Rengstorff Avenue, Mountain View, CA 94043, 415-964-1353), has recently released two role-playing games whose intriguing new play compensates for older Apple IIs' lack of graphics power.

Demon's Winter ($29.95) is a sequel of sorts to Shard of Spring, though the new game world is 32 times larger. Members of your party can pray to a particular god in temples located around the land of Ymros and acquire temporary mystical powers. While Dungeon Master lets you do your own mapping (and lots of it), Demon's Winter provides a "visionary" character who can cast a View Land spell: You'll see the surrounding terrain and any nearby towns or ships.

Demon's Winter falls into the category of Ultimaware (games that are very similar to Ultima). While it shares many of that series' traits, such as travel by ship night and day, it also lacks some features, such as the winds and the phases of the moon. Demon's Winter also adds some new twists—a vine-covered terrain called *kudzo*, for one. Another new wrinkle is cursed weapons. If you wield such a weapon, you'll be unable to drop it until a priest performs an exorcism.

SSI's newfound relationship with TSR Games, creators of the original Dungeons and Dragons role-playing games, is yielding a number of D&D computer games. **Pool of Radiance** ($44.95) combines a Bard's Tale-type interface (with animated graphics displaying countless foes) with a unique tactical display for the unending combat you'll experience. It was inevitable that SSI would spawn a role-playing computer game that's more like a war game than Ultima, Bard's Tale, or any of the other D&D imitators.

Those familiar with TSR's books and noncomputer games will see some familiar monster faces, such as regenerating trolls, rolling around.

It remains to be seen whether official D&D computer games can change the difficulty and pace of the game to keep players entertained, as human dungeon masters do in multiplayer, noncomputer fantasies. Pool of Radiance does seem to get tougher if you get into a comfortable groove. Star Saga/One ("The Game Master's Universe," December 1988, p. 104) works that way, adjusting the level of play as each participant progresses.

Official D&D games emphasize fantasy-world combat and depict the Tolkien-like places, foes, and friends that the TSR fantasy experience has been developing for ten years. That means bigger piles of captured weapons, deeper troves of treasure, and pages of spells and lore to memorize. The biggest mystery remaining is how people played these fantasy games so long without a computer. ■

Scott Mace is editor and publisher of Microcosm, *a monthly newsletter on computer games. Write to him at 6510 Copper Ridge Drive #T-1, Baltimore, MD 21209. Enclose a stamped, self-addressed envelope if you'd like a personal reply.*

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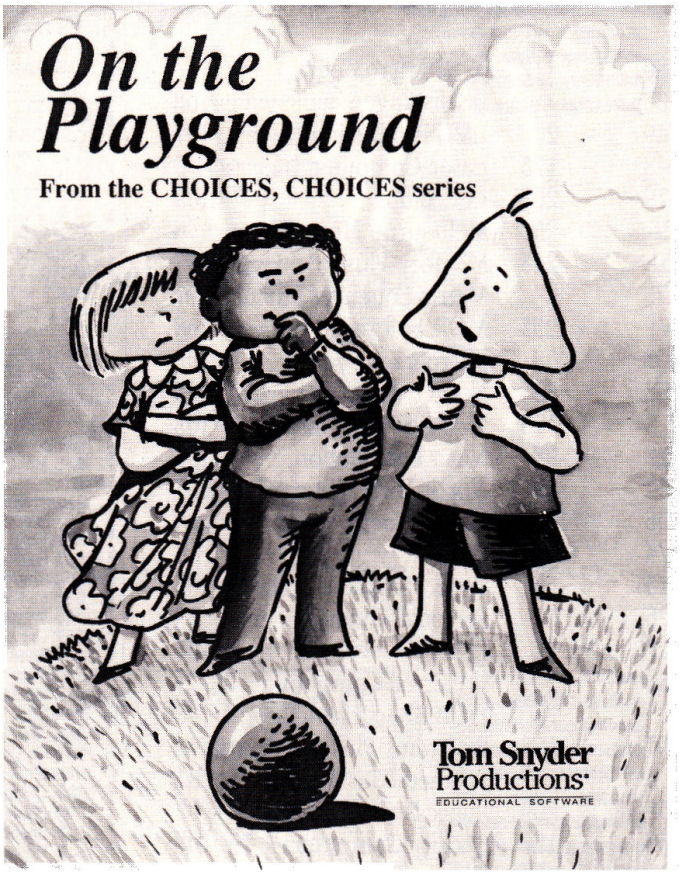
CHECK IT OUT

Alpha Check is a macro-driven **check-writing application** designed to work within AppleWorks. It prints checks and addresses them for window envelopes, updates the check register and balance, and numbers and dates checks. It also tracks tax deductions, generates reports, maintains multiple checkbooks, and transfers information to any part of AppleWorks. Alpha Check can also transfer data to the soon-to-be-released program ACTAsoft AlphaWorks, which generates a full-year spreadsheet and a profit-and-loss statement.

Retailing for $39.95, Alpha Check requires AppleWorks 2.0 or later. For more information, contact ACTAsoft, 19700 Wells Drive, Woodland Hills, CA 91364, (818) 996-6731, or circle Reader Service number 352.



Tom Snyder's Choices, Choices helps kids make decisions outside the classroom.

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Tom Snyder Productions is trying to make being a kid a little easier. The company's new line of elementary-education programs, called Choices, Choices, is designed to help schoolchildren learn to confront **moral issues**. Taking Responsibility, the first program in the series, discusses honesty; On the Playground, the second program, considers how you should treat other kids. Each program sells for $89.95. Contact the company at 90 Sherman Street, Cambridge, MA 02140, (617) 876-4433, or circle Reader Service number 353 for more information.

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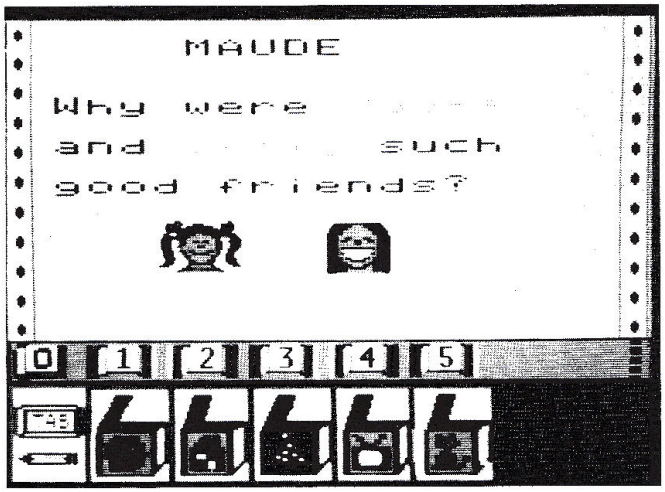
MASS PRODUCTION

Sports-team logos, geography, tiny signs, and music are just a smattering of the graphics available from the Print Shop Users Club (PSUC). In addition to its 20 **Print Shop graphics** disks, the club has also created six fonts and four border disks. The $45 membership package includes 1250 original graphics, a utilities disk, and a copy of the club newsletter. Contact the Print Shop Users Club, Box 3669, Oakland, CA 94609, (415) 655-4594. For orders or to request a free brochure, call (800) 835-2246, extension 216. Circle Reader Service number 358 for more information.

FIRST CHOICES

Houghton Mifflin's FirstWriter, a new **educational word processor** developed by the Houston Independent School District, is designed for children in kindergarten through third grade. With more than 100 graphics and five possible text colors, FirstWriter helps kids learn to create sentences and stories. All instructions are spoken; young children can run the program independently. It also includes a talking dictionary and a Story Starter, which lets budding authors create new chapters from Houghton Mifflin's Reading Comprehension program, presenting children's stories by noted authors.

FirstWriter is available for $117, or $237 packaged with an Echo or Cricket sound-synthesizer board. For more information, contact Houghton Mifflin Company, Educational Software Division, Mount Support Road, CN9000, Lebanon, NH 03766-9000, (603) 448-3838, or circle Reader Service number 355.



FirstWriter from Houghton Mifflin helps kids aged 5–9 begin creating sentences and stories.

Hardware

BIG BLUE APPLES

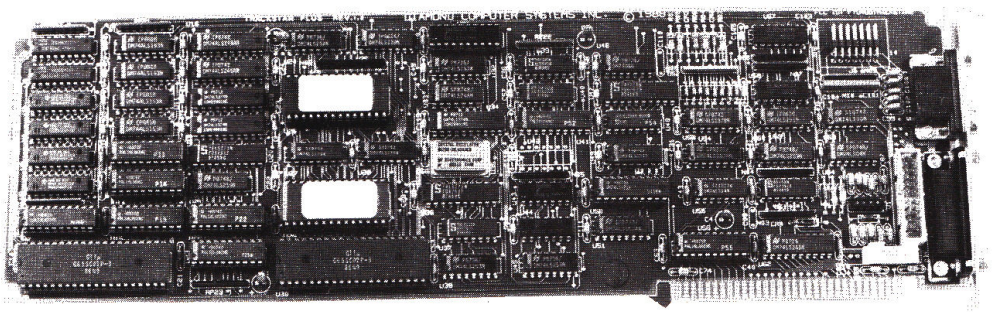
Caught between two systems? The Trackstar E, a **65C02 coprocessor board** for IBM-compatible computers, runs Apple II software on MS-DOS machines. This improved successor to the Trackstar 128 now lets you store Apple files on your IBM hard-disk drive, and transfer files between MS-DOS and ProDOS formats. The full-length board includes 128K of memory, an Apple clock, Apple 40- and 80-column video, an Apple 5¼-inch disk-drive port, and two Apple game ports.

Buying a Trackstar E for an IBM PC/XT/AT/386-class machine is like buying a second computer for only $445, from Diamond Computer Systems, 470 Lakeside Drive, Sunnyvale, CA 94086, (408) 736-2000. For more information circle Reader Service number 356.

APPLETALK LINK

If expensive cables have discouraged you from setting up an AppleTalk network, Local PhoneTalk may help. This device lets you connect any **AppleTalk-compatible** computer or printer to an AppleTalk network with inexpensive, plain telephone cables.

This low-cost alternative, from AESP Data Cable Division, is priced at only $59 per node. Contact the company at 1680 N.E. 205th Terrace, North Miami Beach, FL 33179, (305) 653-0898, or circle Reader Service number 357 for more information.



Transferring files between MS-DOS and ProDOS is a breeze with the Trackstar E from Diamond Computer Systems.

Resources

SILVER SCREEN

Now on videotape is a ***Software Buyers Guide*** containing the latest products from 20 top developers. The accompanying reference guide includes demonstrations and discussions of what to look for in applications such as desktop publishers and word processors. The $39.95 tape (plus $5.05 shipping) is available from VideoAdvantage, Department 68, 1229 Poplar Avenue, Mountainside, NJ 07092, (800) 344-2525, or (800) 348-8181 in New Jersey. Circle Reader Service number 359 for more information.

Product descriptions contained in this section are based on information supplied to us by the respective manufacturers. These announcements are provided solely as a service to our readers and do not constitute endorsement by inCider *of any given product.*

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HINTS/TECHNIQUES

Apple users know there's always an easier way to get the job done. A shortcut here, an elegant twist there—that's what Hints/Techniques is all about. It's an information swap for readers who want to share their programming pointers, DOS tips, hardware secrets, AppleWorks applications, WPL enhancements, and all those other insights that make you go "Aha!" in the night.

Formatter

by Shari Kimmel

Most word processors let you format a printed document to a specified number of characters per line. Unfortunately, many, such as Bank Street Writer, don't put actual carriage returns into a text file saved to disk, so you lose that formatting.

As a consequence, most text files contain carriage returns only at the ends of paragraphs. That's a problem if your software, such as certain bulletin-board programs, can't accept the number of characters most paragraphs contain—you may even lose whole sentences.

The accompanying **Program listing**, Formatter, adds carriage returns after every 65 characters. You can change this value to any integer you want by altering the value of the variable NUM in line 15 (best if greater than 25).

Formatter first asks you for the name of the file to which you want to add carriage returns. Your Apple will generate a new filename automatically by adding *C* to the old filename. For example, if the input file is NAME, the output file is called CNAME.

Formatter then loads 65 characters from the file and finds the beginning of the last word, which is probably broken into two parts. Formatter saves the line, except for the divided word at the end, to disk with a carriage return. It then moves any remaining letters to the beginning of the next line and loads more words from the file to make the line 65

Program listing. *Formatter adds carriage returns to your document when you specify a certain number of characters per line.*

```
1  REM  FORMATTER by Shari Kimmel  [5040]
2  REM  Copyright 1988, inCider  [4851]
3  REM  ProDOS 40-column text version  [5625]
5  HOME : ONERR  GOTO 450  [962]
10  REM  THIS PROGRAM CHANGES THE NUMBER OF CHARACTER
    S PER LINE IN A TEXT FILE TO THE VALUE IN NUM (LI
    NE 15)  [19037]
13  REM  NUM MUST >= 25!!!  [3769]
15 NUM = 65  [655]
20  DIM LINE$(NUM - 1)  [1899]
25  PRINT : PRINT "THIS PROGRAM WILL ADD CARRIAGE RET
    URNS  AFTER EVERY ";NUM;" CHARACTERS IN A TEXT FI
    LE."  [5935]
26 PRE$ = "": REM  USED TO HOLD PREFIX IN PRODOS  [2545]
27  PRINT : INPUT "WHAT IS THE PREFIX OF THE NAME OF
    THE   FILE YOU WANT TO USE?  INCLUDE THE SLASHAT
    THE END.  (RETURN FOR THE CURRENT    PREFIX.) ";P
    RE$  [8996]
30  PRINT : INPUT "FILE NAME-->";F1$  [1529]
33 F2$ = PRE$ +  MID$ ("C" + F1$,1,15):F1$ = PRE$ + F
    1$  [4291]
35  PRINT "NEW FILE NAME IS ";F2$  [4664]
37  PRINT : PRINT : PRINT "PLEASE WAIT ... WORKING"  [5399]
39  REM  OPEN FILE  [1839]
43  PRINT  CHR$ (4);"OPEN";F1$  [1199]
45  PRINT  CHR$ (4);"OPEN";F2$  [1203]
47 P = 1  [507]
50  PRINT  CHR$ (4);"READ";F1$  [1231]
55  REM  GET NUM CHARACTERS FROM FILE  [5408]
60  FOR I = P TO NUM  [1478]
65  GET TEMP$  [1350]
70  IF TEMP$ =  CHR$ (13) THEN 115  [2654]
75 LINE$(I - 1) = TEMP$  [1306]
80  NEXT I  [445]
85  REM  FIND THE END OF THE LAST WHOLE WORD  [7114]
90  FOR I = NUM TO 1 STEP  - 1  [1571]
100  IF LINE$(I - 1) =  CHR$ (32) THEN 115  [3032]
110  NEXT I  [511]
117  REM  PRINT THE NEW LINE INTO THE FILE  [6364]
120  PRINT  CHR$ (4);"WRITE"F2$  [971]
125 START = 2: IF LINE$(0) <  >  CHR$ (13) AND LINE$(
    0) <  >  CHR$ (32) THEN START = 1  [5302]
130  FOR J = START TO I - 1  [1726]
134  IF J = 2 AND LINE$(1) =  CHR$ (32) THEN J = 3  [2269]
145  PRINT LINE$(J - 1);  [1251]
150  NEXT J  [264]
160  PRINT  [715]
163  REM  CHECK FOR END OF FILE  [1484]
165  IF  PEEK (222) = 5 THEN 280  [2447]
170  IF I = NUM OR TEMP$ =  CHR$ (13) THEN I = NUM +
    1:P = 2: GOTO 205  [4112]
175  REM  MOVE THE CHARACTERS AT THE END OF LINE$ THA
    T WERE NOT PRINTED OUT TO THE BEGINNING, AND RESE
    T P TO WHERE THE NEXT CHARACTER READ FROM THE FIL
    E WILL GO  [10181]
180  FOR J = 1 TO NUM - I + 1  [1388]
190 LINE$(J - 1) = LINE$(J - 1 + I - 1)  [4138]
```

Continued

Continued

```
200  NEXT J:P = NUM - I + 2  [1724]
205  FOR J = NUM - I + 2 TO NUM:LINE$(J - 1) = " ": NEXT
   J  [3553]
207  REM  GET MORE CHARACTERS  [1624]
210  GOTO 50  [531]
280  REM  CONVERSION DONE  [3173]
285  POKE 222,0  [984]
290  PRINT  CHR$ (4);"CLOSE";F1$  [1306]
300  PRINT  CHR$ (4);"CLOSE";F2$  [1336]
305  PRINT  CHR$ (7); CHR$ (7); CHR$ (7); CHR$ (7);"D
   ONE"  [3812]
310  END  [2600]
450  REM  ERROR CATCHING ROUTINE  [1720]
460  REM  IF END OF DATA PRINT ANYTHING LEFT IN LINE$
     IN THE TEXT FILE  [4164]
470  IF  PEEK (222) = 5 THEN 117  [2125]
475  REM  ANOTHER ERROR OCCURRED, SO CLOSE FILES AND
   END PROGRAM  [3863]
480  PRINT "AN ERROR HAS OCCURRED.  THE FILE COULD  N
   OT BE CONVERTED."  [4498]
490  GOTO 280  [609]
```

End

characters long. Formatter repeats this procedure until it has converted your entire document.■

Write to Shari Kimmel at 16 Buck Road, East Brunswick, NJ 08816.

Spreadsheet Coverup

by Larry Morton

Combining two databases into one doesn't require magic. The following approach illustrates how you can merge two incompatible databases into a usable one that provides information at your fingertips.

First let's construct new, compatible templates for each database. Format an empty disk and name the volume BASES. Save the two databases in their unaltered form, then arrange each by the same key category. Save the databases separately as Data 1 and Data 2, and print a tables report from each file.

Return to Data 1, and, using the hardcopy as a guide, insert new records for the Data 2 categories and headings missing from Data 1. Save this file as Data X. Now bring up Data 2 on screen, and insert new records for the Data 1 cate-

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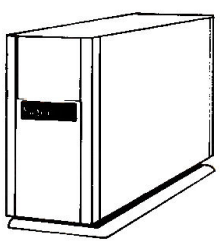

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gories and headings missing from Data 2. Save this file as Data Y. Print a tables report from each new file and compare them carefully for possible errors in category sequence.

Go to the Report Format menu. Referring again to your hardcopies, move the categories you want to transfer as close to one another as possible to reduce left-to-right cursor movement in your spreadsheet later on.

Your next step is to create a master template. Copy the database containing the smaller number of fields to the beginning of the other, and save the file as Template. This master file now holds your newly expanded databases. Print to disk as a DIF (data-interchange format) file, and at the ProDOS pathname prompt type /Bases/Template.DIF. Return to the main menu and create a new spreadsheet file from your DIF file. Name this file Datasheet.

After saving the new spreadsheet, remove the desired information from the upper database and place it in the expanded database below. Change column width for the columns containing the information you're moving and for the categories you arranged from your database. Insert additional columns as separators and reduce their widths to two spaces. Don't forget to save.

As you arrange the spreadsheet, use the Copy command to move exactly what you need from one cell to another. Use the Move command only when you want to transfer entire rows or columns. Next, set up a top and bottom window and synchronize it (Open apple-W, S). Finally, change to manual calculation (OA-V, F, M) for faster speed.

Use the following sequence for arranging information. Copy data from one "data cell" section down to the other, save it as DS1, and check the results using One Window (OA-W, O). After transferring successfully, blank out what you no longer need. Repeat the sequence until you've copied all data cells. (You'll have saved a file for each transfer step—DS1, DS2, and so on.) Save as Mydatasheet.

If you choose to use this as your report, adjust all column widths to reveal their contents. It's also wise to embed characters and lines per inch as printer codes.

Next, print Mydatasheet to disk as a DIF file, /Bases/Mydata.DIF. At the prompt choose columns for DIF order. Create a new database file from this DIF file and save it as Newdata. Create a new tables report and move the cursor through the categories. Delete the string of empty categories. Tidy up the remaining columns now, or wait until you're ready to print a report.■

Write to Larry Morton at 2402 Shenandoah Street #7, Los Angeles, CA 90034.

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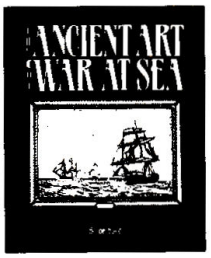

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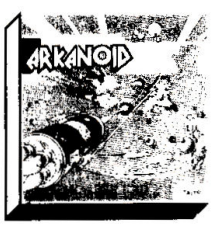

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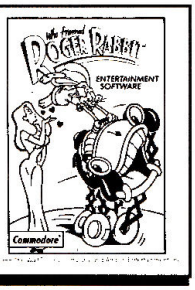

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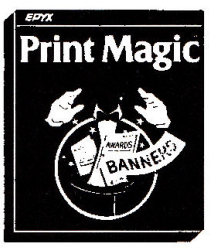

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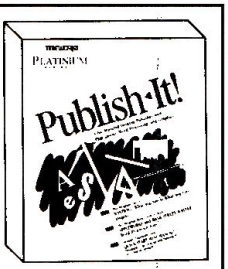

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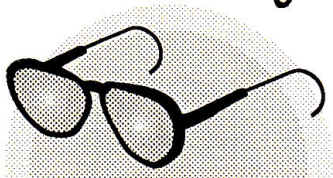

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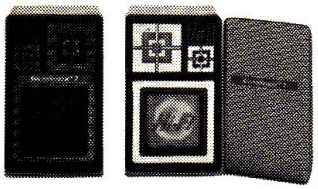

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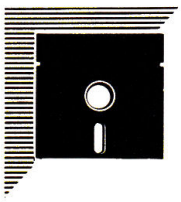

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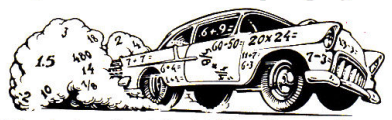

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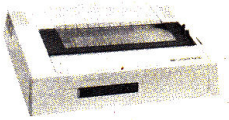

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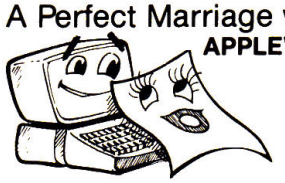

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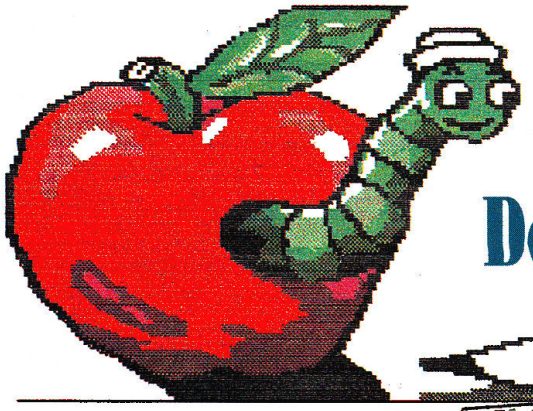


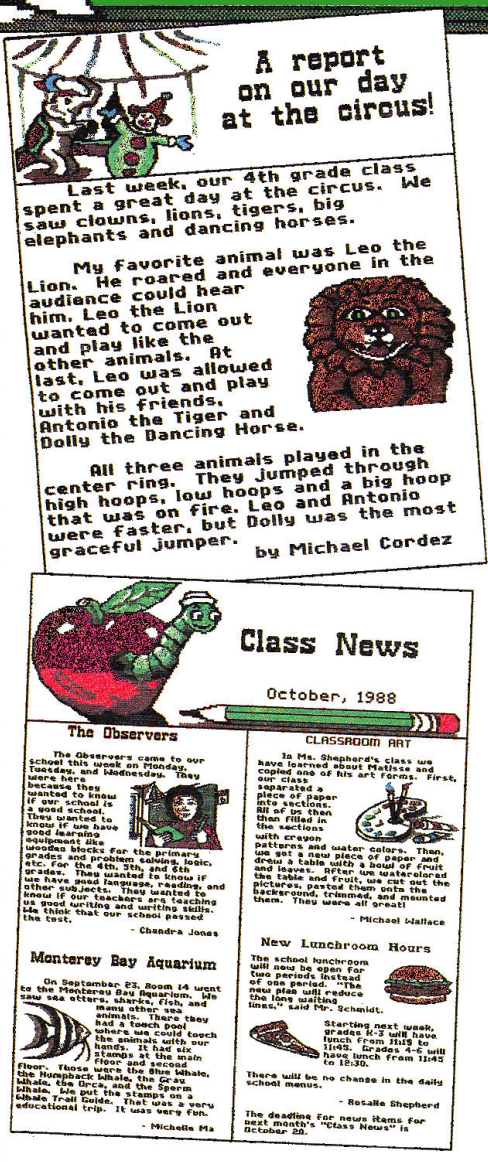
The Children's Writing and Publishing Center: Desktop Publishing Grows Up

As desktop publishing gets more and more popular, page-layout programs grow increasingly sophisticated—in more ways than one. True, the latest packages include a vast array of formatting features, but they also come with steep learning curves and mammoth memory requirements. So what kind of publishing can you do with an easy, 128K program? Try **The Children's Writing and Publishing Center** (CWPC), new from The Learning Company (6493 Kaiser Drive, Fremont, CA 94555, 415-792-2101) for the Apple IIe, IIc, or GS, if you want to see what pure simplicity can do for your documents.

Using CWPC is a breeze. The menu bar across the top of the screen lets you select a font style and size, choose pictures, move from your title to the body of your material, save or retrieve your work (the program comes with a preformatted storage disk), and print.

You can set up one or two columns, and you can use a heading or fill the whole page with text. If you select newsletter format (two columns), your document can be only one page long; you'll have to do any following pages separately. Letters or report documents can be four pages long.

"Grownup" graphics-based word processors are notoriously slow. Not so with CWPC. "I can't believe the way this program accepts type," says Review Editor Lafe Low. "I confess—I skipped two-thirds of my high-school typing classes, but after working on *inCider* four years, I can type fairly rapidly. So far, CWPC is the only desktop-publishing program I haven't been able to beat."



A report on our day at the circus!

Last week, our 4th grade class spent a great day at the circus. We saw clowns, lions, tigers, big elephants and dancing horses.

My favorite animal was Leo the Lion. He roared and everyone in the audience could hear him. Leo the Lion wanted to come out and play like the other animals. At last, Leo was allowed to come out and play with his friends, Antonio the Tiger and Dolly the Dancing Horse.

All three animals played in the center ring. They jumped through high hoops, low hoops and a big hoop that was on fire. Leo and Antonio were faster, but Dolly was the most graceful jumper.

by Michael Cordez

Class News

October, 1988

The Observers

CLASSROOM ART

Monterey Bay Aquarium

New Lunchroom Hours

Top, CWPC's letter/report format. Pictures from the clip-art gallery are easy to place; text wraps around automatically. Bottom, newsletter format. Predesigned headings, an easy-to-use menu bar, and basic options keep things simple.

Selecting and placing pictures are equally quick and easy. CWPC comes with a gallery of 159 pictures and predesigned newsletter headings; it can also import Print Shop-compatible graphics if you run out of ideas. When you find one you want to use, just press Return and position it with the arrow keys. In the blink of an eye, your text will wrap around it automatically. The only thing missing here is a delete option for pictures.

"It's simple," adds Senior Editor Paul Statt. "I've been looking for years for a desktop-publishing program that isn't as difficult as setting type. CWPC doesn't do everything, but it does everything it needs to without fuss—you can type words fast, enter pictures fast, and put them together fast. I wrote a newsletter with CWPC without even reading the instructions—anybody can do it."

At $59.95, The Children's Writing and Publishing Center is a great deal. It's the desktop-publishing program your kids have been waiting for.■

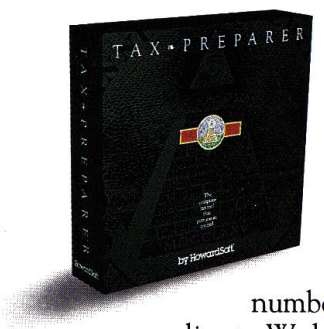
Every month, hardware and software manufacturers release dozens of new products into the Apple II market. Editors' Choice singles out one product each month that the inCider *editors feel is a significant addition to the Apple II family of products. Products evaluated in Editors' Choice are among the most recent releases and may not be available yet for retail distribution.*

I can't afford a tax return that isn't accurate. Neither can you.

I prepare tax returns. Lots of them. So I considered buying tax software for my computer. But when I found that most professional packages cost well over $1,000, with a hefty annual charge to match, I was a bit surprised. For an investment like that, I'd seriously consider staying with my service bureau.

"Then I saw an ad for HowardSoft's Tax Preparer®"

I was skeptical. First, Tax Preparer only costs $295, and updates are less than $100 a year.



Second, I know that a lot of people use Tax Preparer to do their own personal taxes. So when I read that the same software was supposed to do the job for us pros, I had to put it to the test.

I plugged in the numbers for one of my toughest clients. We have to file Form 8582 for this guy. He's got real estate, limited partnerships, bank accounts for his kids . . . you name it.

Getting started was simple. My computer-phobic partner and I did it on the first try.

But the big surprise came when I found out we didn't have to complete any passive worksheets. In fact, we didn't have to enter *anything* on Form 8582 ourselves, or even tell the computer we needed it! Instead, Tax Preparer generated it automatically.

Its execution of the Passive Activity Rules was nothing short of brilliant. When I did it by hand I had to calculate the whole return with *and* without the passive activities to get it right. Tax Preparer transfers *hundreds* of numbers among IRS forms, and recomputes AGI as often as necessary to get an accurate return. Automatically. It all happened so fast, I almost missed it. And the results were clear, and right to the penny.

Next, I gave it a return that even had the $1,000 packages confused last year. In fact, the IRS had to issue Special Announcement 88–38 to show people how, if you have an IRA deduction, you have to compute the taxable part of social security *twice* to get the right result. HowardSoft was way ahead of these guys. Their software performed flawlessly.

Tax Preparer even understood about limiting investment carryovers to 17.5% of the total carryover, long before IRS Announcement 88–52.

I tried everything to trip it up. It blocked illegal combinations of dates, methods, and recovery periods from my depreciation entries. It kept my itemized lists accurate to the penny, but rounded to the dollar on the form, just like the IRS says to do. It even cross-referenced my supporting statements to the forms they supported, automatically.

"HowardSoft's attention to detail made all the difference."

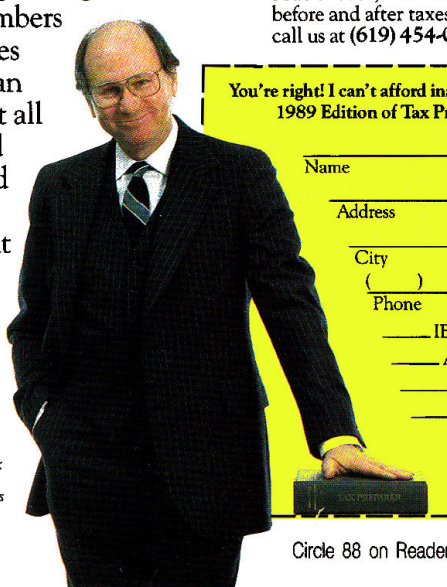
I was impressed. So impressed, I bought it. And I've used it all year, both to prepare returns, and to plan taxes using its built-in projections into the 1990's.

So, look. You can keep fooling around with a service bureau. Or you can pay five to ten times as much for software with no more tax knowledge. Or you can even chance one of those cheapies if you plan to do the complicated calculations yourself.

But why risk it? Just fill out the coupon, or pick up the phone and call HowardSoft. Get the tax software that gives you just what you need, at a price you can afford.

Tax Preparer by
HowardSoft®
Professional software at a personal price.
1224 Prospect Street, Suite 150
La Jolla, CA 92037

HowardSoft's professional software at personal prices includes our California Supplement™ for preparing the state return starting with Federal data, and Real Estate Analyzer® for analyzing income property before and after taxes. For more information, or a dealer near you, call us at **(619) 454-0121.**



You're right! I can't afford inaccuracy, either. Please send me my copy of the 1989 Edition of Tax Preparer (for 1988 taxes) as soon as it's released.

Name _____

Address _____

City _____ State _____ Zip _____

( ) _____
Phone

____ IBM-PC or MS-DOS compatible @ $295 $ _____

____ Apple II series @ $250 $ _____

____ My check is enclosed. *In California, please add 6-1/2% sales tax.*

____ Please charge to my ☐ Visa ☐ MasterCard.

Acct. No. _____

Signature _____

HowardSoft, Tax Preparer, Tax Preparer: Partnership Edition, Tax Preparer: California Edition, and Real Estate Analyzer are trademarks of Howard Software Service; IBM of International Business Machines Corporation; Apple of Apple Computer, Inc.

Circle 88 on Reader Service Card.

We've taken a slightly different approach to creating software for your IIGS.

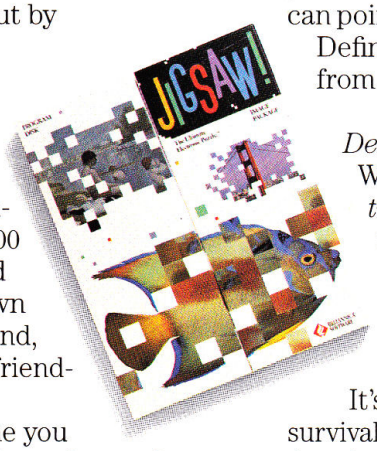
Most IIGS software is created for everyone else first–for IBM, Commodore, Apple IIe.

Then minor changes are made for the IIGS. In fact, sometimes all that changes is the sticker.

At Britannica we don't work that way. We start out by designing *on* the IIGS–*for* the IIGS.

That's why our software takes full advantage of your 4,000 colors, digitized sound, pull-down menus, GS/OS and, of course, your friendly mouse.

So isn't it time you give your IIGS the software it deserves–like these?



JIGSAW!
Awarded "Editor's Choice" in the December '88 edition of inCider. *JIGSAW!* was called "deceptively simple, yet maddenly complex."

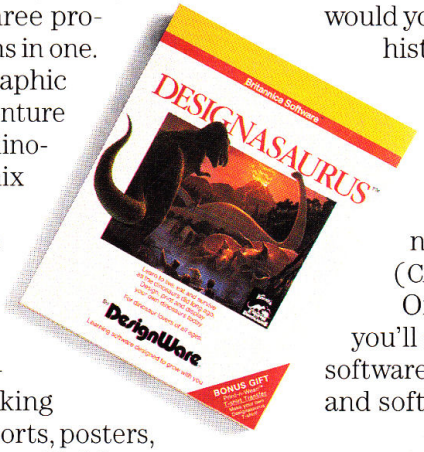
This wonderfully addicting electronic puzzle uses all 4,000 of your IIGS colors in its 24 images. Each image can be scrambled into 8, 15, 40 or 60 pieces. Then you see how fast you can point and click it back together.

Definitely captivating for anyone from 4 to 104.

Designasaurus.
Winner of the Best *Educational Program* award from the Software Publishers Association, this run-away hit is actually three programs in one.

It's a graphic survival adventure (*you're* the dinosaur). It's a mix and match game (create your own species). And it's a printing program for making dinosaur reports, posters, booklets –even T-shirts.

For dinosaur-lovers of all ages.



Revolution '76.
This spectacularly rich historic simulation is easy to learn. Yet challenging to conquer.

You'll unite colonies. Build armies. Make or break alliances. And pick leaders.

Could you have set the groundwork for one of the world's most successful nations? And how would you have changed America's history? Play *Revolution '76* and find out.

For time-travellers 14 and up.

Look for all three programs in software stores near you, or call 800/572-2272 (CA: 415/546-1866).

Once you try our software, you'll see the difference between software created for everyone else and software created just for you.

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