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Apple II / Macintosh

AN IDG COMMUNICATIONS PUBLICATION
June 1992

FIRST LOOKS, P. 15

Mac LC II & Headline Harry

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MORE WAYS TO CUSTOMIZE YOUR MAC

NEW APPLE II SOFTWARE

- 27 Shareware Hits
- Apple II Report

REVIEWS

- ProTerm 3.0
- Wordtris
- First Aid with Reddy
- Gold of the Americas

WAY COOL MAC . . . HE'S BACK

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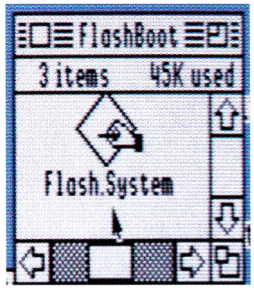
What is 3 times faster than a disk drive? A RAM Disk

Every Apple IIGS has a built-in RAM Disk capability that lets you reserve some of your computer's memory as a super-fast electronic disk drive. Set up your RAM Disk in the morning and you might not have to swap program disks all day! Thousands of users have already discovered the speed and convenience of the RAM Disk. Now you can, too, with FlashBoot.



FlashBoot lets you quickly save and load the contents of your RAM Disk. First, set up your RAM Disk the way you want it using the IIGS Installer and Finder. Then use FlashBoot to save a copy of your RAM Disk to a set of self-booting 3.5" disks. Now loading your RAM Disk is as simple as booting your backup disk—you don't even need FlashBoot to load it! Plus FlashBoot offers a number of flexible options to boot the RAM Disk and the other drives attached to your computer.

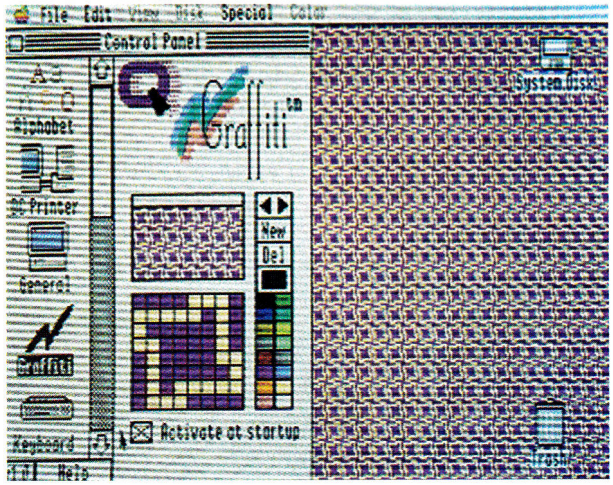
What can you put on the RAM Disk? Anything you want! Using GS/OS and the Finder is no hassle with your IIGS System Disk installed in RAM. Add more fonts, desk accessories, and other enhancements—even Q Labs' *Signature* and Westcode's *Pointless*—to your RAM-based System Disk instead of being limited to a single 800K 3.5" disk. Put your AppleWorks GS System, Program, and Dictionary disk on the RAM Disk for integrated power. Or install HyperStudio, Platinum Paint, and Quickie software for a multimedia workstation. The possibilities are as wide open as your imagination!

FlashBoot is fully compatible with IIGS System 6 and all other hardware and software. Discover the RAM Disk speed and convenience built into your IIGS today with the Q RAM and FlashBoot!

FREE WITH PURCHASE OF 4 MEG Q-RAM GS OR ANY 4 MEG RAM UPGRADE

FlashBoot $29.95

Spice up your desktop

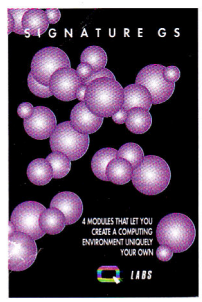


Is your IIGS just plain vanilla? Now you can make it any flavor you want — with Signature GS, Q Lab's set of C-Devs that will soup up your Apple IIGS. Signature GS lets you create a computing environment that is uniquely your own. With Signature GS you get:

PHANTASM — A utility that prolongs screen life — and looks good doing it. When your screen has been still too long, it can become damaged. Phantasm prevents damage by automatically giving your screen something to do. A variety of fun, attractive screen activities are available, plus you can tell Phantasm when to come on.

GRAFFITI — There's nothing wrong with the IIGS desktop — except it's boring. Graffiti gives you a variety of colorful desktop patterns to choose from — or you can create your own.

SONICS — The "S" in IIGS stands for sound. Sonics lets you customize your IIGS sounds, and assign special sounds for specific functions. And these aren't just beeps — they're fun and entertaining. Add sounds to Insert/Eject Disk, Dialog Boxes, etc.



BOOTMASTER — Changing the configuration of all your IIGS's drivers, and system elements can be a pain. But BOOTMASTER makes it easy by putting the controls for all your IIGS's drivers, CDAs and NDAs on one master control panel. You turn them on and off at will — and change your selections easily.

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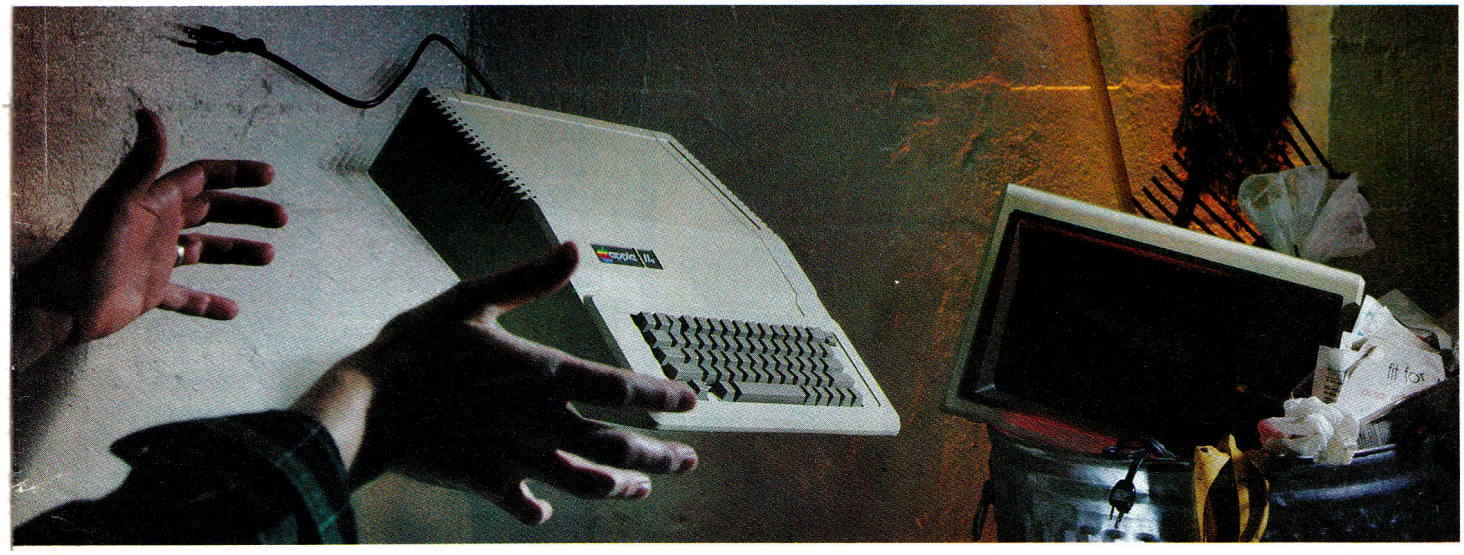

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SYSTEM REQUIREMENTS: *SOFTDISK*–APPLE II+, IIc, IIc+, IIe (enhanced), IIGS and Laser 128 computers 64K required, 128K recommended. *SOFTDISK G-S*—Apple IIGS computer 1.0 meg and one 3.5" drive required, 1.25 meg and two 3.5" drives recommended.

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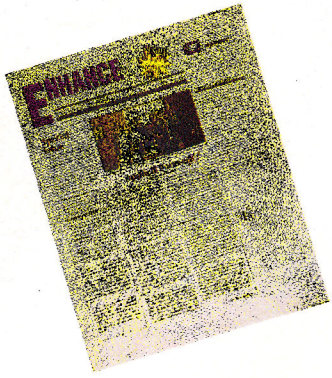

Enhance is Quality Computers' bi-monthly informative-technical-entertaining newsletter. *Enhance* gives you the kind of information you need to make your Apple the effective work/educational tool it was designed to be, like product reviews and comparisons, new product announcements, news, and two special sections, Enhancing Education — focusing on key educational topics like grants, fund raising and hypermedia applications; and Club Corner — designed to spark interest in User Groups across the country.

Enhance also includes our catalog — full of all the hardware and software you need for your Apple II. Quality Computers catalog includes detailed product descriptions and MONEY-SAVING COUPONS.

Quality Computers has been publishing *Enhance* for over 4 years. It's free to all QC customers, or you can call for your free subscription today!

"After reading through this issue of Enhance, I am ready to invest in upgrading my Apple IIGS and add some programs rather than go to the MS-DOS computers. You have restored my faith!"

Robert C. Donald
Hall Park, OK

"You publication is every bit as informative as the other

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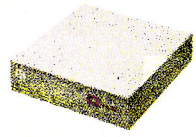

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The Q Drive is the best SCSI hard drive available. Automatically formats itself for IIe or IIGS, and comes with 15 MEG of free software.
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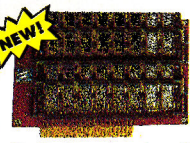
See page 4

NEW!



Quality Computers does it again. Tired of the low quality of many RAM cards, we built our own. The Q-RAM card uses SIMM modules to boost your IIGS's memory. The Q-RAM card comes with a 30-day, no-hassle trial period, and a 5-year warranty.
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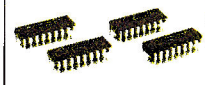

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NEW!

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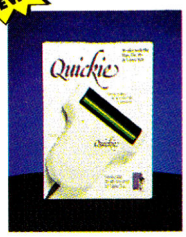

VITESSE
The new Quickie 3.0 includes exciting upgrades to both ProDOS 8 and GS/OS versions. The new ProDOS 8 version supports line art and photo scanning with dithering, and more. The GS/OS version offers new features in the tool palette including lasso, eraser, pencil and fatbits. There is also a "merge scan" command.

Quickie 3.0 ..... 199.95
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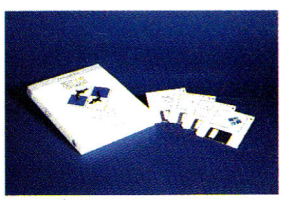
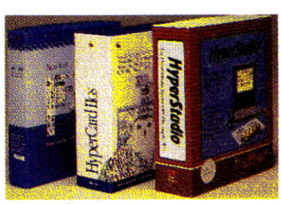
VITESSE
Salvation Supreme *is the complete hard drive utility for the Apple IIGS. It includes: Bakkup, for high-speed backup and restore; Exorciser, to detect and cure viruses; Wings, a comprehensive hard drive management system; Renaissance, for fast, thorough optimization; and Deliverance, to recover lost files and find bad blocks.*

Salvation Supreme 99.95



BYTEWORKS
ORCA/M 2.0 *supports all of the new features of Apple operating systems, including longer path names, resources, and networks. It is faster, and has loads of new features to make programming easier. You also get GSBug to help you debug machine language programs, and Apple's Rez compiler and Derez decompiler to create and modify resources.*

NEW! ***Orca/M 79.95***



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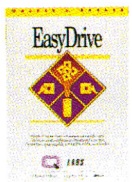

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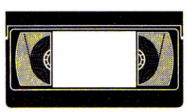

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The Q-RAM GS

When we could no longer find reliable, affordable hard drives, we made our own—the Q Drive. The Q Drive made Apples faster and easier to use. In fact, it was such a success that we had to wonder why we'd waited so long. Now we've done it again.

Introducing the Q-RAM GS memory card.

The Q-RAM GS is an economical way to add up to 4 MEG of memory to your Apple IIgs. It's fully compatible with all Apple IIgs hardware and software—including the IIgs RAM Disk and DMA peripherals like the Apple II High Speed SCSI Card. And it's so small that it fits in your shirt pocket.

When you install the Q-RAM GS life becomes just a little easier. Programs load completely into memory at startup, eliminating disk swapping. Out-of-memory error messages disappear. You'll have memory to spare—memory to load desk accessories, or to set up a convenient RAM disk.

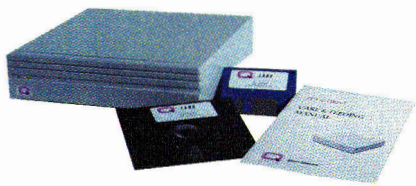
Installation is simple. You can expand a Q-RAM GS by snapping in standard SIMMs—we even include the necessary diagnostic software for your peace of mind. And since the Q-RAM GS uses SIMMs, your memory investment won't go to waste.

Of course, since you're dealing with Quality Computers, you get an unconditional 30-day money-back guarantee and a five-year warranty. And the price is the best news of all—a 2 MEG Q-RAM GS costs about the same or even less than other IIgs memory cards in a 1 MEG configuration!

CAPACITY	PRICE
1 MEG	99.95
2 MEG	149.95
4 MEG	249.95

30-day money-back guarantee • 5-year warranty

The Q DRIVE



Thousands of drives later, experts still are praising the Q Drive for its performance and value. *inCider/A+* gave it a four-and-a-half-star rating. Our customers are using words like "amazing" and "fantastic" to describe the way the Q Drive has changed their computing.

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GS110 Milestones 2000: This game is based on an old French game. You have to play mileage cards to advance your own auto while stalling your opponent with flat tires and accidents. Great graphics.

GS117 Star Trek Classic GS: A remake of one of the earliest computer games ever written. Fire your photon torpedoes and laser, do short range scans and use your warp drives to defeat Klingon and Romulan star ships.

GS103 & GS104 Cosmocade: On the first disk, you must Journey to Calibus in a fast-paced arcade style game. Disk two is called Naxos. A joystick is required.

GS145 Sensei: A karate-style game by the FTA. Use a joystick to fight your way into a black belt.

GS119 Columns 2.0: In this game which is similar to Tetris, you arrange falling blocks so that colors line up. Includes rock music background.

GS131 State-of-the-Art Games: This disk includes PlasmaLab 2, Xpurpose, BlackJack Tutor, From Beyond, FTA Plotting, Game Maker and Explorer GS.

GS129 Games, Games, Games: Cribbage, Rubik Cube, Poker Challenge, Solitaire NDA, Golden Bug, Elevators & Word Search.

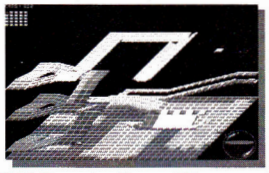
GS105 Space Clusters: A clone of Galaxian.

GS118 Memory Card Game: Full color GS version of Concentration plus Wisconsin Rummy and Hearts.

GS157 Fun, Fun, Fun: A strategy game called Floortiles plus 19 other fun programs.

GS146 Easy Dead: Mindless arcade action.

GS137 Dr. Mario & Others: Tetris like game plus Quinette, PuzzleGS, and Pac Man NDA.



GS154 Bouncing 'Ferno: This game will remind you of Marble Madness as you attempt to bounce your way through a maze of ramps and elevated terraces. Brand new from the FTA.

GS88 PixMix: Turn any SHR graphic into a fun onscreen jigsaw puzzle.

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GS144: A large collection of songs for use with Electronic Arts' Music Construction Set.

SL01 MidiSynth™ Jukebox: This is the hottest music program available for the GS. Full orchestral sounds with unbelievable quality. You won't believe your ears.

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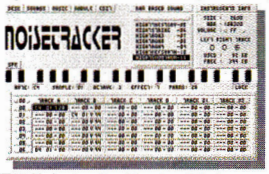
GS53 SoundSmith: The best known music program for the IIGS will have you rocking.



NT00 Noisetracker Version 1.0: An exceptionally fine music program from France.

NT02 thru NT09: Eight disks full of songs and wildness for use with Noisetracker.

HYPERCARD GS

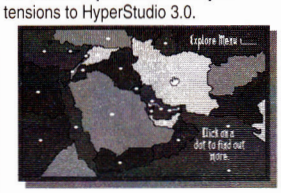
HC04 Hyperfun: Eamon Adventure game and an animation stack. Lot's of fun.

HC05 HyperHome: A tutorial for using HyperCard plus a chemistry stack and a check book management stack.

HYPERSTUDIO

HS26 & HS27 Civil War Stack: Learn about the causes, the personalities and the history behind the U.S. Civil War. Great graphics.

HS48 Developer Pack: Write your own extensions to HyperStudio 3.0.



HS46 Middle Eastern Stack: Learn the history and geography of Iraq, Iran, Kuwait and the other Middle Eastern countries.

HS45 Sound F/X: Digitized sound effects ready for use with HyperStudio. Beeps, drums, booms, barks, clangs and alarms.

HS43 Sound of History Vol 1: Learn history by hearing great speeches from the past.

HS37 Geography: Learn about US States.

ANIMATIONS

GS138 The Delta Demo: From the FTA in France, this program shows off the best of the IIGS: the graphics and the music!

GS135 Simple Animation Program: An animation workshop which you can use to design your own creations.

GS136 The SAP Wall: Based on Pink Floyd's "The Wall", this animation will rock you.

GS94 Modulae, GS34 Nucleus, GS134 Animaga: More demo animations by FTA.

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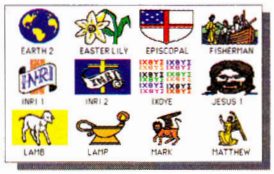

GS133 Religious Print Shop GS Graphics: Eighty all-new graphics for Print Shop.

GS07, GS08, GS29, GS35, GS77, GS78, GS100, GS106 & GS123 Graphics, Fonts and Borders for Print Shop GS: Nine completely different disks for use with Print Shop. Each disk contains at least 72 multi-color graphics and most have borders and fonts.

GS48 GIF Graphics: 75 colorful graphics in GIF format plus an all-new IIGS graphic utility program to view or convert them.

GS124 Dinosaur Clip Art: Black & white clip art (640 mode) of dinosaurs.

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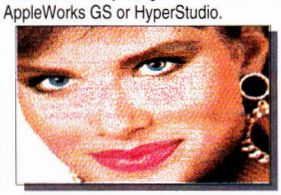

GS148 DYA Exhibit A: A 3200-color slide show with 28 beautiful full-color graphics.

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GS107 Yet Another Fractal Program: Create Mandelbrot and other fractal graphics.

IIGS UTILITIES

GS158 System 6.0 Special Effects: Spruce up your System 6.0 disks with these utilities.

GS120 Icon Mania: Everything you need to add new icons to the IIGS desktop. Two icon editors and hundreds of predrawn icons.

GS47 GS/OS Goodies: Our all-time best selling disk. This disk contains over 20 new desk accessories including ShowPic.

GS154 Gyrus Desktop Utilities: Everything a power user could want. Desk Accessories galore, including a calculator, a clock, a sound player, a Chinese Checkers game, Also an animated screen blanker, a SHR screen saver, a text file reader, utilities that load fonts & NDAs "on the fly". Much more!

GS151 Way Cool Jazz: Now you can jazz up your GS just like the experts do.

GS99 Twilight Screen Saver: This CDev is a completely modular screen saver which operates from within GS/OS. This is a must-have program for all IIGS owners.

IIe & IIc PROGRAMS

R07 AppleWorks Patcher: Fix up your AppleWorks 3.0 with these patches.

H73 CEEMAC: Kinetic art generator.

G46 Columns IIe: A Tetris-like game in which you rotate gems to match up columns.

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inCider A+ Apple II/Macintosh

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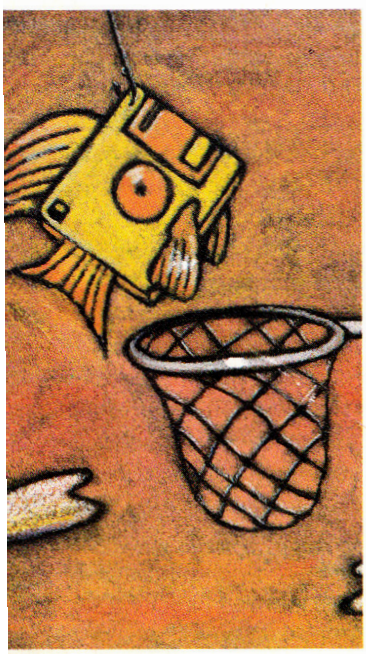
ARTICLES

34 **Totally Radical Mac** by Owen W. Linzmayer

It may be hip to be square if you're Huey Lewis & the News, but it's a death wish for any respectable Mac user. Truth is, Macs just wanna be cool . . . . And, luckily, it's easy to customize the Mac's operation to reflect your unique style. *inCider/A+* has once again combed through the best user-group libraries, on-line databases, and commercial offerings in search of neat programs and products that fit just one strict requirement: They have absolutely no redeeming value other than the totally radical coolness they bestow on Macs and their owners.

40 **Shareware: Catch of the Day** by Joe Kohn

What's new for the Apple II? Whether you're after fun and games, a boost in small-business or home-office productivity, or a supplement to your classroom lessons, thousands of programs are available, with more appearing every day. Don't look for them at your local dealership, though — we're talking about shareware, freeware, and public-domain products. Dial up an on-line service, visit your local user group, peruse a specialized mail-order catalogue — you're in for a money-saving treat.



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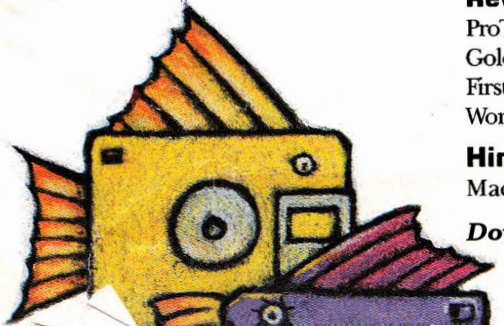

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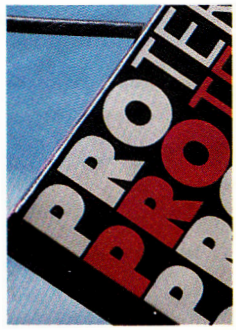

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WHO'S DRIVING?

A funny thing happened on the way to a low-cost color dynasty: Apple made a pit stop.

No one will dispute the statement that the Apple IIGS is a great computer. Its sound, its graphics, and its ample supply of slots for expandability have made it a hit with a million home, small-business, and education users. But a funny thing happened on the road to building a low-cost color dynasty: Apple stopped the car. It never improved on the GS or marketed it the way it should have or the way it could have. For one thing, Apple never boosted the GS' random-access memory to an acceptable level. The original machine shipped with a mere 256K; then Apple bundled a memory card with an additional 256K. Eventually the system shipped with 1 megabyte on the motherboard, but by that time it needed 2 megabytes to handle GS applications.

By DAN MUSE * EDITOR IN CHIEF

Apple's lack of attention created a large third-party market, but word was out that the GS out of the box didn't exactly show off 16-bit software such as AppleWorks GS. Software vendors became reluctant to develop for a machine with inherent — though not insurmountable — weaknesses.

If Apple had shipped a GS with 2 megabytes (or more) of RAM and an 8-megahertz 65816 CPU (central processing unit), who knows how much more successful the GS would have been? But that could be precisely why Apple never really invested in improving or marketing the GS.

When *inCider* reported on the new GS in October 1986, Review Editor Eric Grevstad commented that "the IIGS is a splendid product. My fear is that Apple will hide its light under a bushel." By the late '80s it became clear that Grevstad's fear was well founded: Apple was a Macintosh company and promoting the IIGS wasn't on the agenda. Unfortunately for Apple, the alternatives were a hugely expensive color Mac or a black-and-white Mac. Those scattered offerings provided room for IBM and assorted clones to move into the education market.

Has Apple learned from the mistakes it made with the GS? Based on the success of the Mac LC, it appears that it has. The LC is probably the best-selling Mac right now — but it's also one of the lower priced. True, the original LC has some limitations. The 68020 chip is old technology, incapable of taking advantage of System 7's virtual-memory capabilities. And the machine's standard 2 megabytes of RAM is simply no match for the new operating system.

In March, however, Apple shipped the LC II — no major revision, just some things that make it a more attractive purchase, such as a 68030 processor and 4 megabytes of RAM on the logic board. Rumor has it that an LC with a built-in CD-ROM drive and an Apple IIe Card on a chip will follow this fall.

Apple now sees that it's important to have a low-cost color system for home and school. It also seems to realize that it can't hold back on features under the assumption that the consumer will simply move up to the next level — in this case, the Mac IIsi.

Apple sold about a million GSes. It could have sold three million. When you look at a GS with an internal hard-disk drive, an accelerator, and gobs of RAM running HyperStudio, AppleWorks GS, or even 8-bit Publish It! 4, you realize that the GS is a powerful system. Unfortunately, the road to that power is one you have to travel alone.

Apple clearly blundered with the GS, probably because within Apple itself no one could agree about where the machine was supposed to fit in. The LC, however, is clearly the low-end Mac. Apple now seems to understand the importance of making lower-cost machines technically sophisticated. The LC still needs to be faster, and its single-slot architecture is limiting. But Apple's on the right track.

The GS succeeded despite Apple. Still, a lot of users and developers took it on the chin because Apple never set a clear course for the GS. On the road to a powerful LC, we hope Apple stays in the driver's seat. ❑

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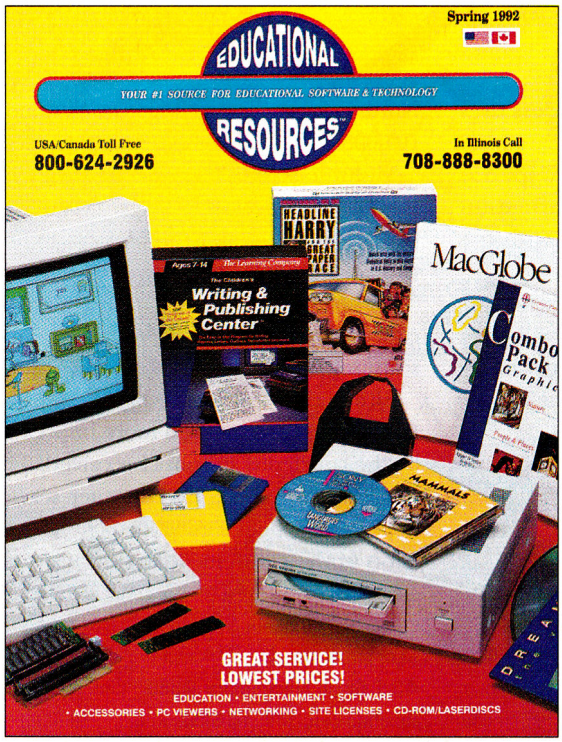

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LETTERS

POINTING UP POINTLESS

THANK YOU FOR YOUR COVERAGE of our product **Pointless**. We'd like to clarify a few items from recent articles, however, that aren't quite accurate:

• In "True to Type" (What's New, March 1992, p. 15), the text mistakenly indicates that "Pointless creates outlines from GS fonts' bit-map information." In reality, Pointless doesn't create outlines from bit-map information; rather, it uses TrueType outline fonts the same way the Mac does.

• In addition, the article suggests that Pointless "translates" TrueType fonts into GS format. Actually, there's nothing for Pointless to translate. TrueType font files transferred to a ProDOS disk are the same files the Mac uses.

• This section also mentions that Mac fonts displayed on the GS look "a little like Manute Bol." Owing to the aspect ratio of the GS screen display, both standard bit-map and TrueType fonts appear tall and thin. When these font types are printed, however, they look correct.

• In "Words into Print" (April 1992, p. 34) you imply that Pointless works with PostScript fonts. Actually, Pointless uses only TrueType fonts.

• "A Glossary of Print Basics" (p. 35) restates the same general information from March's "True to Type," with the same inaccuracies.

• The "PostScript or No Script?" sidebar (p. 36) implies that GS/OS 6.0 will have built-in TrueType. In fact, the new operating system doesn't contain TrueType.

John Oberrick
WestCode Software
11835 Carmel Mountain Road
Suite 1304
San Diego, CA 92128

HAPPY WITH THE WORKS

I READ WITH INTEREST THE ARTICLE "Integrated Software: Weighing Your Options," in the February 1992 issue (p. 28). While I agree with many of the author's comments on **Microsoft Works**, I disagree with the statement that "Microsoft has yet to produce a capable database."

As principal of a large elementary school, I use the database module every day to track the records of the student body. Over the course of more than two years, I haven't encountered any problems with the module; I find it to be powerful and responsive. I do find, however, that it takes quite a bit of prior database knowledge to get the most out of this program. I eagerly await Microsoft Works' anticipated 3.0 update.

James A. Mattern, Principal
Romona School
600 Romona Road
Wilmette, IL 60091

EQUAL ACCESS

SELDOM DO I ENCOUNTER A product or a supplier worthy of praise, but the **Adaptive Firmware Card** distributed by Don Johnston Developmental Equipment (P.O. Box 639, 1000 North Rand Road, Building 115, Wauconda, IL 60084, 708-526-2682) is such a product.

Multiple sclerosis leaves me with only limited use of my hands, yet this device lets me operate the computer (including the AppleWorks word processor) via a "puff/sip" switch. The card provides Morse-code mode, standard keyboard mode, and scanning and assisted keyboard functions.

Although I was impressed by the product literature, I was even more impressed by the courteous support I received. The folks in Don Johnston's customer-service department spent a great deal of time and effort working with me to resolve any problems I encountered as I learned to use the card. Sign me "A Satisfied Customer."

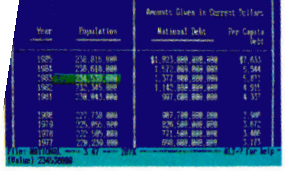
Martin Kilinski
435 East Henrietta Road
Rochester, NY 14620

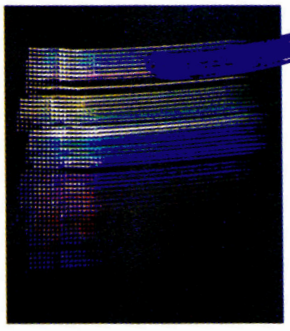
SPEED SHIFT

WITH REGARD TO THE LETTER from J. Morris Prosser in your February 1992 issue concerning BUILD.SPEED and CHANGE.SPEED (p. 21), Softdisk G-S has recently published a program called **FlexiBoot** (by Jerry Kindall of Quality Computers, Softdisk G-S #28). Activate FlexiBoot on startup (warm or cold) by holding down the apple (command) key, then boot from any slot and change your system speed. Seems to be the perfect solution for users who want to run those old DOS 3.3 games at the correct speed without resetting the Control Panel permanently.

Lee Golden, Managing Editor
Softdisk G-S
606 Common Street
Shreveport, LA 71101

inCider/A+ WELCOMES READERS' COMMENTS. WE RESERVE THE RIGHT TO EDIT FOR CLARITY, STYLE, AND SPACE. ADDRESS YOUR CORRESPONDENCE TO LETTERS, *inCider/A+*, 80 ELM STREET, PETERBOROUGH, NH 03458.





MS-DOS APPLEWORKS

*inCider A+ Magazine, A

SuperWorks™

INTEGRATION FOR THE NEXT GENERATION OF PC USERS

Remarkable Technologies announces a breakthrough product which now delivers AppleWorks power on an IBM PC or compatible. SuperWorks lets AppleWorks users step up to a PC with AppleWorks files, utilizing an AppleWorks work-alike integrated package.

New features provide full & complete integration of all capabilities including; spreadsheet (3-D capability), database (the easiest to use and one of the most powerful anywhere), word processing, a dynamic and a complete capability communications package, in addition to unlimited keystroke macros.

SuperWorks uses only 170K in RAM and it's the only integrated package developed for the notebook.

As a special introductory offer to inCider readers, SuperWorks is now available at the special low price of $199.00. SuperWorks has a regular retail price of $400.00.

WHAT ARE THE EXPERTS SAYING?

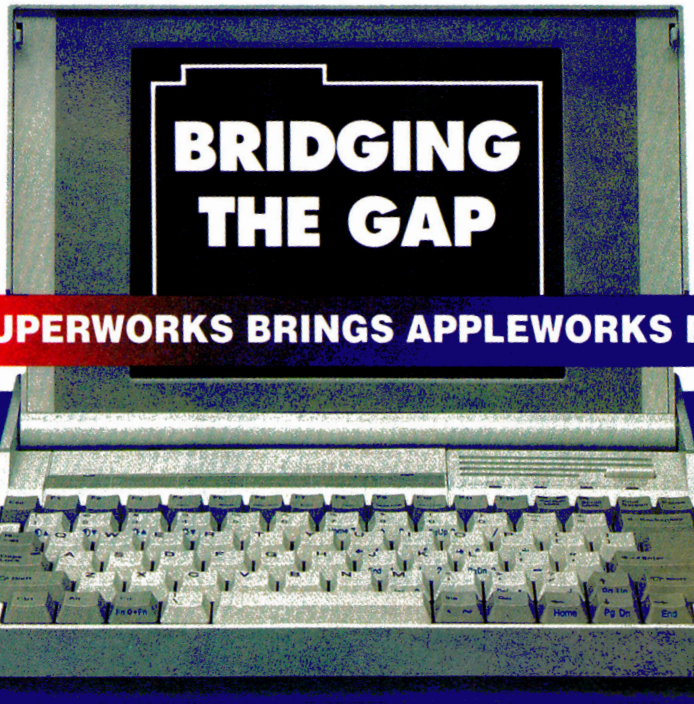
"MS-DOS APPLEWORKS" "inCider/A+ 8/91"

What do you say to an "MS-DOS clone" of Appleworks 3.0? Remarkable Technologies' SUPERWORKS ($199), has caused more than one double-take around here. SUPERWORKS functions like Appleworks on any IBM PC except that it's faster. If you use Appleworks and can train your fingers to find their way around an MS-DOS keyboard, you can use SUPERWORKS. It even incorporates some features for which Appleworks users pay extra.

★★★★ inCider Magazine, November 1991

Miami Herald/Craig Crossman 8/12/91

"Known as SUPERWORKS, this Appleworks clone does almost everything Appleworks does and more. If you know how to use Appleworks, you can use SUPERWORKS without picking up a manual. SUPERWORKS brings the functionality of Appleworks to the MS-DOS world while leaving behind many of its limitations."



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Circle 33 on Reader Service Card.

MAC LC II: READY FOR PRIME TIME

If you bought an Apple Macintosh LC — as half a million other people did — you probably discovered soon after turning it on that 2 megabytes wasn't enough RAM, at least not for Apple's newest system software. System 7 took more than half the LC's standard memory. But the new Apple **Macintosh LC II** is ready for System 7: Its microprocessor (a Motorola 68030, as in the Mac SE/30 and IIsi) lets it use memory more efficiently than the original Mac LC, and its standard memory is 4 megabytes — twice the original complement. (You can add as much as 8 additional megabytes of RAM, for a total of 10 megabytes.)

Apple has even upgraded the popular Apple IIe Card for the Mac LC II: It now works with System 7 as well as older operating systems. In addition, Apple reports that the machine's built-in video output can support "several VGA monitors" of the inexpensive MS-DOS clone type.

What's so different about a new microprocessor? The 68030's greatest advantage over the original LC's 68020 isn't speed — performance is reported to show only a slight increase if any— but that it lets the LC II's hard drive simulate "virtual memory." *Virtual memory* is a portion of the machine's relatively spacious hard-disk drive (40 or 80 megabytes) that you can set aside and use as if it were part of the LC II's relatively small (4 to 10 megabytes) random-access memory. This memory-switching technique lets the LC II run bigger programs than the original machine could — although you wouldn't want to use virtual memory to run programs you use every day. It's slower than RAM and wastes valuable space on your hard drive. It makes sense for the long run to buy extra RAM. (See accompanying **Figures 1** and **2**.)

As noted above, the LC II comes with 4 megabytes of RAM on the logic board: Apple discovered that this was the most popular memory configuration among LC owners and made it the standard. The LC II has two slots for adding single in-line memory modules (SIMMs), as did the original machine.

The LC II, like the LC, has a single expansion slot. Because the LC II has a 68030 microprocessor, Apple can't call it the "020 direct slot" anymore; on the other hand, the Mac IIsi already has an "030 direct slot." Apple calls it the "LC slot," and it should work with most of the expansion cards compatible with the original LC.

The LC II won't work with 030 direct-slot cards. Call the manufacturer of any expansion cards you have before upgrading to an LC II.

The new LC II comes in two sizes: with 4 megabytes of memory and a 40-megabyte hard-disk drive for $1699 (suggested retail price), or 4 megabytes and an 80-megabyte drive for $1849. Current Macintosh LC owners can ask an authorized Apple dealer to install a 68030 logic-board upgrade in their machines.

At least one LC-slot card for the Mac LC II needs to be upgraded, too: Your Apple dealer must replace a chip on the Apple IIe Card before you can take advantage of the card and System 7 on the LC II.

Don't throw out your spare parts: If you've got, say, two extra 1-megabyte SIMMs in your old LC (for a total of 4 megabytes of RAM), you can pop them into your upgraded LC II for a total of 6. You can also use your original 512K video-RAM-expansion SIMM in the new LC II.

If you have an original Mac LC, it makes sense to upgrade to the LC II — especially if you haven't yet moved up to System 7 or if you've put off buying extra memory. And if you've put off buying a Macintosh until now, the Mac LC II — at a price that's unchanged — is a great value.

— P.S.

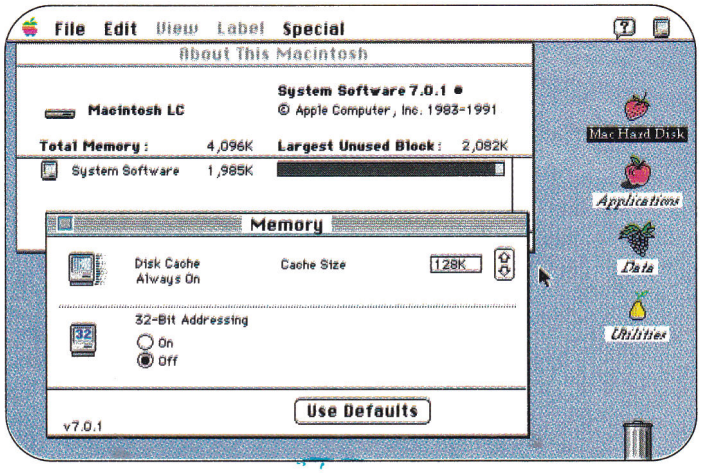


Figure 1. Short memory: The original Macintosh LC needed an extra 2 megabytes of RAM simply to boost its complement to the 4 megabytes needed to run System 7 and another program at the same time.

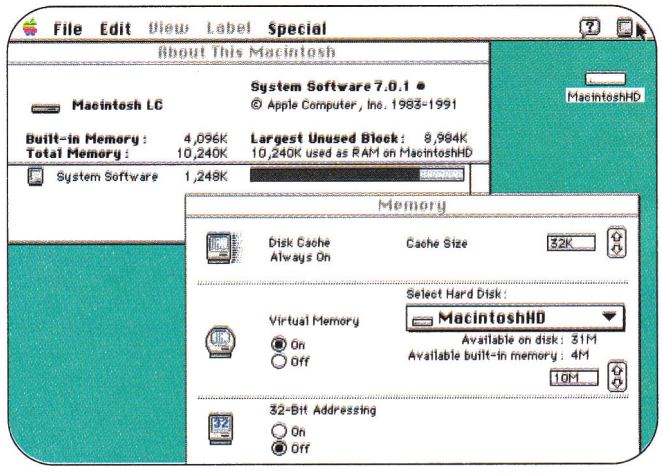


Figure 2. The Mac LC II starts with as much memory as an expanded LC. In addition, you can assign part of your hard-disk drive to work like RAM, as "virtual memory." This LC II now operates like one with about 10 megabytes of RAM.

"Apple II" indicates an 8-bit product compatible with IIes, IIcs, IIc Pluses, and IIGses unless noted otherwise.

NEW SOFTWARE

◆

THE RACE IS ON

Quarter Mile, an old favorite Apple II game, has recently been upgraded.

It plays the same: You answer math questions on topics ranging from whole numbers to fractions, from decimals to integers and equations.

The series includes four different Quarter Mile games, with more than 40,000 problems in all. Your animated dragster speeds along at a rate determined by the number of problems you solve correctly.

Kids love Quarter Mile because they can hear the roar of the engine and the squeal of the tires — and everybody from kindergartners to grown-ups will enjoy the competition.

Quarter Mile's competitive nature makes tournaments in your class, in your school or district, or even in your state easy. Tournaments will be sponsored this year across the state of California; in the 1992-93 school year they'll take place across the country.

Every game in this new Quarter Mile series has been updated substantially — to appeal to older, more advanced students with topics such as equations and problem solving, and to help younger users with basic concepts such as keyboarding.

Each program sells for $50, from Barnum Software, 2201 Broadway, Suite 201, Oakland, CA 94612, (510) 268-0804.

For more information, circle number 356 on the Reader Service card.

Jostens' Tapestry programs help youngsters improve literacy skills.

▲ ◆ ■

EARLY LEARNING

Jostens' new **Tapestry Early Childhood** and **Emerging Literacy** lines, available in stand-alone and network versions for the Apple II and Macintosh (as well as IBM and Tandy), are a series of child-centered programs, designed to meet the needs of classes from pre-kindergarten through the third grade, including Head Start, Even Start, and primary students.

The Tapestry Early Childhood package includes 15 computer programs, storybooks, and audio cassettes, one SuperPrint II Big Book Maker, ten trade books, one set of manipulatives, and a teacher's manual. The Emerging Literacy set consists of 30 computer programs, storybooks, and audio cassettes, and 25 student self-check books per classroom, as well. The Tapestry program also features Parental Involvement Components, including video cassettes, a presenter's manual, 12 monthly newsletters, daily activity calendars, and 18 "Bedtime and Beyond" storybooks and audio cassettes. Both packages are also available in Spanish.

Whether you prefer a structured classroom or let your students "learn by doing," the Tapestry programs can equip your young students with a solid foundation for success. Prices vary; for more information, contact Jostens Learning, Education Services, 7878 North 16th Street, Phoenix, AZ 85020-4402, (800) 422-4339, or circle number 350 on the Reader Service card.

▲

COOL MAC STACKS

Let's face it, you got a Mac because it was cool." If that description fits you to a T, then **Cool Mac Stacks** is the HyperCard gizmo for you — no productivity tools here. This $19.95 disk/book combination includes such memorable programs as The Pizza Navigator, a "what if" stack that lets you try different pizza combinations, assesses the costs, compares local pizza parlors, and even calls them on the telephone.

Too serious? Phone> Acronym generates letter equivalents for your phone number: "Call me, I'm 'FUN 4YOU.'" Sunrise tells you what time the sun rises and sets on any day anywhere in the continental United States.

But Cool Mac Stacks is also an entertaining introduction to HyperCard and HyperTalk, and a great companion as you script your first stack. It even includes a number of utilities and tools to make your earliest stacks look professional.

David Drucker, author of Cool Mac Stacks, is director of education for the Boston Computer Society's Macintosh group. His book — plus 19 shareware and freeware stacks — sells for $19.95, from Hayden Books, 1711 North College Avenue, Carmel, IN 46032, (317) 573-2500. For more information, circle number 352 on the Reader Service card.

▲

THE OTHER SIDE OF PUBLISHING

No desktop-publishing program ever created a word of type: People publish newspapers, magazines, and books. If your students already have the tools to create a school newspaper but lack the skills, **Student Publishing Company** can help.

It's a HyperCard program for grades 6 through 12 that teaches the skills necessary to produce a publication and provides an introduction to the real world of publishing — the workaday world of editors, reporters, graphic artists, circulation managers, and advertising salespeople.

Here's how it works: "Student Publishing Company"'s not only the name of the program, it's the name of the company you'll form in your classroom.

Students have to apply for jobs, learn how to do their work, and face evaluations. You can use the program simply — in a one-day exploration of possible careers, for instance — or extensively at a school newspaper.

NEW-PRODUCT FOCUS

▲ MAC ◆ APPLE II ■ APPLE IIGS

Student Publishing Company does everything but put out the paper — you'll need a DTP package to do that. The program costs $49, from Intellimation Library for the Macintosh, P.O. Box 1530, Santa Barbara, CA 93116-1530, (805) 968-2291. For more information, circle 355 on the Reader Service card.

NEW HARDWARE

▲ ◆ ■

SHARE A PRINTER

Q-System GS, an intelligent print spooler, queues print jobs automatically from as many as seven Apple IIs, Apple IIGSes, Macs, and MS-DOS compatibles. It's equipped with seven serial input ports, one serial output port, and one parallel output port. The serial ports are mini DIN-8 ports, just like the ones on your Mac, GS, ImageWriter, or HP LaserJet.

Print jobs are stored in a standard 256K buffer memory, which you can expand to as much as 4 megabytes, using readily available SIMMs like the ones used in Macs.

Q-System is compatible with AppleTalk. You can use one printer with as many as seven different networks if you need to, but, more realistically, you'll be able to combine networked and nonnetworked computers on a single printer.

Q-System GS sells for $595; the smaller (six serial ports) **Q-System GSe** sells for $495. A variety of other printer hardware and memory components for Apple II computers are also available. If printers are a problem in your computer lab, call or write Sequential Systems, 1299 Diamond Circle, Suite D, Lafayette, CO 80026, (303) 666-4549.

For more information, circle number 354 on the Reader Service card.

▲

DISK DRIVE PLUS

Applied Engineering's **AEHD Plus** drive is a high-density 3.5-inch disk drive for the Mac Plus, Mac SE, and Mac II. It plugs directly into the external disk-drive port. (An external drive connector is available from AE for the Mac II.) It's fully SuperDrive compatible, but doesn't need the SWIM chip upgrade Apple's SuperDrive requires.

The AEHD Plus drive formats, reads, and writes high-density, 1.44-megabyte Mac disks, as well as 400K and 800K disks. The drive also works with 720K and 1.44-megabyte MS-DOS-formatted disks via Apple File Exchange, Dayna's DOS Mounter, or other transfer programs.

The AEHD Plus carries a suggested retail price of $449, from Applied Engineering, 3210 Beltline, Dallas, TX 75234, (214) 241-6060. For more information, circle number 351 on the Reader Service card.

■

SUCH A DEAL

Applied Engineering is sponsoring a trade-in program to encourage every Apple IIGS owner to buy an **AE GS-RAM III** memory-expansion board. If you own any GS RAM card with 256K or more, from any board maker, you can trade it in for Applied's GS-RAM III with 2 megabytes for only $139. The board normally retails for $299.

GS-RAM III was designed to use new RAM-chip technology to produce an efficient, low-power memory board. It comes with super-hi-res diagnostic software, as well as the widely known AppleWorks enhancement program **AW 3 Expander**. The Expander software adds several useful features to AppleWorks versions 2 and 3, such as a print buffer and automatic segmenting of large files.

If you know you need 2 megabytes but have put off the purchase, now's the time. Contact Applied Engineering, GS-RAM Trade-In, 3210 Beltline, Dallas, TX 75234, (214) 241-6060. For more information, circle number 357 on the Reader Service card.

NEW RESOURCES

◆ ■

DISK'S IN THE MAIL

Having trouble finding high-quality software for your Apple II? The brothers Sperber — Ray and Mark — have founded a mail-order company called **Raymark Enterprises** to make it a little easier.

For $10, Raymark makes you a lifetime member; you'll receive a catalogue of public-domain software, shareware, and freeware, and the current issue of the Raymark newsletter. Prices are low: Each 5.25-inch disk costs $3; each 3.5-inch disk is $4. (Prices are even lower for bulk orders.)

Products include games, educational software, business software, utilities, graphics, fonts, GS software, and a selection of accessories such as blank disks, ribbons, joysticks, and mousepads.

Raymark even offers a search service for public-domain software not already in the extensive catalogue — and in some cases will write custom software if it can't find what you need.

To order or join, contact Raymark Enterprises, P.O. Box 70443, Oakland, CA 94612, (800) 2APPLE2, (800) 227-7532. For more information, circle number 353 on the Reader Service card.

◆ ■

QUALITY PUPS

Quality Computers has contracted with **Beagle Bros** to service and support all Beagle Apple II software, including Platinum Paint, Point-to-Point, the BeagleWrite series, and the TimeOut line of AppleWorks enhancements.

Quality will also develop new Beagle Bros software; the first product scheduled is **TimeOut Grammar**. Beagle Bros will concentrate its own resources on its growing line of Mac products, including the integrated package BeagleWorks.

Joe Gleason, president and CEO of Quality Computers, says he hopes to keep the Beagle Bros stable of programmers active; you should continue to see the names Alan Bird, Randy Brandt, and Mark Munz, among others.

For more information, contact Quality Computers, 20200 East Nine Mile Road, P.O. Box 665, St. Clair Shores, MI 48080, (313) 774-7200, or circle number 358 on the Reader Service card.

On Harry's Trail

A PAPER CHASE IS AN OLD CHILDREN'S game, sometimes called "hares and hounds." The hares drop scraps of paper as they wander toward the goal; the hounds must trail the hares to the goal and pick up every scrap they drop. **Headline Harry and the Great Paper Race**, on the other hand, is a Mac game from the educational-software maker Davidson & Associates. It's more educational than hares and hounds, and not as frustrating as the proverbial paper chase, which is what we now call any endeavor that requires us to fill out an endless trail of forms. But Headline Harry isn't completely unlike bureaucracy in America, either.

It's the Star versus the Diabolical as you race to sort out the red herrings from the real clues.

The object of the game is to write a newspaper story. You play a cub reporter at the U.S. Daily Star. Headline Harry, editor of the Star, assigns you to uncover a story. You can't cover the story, because you don't know what has happened. Like a detective — the sleuth tracking Carmen Sandiego, perhaps — you have to first discover what happened. And like a reporter, you also must find out who did it, where, and when.

Specifically, you need to supply a date, a year, a place, an event, the names of key persons, and key words for events such as the first human landing on the moon, the Beatles' first North American TV appearance, or the nuclear incident at Three Mile Island. Our prerelease version included 12 historical events (or current events, depending on your age).

If you can uncover the "who, when, where, and why" of an event (the "what"), you're rewarded with a news story, written by the computer. You write the headline.

A typical editor, Headline Harry wants you to get the story right and get it fast. His rival at the sleazy Diabolical Daily wants the same story, and the Diabolical reporters are out there, laying down false clues and trails. Red herrings make Headline Harry challenging — more than Carmen. You discover that not every trail in the paper chase bears following.

But it's not enough to be "right": You have to have exactly the information Headline Harry wants. For example, you might expect that one of the words associated with Three Mile Island would be uranium (it isn't), but you might not expect movie.

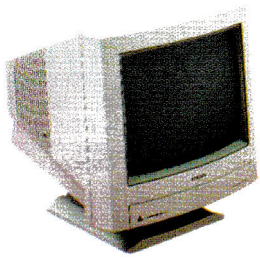
Unlike the Carmen games, which encourage you to look away from the computer for guidance — to an almanac, an encyclopedia, or a travel guide, for instance — Headline Harry supplies all answers internally. This marks it as more entertaining than educational. But Headline Harry is lots of fun. It's fun to watch, for one thing: Each story offers QuickTime movies. Taken from actual newsreels and TV broadcasts, the video still seems to be an afterthought, however.

It's fun to play, using a slick interface that combines a simulated VCR, a phone to call the boss or Mom, a radio to catch the news, a notebook to jot down clues, and even an old-fashioned encyclopedia — all built into a "personal digital assistant" that would bring a tear to John Sculley's eye.

Headline Harry is software of the highest quality. It can be frustrating as well as fun, educational as well as entertaining. It's a game kids will remember someday — praise enough.

Headline Harry is priced at $59.95, from Davidson & Associates, P.O. Box 2961, Torrance, CA 90509, (310) 793-0600. It requires 8-bit color capability and 2 megabytes of RAM for System 6.0.7, or 3 megabytes for System 7. You can install the game on your hard disk. QuickTime is recommended; without it, moving-video portions of the game will appear as static screens. — **P.S.**

FIRST • LOOK



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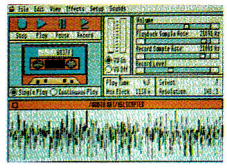

Sonic Blaster

Sonic Blaster records, amplifies and plays back in full stereo. It can record sounds from your stereo, CD player, TV or VCR and alter them with a full range of editing functions..... 59

Applied Engineering

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Glen Bredon

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Kensington

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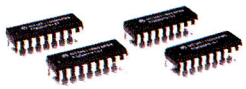
Macintosh



Memory

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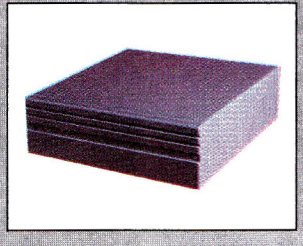

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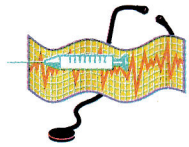

APPLE CLINIC

LESS IS MORE

For fans of the compact IIc, a hard drive opens up new options in storage and operation.

By CECIL FRETWELL

HARD-DRIVING IIc

ARE THERE ANY HARD-DISK drives still available for the Apple IIc? I've been trying to contact Chinook Technology of Longmont, Colorado (supposedly the only manufacturer of IIc hard drives), for some time now with no success.

Charles J. Sarchet
U.S.S. Parche

Look up a company called ***Sequential Systems****; it's taken over the manufacture and distribution of Chinook hard-disk drives, including the* ***CT-50c*** *($549) and* ***CT-100c*** *($729), which install to the drive port of your Apple IIc. Sequential's address is 1200 Diamond Circle, Lafayette, CO 80026, (800) 759-4549, (303) 666-4549.*

One good source is ***Charlie's AppleSeeds****, 9081 Hadley Place, San Diego, CA 92126, (619) 566-1297. The company is open from 7 a.m. to 9 p.m. Pacific time.*

Sequential is currently the only manufacturer of an external IIc-compatible hard drive. The CT drive series is very good; its only drawback is speed, as the technicians had to slow the drive down to work reliably with the IIc drive port. By the way, should you decide to migrate to a IIGS *or a Macintosh, Sequential Systems can reconfigure your drive to work from a SCSI port.*

Some IIc owners may have to purchase a ROM upgrade to use a CT drive. Figuring out whether you need the upgrade is easy: If your IIc has an Apple memory-expansion card or runs a UniDisk 3.5, it can support a Sequential drive. If you don't have either one and want to find out whether your Apple IIcis up to the task, turn off the machine and take all disks out of the drives. Then turn it on and wait for the Check Disk Drive *message to appear.*

Now press the key combination Control-Reset (hold down the control key and press Reset), and at thebracket prompt type PEEK(64447) <CR>*. Your IIc will return a number. If it's* 0, 3, *or* 4 *(or* 5 *if you're using a IIc Plus), you're all set. If your IIc returns* 255*, you need to get a ROM upgrade, either from your local Apple dealer or from Sequential Systems.*

Special thanks to David McKee and Chuck Newby for their help with this question.

ORCA OR APW?

I'M SHOPPING FOR A C COMPILER for my Apple IIGS. The only two I know of are **APW C** from APDA (Apple Programmers and Developers Association) and **ORCA/C** from Byte Works. Which do you recommend?

Michael Durisin
Midland, MI

As far as I'm concerned, there's no contest — if you have a lot of C in your future, then go with ORCA/C. ORCA/C is ANSI compatible, while APW isn't.

"ANSI compatible" means that the language follows certain rules that are independent of your workstation platform — a IIGS*, an IBM PC, or whatever. For instance, I do a lot of C work on my GS at home, my Mac at work, and Digital Equipment VAX systems at work.*

I have several C programs that work on all my systems, because I took pains to work strictly with ANSI C, leaving out any code specific to a particular system — the Toolbox for the IIGS*, say. Writing in ANSI C makes incorporating changes to accommodate a particular system relatively painless.*

À LA MS-DOS MODE

ARE THERE ANY BOOKS AVAILable on the start-up and operation of Applied Engineering's **PC Transporter** card? The manual is okay for installation, but not for operation.

Russell Bennion
Ridgecrest, CA

Once the PC Transporter card is up and running in MS-DOS mode, it's just like a fast CGA-quality IBM PC/XT Turbo, so unless you're looking for something esoteric, you should latch onto a primer on running that machine. There should be a selection available in any bookstore carrying computer-related and high-tech material. One book I recommend is **Inside the IBM PC and PS/2***, by Peter Norton (Brady Press, $24.95). Thanks to John Pothier for his assistance with this question.*

CUSTOM ICONS

I'M LOOKING FOR A RELIABLE, fast, and powerful icon editor that'll be compatible with GS/OS version 5.0.2, and later versions of this operating system, as well.

Robert C. Fiduccia
Annapolis, MD

Either of two shareware packages should do the trick. ***DicEd*** *is available for $15 from Dave Lyons, who owns DAL Systems, P.O. Box 875, Cupertino, CA 95015-0875.*

IconEd 1.3 *is by Paul Elseth, 2739 Fairview Court Southeast, Rochester, MN 55901. You can order the program directly from him by mail for $15.*

Also see "Way Cool GS," January 1992, p. 36, for more information on these and similar programs. Thanks to Steve Berniacki and Jim Maricondo for their advice.

PROSEL'S UNDOING

I PURCHASED A USED APPLE IIGS with a hard drive. When I boot the system, it comes up in a package called **ProSel**. I know it's a good program, but I'm more comfortable with the Finder, so I'd like to use that as my program launcher for now, and learn more about ProSel's operation later.

I know the disk also contains the Finder, because the ProSel menu shows a program you can use to switch to it. So how can I get my hard-disk drive to boot up in the GS Finder?

Anne Payton
Wasco, CA

Look into the System *folder on the hard disk. You'll see two filenames:* START *and* OLD .START. *Rename the* START *file* START .PROSEL. *Then rename the* OLD.START *file* START.

Now boot your system and it'll come up under the Finder's control. If you decide later to activate ProSel again at boot time, just rename the START *file* OLD.START *and the* START .PROSEL *file* START.

IIc REPLACEMENT KEYS

ONE OF THE KEYS ON MY APPLE IIc Plus keyboard has broken. What can I do? Can I replace it myself?

Kevin Eastman
Gallipolis, OH

Call ***Team Electronics****, 1051 Interstate Avenue, P.O. Box 1512, Bismarck, ND 58502, (701) 223-4546 for the parts.*

Replacing a broken key isn't necessarily an easy task, but if you have some minimal mechanical ability and the desire to "pop the hood" of your Apple IIc Plus, it's certainly not impossible, either. Here goes:

1. If you do decide to perform the repair yourself, unsolder the key first with a solder vacuum.

2. Once unsoldered, you can remove the key by squeezing the ears (accessible from the top of the board) and pulling it out.

3. If the shaft is broken, there'll be nothing to grip, so press it out through from the bottom of the board.

4. Now insert your new key and resolder, and you'll be back in business.

Many thanks to Tom Carlton, Taylor Warren Lance, and Vern Mastel for their help with this question.

SAFETY FIRST

MY HARD DRIVE AND COMPUTER are connected to the same power strip. A friend of mine has his hard disk on one power strip and his computer on another. When is it safe to shut down the system?

Damon Ferguson
Tuscaloosa, AL

Resetting or shutting down a system arbitrarily can damage disk data. Parts of disk files could still be cached in memory, or the system could be doing an automatic save when you decide to turn it off. Always shut it down in an orderly manner: For the IIe/c, it's CPU first, then drives and other equipment. For the GS and Mac, you may have to "park" the drive heads first, then turn off the system, although some drives park heads automatically. Check your drive's operation manual.

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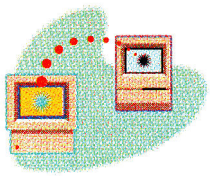


BRIDGING THE GAP

LOOKING AHEAD

The Mac may be Apple's wave of the future, but sharing resources with the II will still be vital for a long time to come.

By GREGG KEIZER

FILE THIS UNDER "SAD BUT TRUE": Most bridges between the Apple II and the Macintosh start with the Mac, end with the Mac, and seem to include the Apple II only by coincidence.

Want to convert AppleWorks word-processing files to a format a Macintosh application understands? Then haul out DataViz's MacLinkPlus Translators 6.0, a Macintosh file-translation package that combined with Apple File Exchange puts Claris' XTND technology to work. Want to share files in a miniature network? Then run System 7 on the Macintosh. Want a portable computer for on-the-road or at-home work? Then consider a Macintosh PowerBook. You get the point.

Bridges of the future will rely on the Macintosh even more. That's because, like it or not, the Macintosh is the machine Apple's banking on to replace the Apple II in such crucial areas as the home and the classroom.

But the bridges you've been building aren't going to disappear overnight. In fact, they'll be necessary as long as people continue to use Apple IIs and Macs together. Indeed, there are lots of ways to span the gap between the two machines, ways to share information and resources that we haven't yet explored.

In the months to come, you'll read about setting up your own in-school electronic bulletin board, how to turn Mac fonts into GS-compatible type, and how to share sounds between the Mac and IIGS. You'll see how GS/OS 6.0 builds bridges all on its own, and learn how to move your irreplaceable database from the II to your new Mac. To get ready for what's possible, now and down the line, consider building a solid, low-cost bridge that'll last.

LOW BID

What's the least-expensive bridge you can build between the Apple II and the Mac?

MAC FOCUS

Apple's long-term plans aren't exactly hard to decipher. Not when its last new Apple II was the GS, released nearly six years ago. Not when it keeps slashing prices of its entry-level Macintosh models. Not when its newest technologies début and remain on the Macintosh.

In fact, as the Macintosh gains ground in areas formerly reserved for the Apple II, the need for bridges will diminish. What use is a bridge when there's no gap? Two recent developments illustrate this trend toward burning bridges.

TALK'S CHEAP

In late February, at the "Technology, Entertainment and Design" conference in Monterey, California, Apple demonstrated a new voice-recognition technology that may prove revolutionary in, among other places, the classroom.

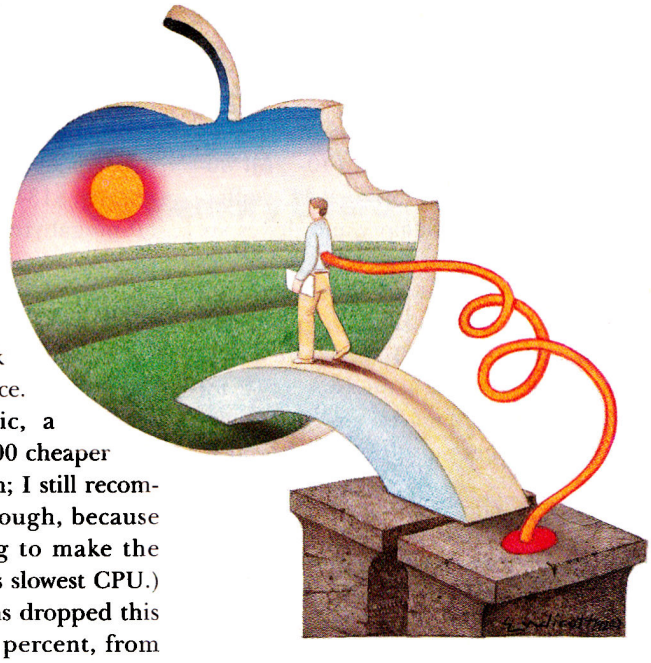
Using an off-the-shelf Macintosh — no special hardware required — this new technology gets the computer to respond to plain-English commands. Although it needs a 68040-equipped Mac (currently the fastest Mac processor, found in top-of-the-line models such as the Quadra 700 and 900), this speech-recognition software doesn't need to be "trained" to understand a specific voice, but comprehends anyone immediately. Relying on a vocabulary in the 100- to 300-word range, the voice-activated Macintosh carries out commands called normally by keystrokes or mouse and menu navigation, such as opening documents, changing type size in a word-processor file, and calling up a name from an electronic database.

Possibly years away from commercial application, this technology may show up in future Macs, or in the line of personal-information devices that Apple's expected to design and market with Sharp Electronics during this decade. These hand-held devices would serve as electronic notebooks or organizers, the "knowledge navigators" of Apple CEO John Sculley's dreams.

Voice-recognition technology already exists on the Mac, of course, and is particularly well suited as an aid to people with disabilities. But products such as Articulate Systems' Voice Navigator II demand special hardware add-ons, and must go through a training period before they understand someone's voice.

But because Apple's technology works on an as-is Macintosh, the opportunities in traditional education could be significant. Imagine a classroom two or three years from now, where children could tell their computers what to do. Preschoolers and early-elementary-aged kids, who may have trouble manipulating the mouse or finding and entering proper keyboard commands, would simply voice their choices and watch the Mac respond. They'd still write by pounding the keyboard, for instance, but they could format documents, skim a graphics library, select an image to import, and print by talking.

Or imagine a Math Blaster-like program that uses digitized speech to teach mathematics skills, and that accepts spoken answers such as "Two plus 12 equals 14." Or a Spellbound-style package (Spellbound, from The Learning Company, is a PC-



Assuming you already have an Apple IIe or IIGS, that's an easy question to answer.

The **Macintosh Classic II**, packed with 4 megabytes of memory and a 40-megabyte hard-disk drive, should be your choice. (The Macintosh Classic, a possible substitute, is $200 cheaper in a similar configuration; I still recommend the Classic II, though, because Apple's quickly moving to make the 68030 microprocessor its slowest CPU.) February price reductions dropped this Classic II system by 27 percent, from $2049 to $1699.

The Classic II runs System 7 comfortably; it can handle several open applications easily at once; and even though its monochrome monitor precludes splashy color, it's a workaday machine for personal, home-office, small-business, and school use.

If you have an Apple IIGS, consider buying an Apple **StyleWriter** ink-jet printer at the same time. Recently reduced to $399, the StyleWriter is an excellent addition because it will work with both the Classic II and, once you upgrade to GS/OS 6.0, with the IIGS, too. (System 6.0 will include a StyleWriter printer driver.)

Connect the Apple II and Classic II with two **PhoneNet** connectors from Farallon ($19.95 each by mail). If you pick up the StyleWriter, you'll need another PhoneNet connector; if your Apple is a IIe, you'll also need a **Workstation Card**.

On the software side, buy **ClarisWorks**, the integrated package for the Macintosh. You're probably using AppleWorks or AppleWorks GS on the Apple II; ClarisWorks smooths the transition from Apple II to Macintosh. ClarisWorks costs around $150 if you buy it by mail order.

At full list price, this brand-new bridge runs $2300, but you should be able to push it below $2000 by shopping several computer dealers. (Don't forget that discount computer stores such as CompUSA and CompuAdd now sell Macs.)

A bridge like this should last you through 1994, minimum. Future enhancements to System 7 shouldn't make the 68030-equipped Classic II obsolete before then. You'll also be able to take advantage of QuickTime as that Mac-only multimedia standard becomes common, and even link your bridge to a CD-ROM later. (See the accompanying sidebar for details.) Plenty of time to squeeze more value out of your Apple II.

MORE FOR YOUR MONEY

And what about color bridges? The Macintosh LC is one of the bedrock machines of Apple's renewed push into the home and classroom markets, and one of the strongest piers in any Apple II/Macintosh bridge.

At press time (late March), the new **Macintosh LC II** had just been released. Based

based spelling program) that not only pronounces the word in a spelling bee, but listens for the student to spell the word aloud, just as in the real thing. Technology like this isn't going to make it to the Apple II, not when it relies on powerful processors. It's another example of the Mac-is-it trend.

QUICK, WHAT'S THE TIME?

QuickTime is Apple's answer to the question "How do I make my computer more like my TV?" Slated to appear in System 7.1, the next version of the Mac's operating system, QuickTime opens up the Mac to multimedia. Although future plans call for QuickTime animations, music, and still images, the first part of the enhancement features movies. Whether QuickTime displays 10 frames of video per second or 15 (the two most-bandied-about numbers) depends on the hardware it's running on. No matter what the speed, QuickTime movies put motion on a standard Mac; it's the first part of a multimedia environment of video, animation, sound, and images.

Multimedia is one of the hottest topics in the computer business these days, in large part fueled by lower CD-ROM drive prices and MPC (Multimedia Personal Computer), a standard for DOS machines based on Microsoft Windows. Multimedia educational and entertainment packages are starting to appear on the PC; Apple doesn't want to be left behind, and plans QuickTime as its response. An expected high-speed 3.5-inch CD-ROM drive from Apple may be another element in its multimedia game plan, if only because multimedia requires huge chunks of disk space, QuickTime's compression notwithstanding.

It's QuickTime's educational possibilities that make it worth watching. Several companies well known to inCider/A+ readers are working on games and educational packages that will take advantage of QuickTime movies. Broderbund's **KidPix** will use QuickTime to replay animations. Davidson's **Headline Harry and the Great Paper Race** will use QuickTime to feature video snippets as clues in its cultural foray across America. (See "First Look," this issue, p. 15.) Scholastic's **Operation Frog** and Tom Snyder's **Flodd, the Bad Guy** are two more to-be-released Mac packages that will utilize QuickTime.

Though initial QuickTime educational software may not push multimedia hard, look for the next wave to dazzle both kids and adults. Imagine an American-history learning game that includes video clips from World War II and Vietnam, still images from the Civil War, animated maps of the Gold Rush and the building of the transcontinental railroad, and music from the Roaring '20s. Or a French-language tutor that uses QuickTime to display video and voice of a disembodied electronic instructor, complete with Parisian accent. Or a space-exploration simulation that tosses in clips, from the launch of Sputnik to Neil Armstrong's first moonwalk.

QuickTime is yet another example of Apple technology that won't migrate down to the Apple II, another example of the vanishing need for bridges in the future. **— G.K.**

Illustration • James Endicott

on a 16-megahertz 68030 microprocessor (the same CPU found inside the Macintosh Classic II), this new machine replaces the current LC as Apple's low-cost color system.

The 030 CPU is the LC II's main claim to fame: It lets the machine take advantage of System 7.0's virtual-memory feature, which uses hard-disk-drive space as a substitute for RAM.

Other LC II details of note include more memory (4 megabytes standard) and larger hard-disk drives (40- and 80-megabyte) than the original LC's offerings. Beefed-up memory and drives are two nods to real-world needs: 2 megabytes just doesn't cut it with System 7.0, and applications always seem to grow exponentially. (See "LC II: Ready for Prime Time," What's New in this issue, p. 12, for more on the new machine.)

LC II prices should be identical to existing LC costs: $1699 in a 4-megabyte RAM/40-megabyte hard-disk-drive configuration; $1849 for the 4-megabyte RAM/80-megabyte hard-disk-drive system. (Prices don't include a monitor.)

LINK TO THE FUTURE

That the LC II exists at all is an important indicator: Apple clearly sees the home and school markets as Macintosh, Macintosh, Macintosh, and in its low-end configuration, the LC II is priced and equipped for those venues. The company clearly sees this entry-level color Macintosh as the inheritor of the Apple II's place at home and in school.

But the LC II isn't necessarily bad news for Bridging the Gap fans. Far from it: As one end of an Apple II/Macintosh connection, the faster, more RAM-packed LC II will serve as a larger and more-responsive repository of shared files. Its color capabilities make it the pick for both home and classroom learning.

And by not casting off the Apple II Card (your authorized Apple dealer must simply upgrade it to work with the revamped processor-direct slot), the LC II guarantees at least as much acceptance among educators as the original LC. ❑

WRITE TO CONTRIBUTING EDITOR GREGG KEIZER AT 4420 HILYARD STREET, EUGENE, OR 97405. ENCLOSE A SELF-ADDRESSED, STAMPED ENVELOPE IF YOU'D LIKE A PERSONAL REPLY.

PRODUCT INFORMATION

Apple IIe Card, $199
Apple II Workstation Card, $249
Macintosh Classic II, $1699
Macintosh LC II, $1699/$1849
StyleWriter, $399
Apple Computer Inc.
20525 Mariani Ave.
Cupertino, CA 95014
(408) 996-0100

ClarisWorks
Claris Corp.
P.O. Box 58168
5201 Patrick Henry Drive
Santa Clara, CA 95052
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Circle 297 on Reader Service Card.

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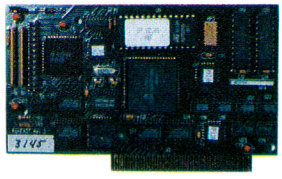
This is the SCSI card that is upgradable to 1 Mb of cache. It is also the SCSI card that is 5 to 8 times faster than the Apple SCSI card under ProDOS 8 and twice as fast under GS/OS. It has an automatic lookahead for unbeaten performance. It has built-in tape backup software that runs in the background. It has a mouse-driven configuration program. It has password protection, of course. By the way, it's also TOTALLY System 6.0 compatible. It's made by C.V. Technologies..



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This board is upgradable to 4 Mbs and fully DMA compatible up to 8 Mbs utilizing its piggyback connector.

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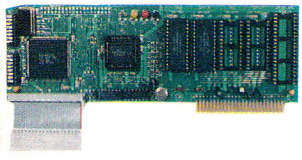

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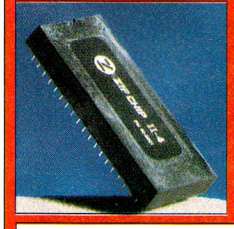

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Math Editor/Formula Typesetter. Easily create formulas for math & science tests, worksheets & papers. Works with any GS compatible printer. *Requires 1 Mb*

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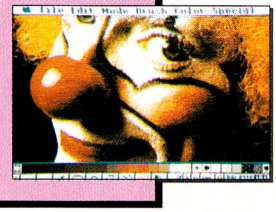
InSync

ProTERM 3.0 $77.95

DreamWorld Software DreamGrafix™

DreamGrafix is the ONLY full-featured 16, 256 & 3200 color paint program for the Apple IIGS that allows users to create & edit the highest quality pictures. Suppors all known Super Hires graphics formats. Compatible with all system accelerators, CDAs, NDAs, inits & system drivers! $65.95



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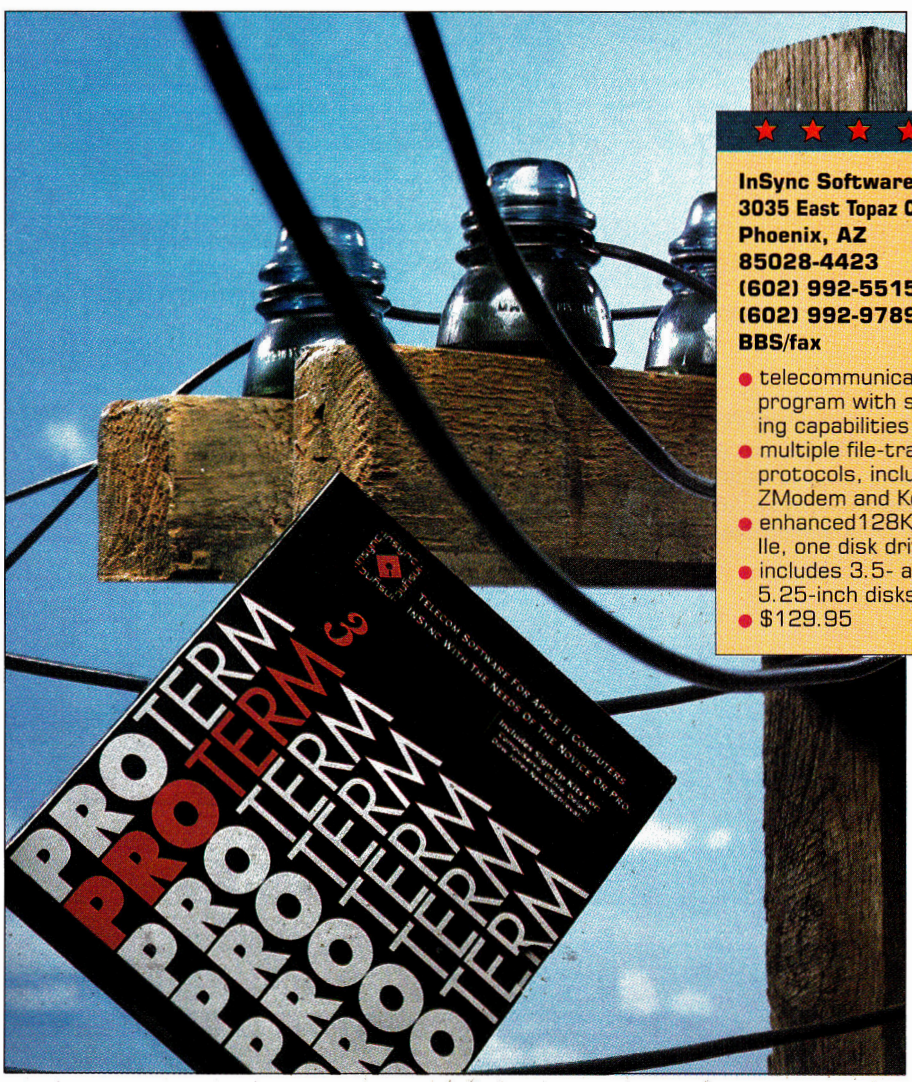
Circle 56 on Reader Service Card.

PROTERM 3.0

Take your on-line system to the max with the newest version of the foremost Apple II telecom program.

Cheap, fast, quality. Which two do you want?" This bit of conventional wisdom, or some variation on the theme, is posted in engineering labs everywhere. But if ProTerm 3.0 is any indication of the mood at InSync Software, conventional wisdom might have to go back for a refresher course — ProTerm 3.0 is cheap, fast, *and* quality. ProTerm is one of the longest-lived telecommunications programs for the Apple II and, with the current incarnation, has evolved into the most powerful.



★ ★ ★ ★ ½

InSync Software
3035 East Topaz Circle
Phoenix, AZ
85028-4423
(602) 992-5515 sales
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BBS/fax

- telecommunications program with scripting capabilities
- multiple file-transfer protocols, including ZModem and Kermit
- enhanced128K Apple IIe, one disk drive
- includes 3.5- and 5.25-inch disks
- $129.95

Version 3.0 comes complete with a well-written 271-page manual, 3.5- and 5.25-inch disks, quick-reference cards, and special offers for a number of on-line information services. From installation to downloading to macros, ProTerm 3.0 is a slick, complete, top-notch package.

EASY COME

Because of the variety of hardware available for the Apple II series, a telecommunications program has to be particularly versatile to accommodate all possible configurations. ProTerm 3.0 meets the challenge squarely by supporting a wide variety of hardware options.

The program guides you gently through choosing correct settings for your particular array of equipment, a blessing for the novice, but also allows direct access to a number of set-up preferences, a must for the power user. For instance, even if you've never heard of a "modem-initialization string," ProTerm 3.0 will take care of it for you. But if you like to get your hands dirty, changing your modem-initialization string, or AT prefix, is as easy as calling up a dialog box.

A telecommunications program's user interface can determine how efficient and useful the software is. ProTerm's user interface is text based for high speed whether you run it on an Apple IIe, a IIc, or a IIGS. The screen is clean, simple, and sensibly laid out. Whether you use the mouse or operate strictly from the keyboard, you'll have little problem finding your way around.

ProTerm's full-featured scrollback buffer and editor are just as easy to use, and provide essential assistance when you're logged onto a remote system. It's crucial to have a capture buffer to save incoming text and allow viewing of items that flew by too quickly to read.

Another important feature is a good integrated editor for composing messages or other text on or off line. ProTerm activates the scrollback buffer automatically

Photography • Larry Dunn

when it logs onto a remote terminal, and captures incoming text up to the limit of available memory; you can view captured text at any point during an on-line session, and select and transfer text blocks to the editor easily.

ProTerm's editor is reasonably comprehensive; it offers a clipboard, find and replace commands, and fairly complete formatting features, including embedded tab rulers, spacing and page settings, and justification. The editor supports dot commands — embedded formatting commands within text.

ProTerm's printer driver supports "generic" text models; I had no trouble printing to a Hewlett-Packard DeskJet, suggesting that the generic driver should work well with most printers. The editor supports both text and AppleWorks files.

EASY GO

Any telecommunications program must provide a number of transfer methods if it's going to be useful for uploading programs to, or downloading programs from, other computer systems. Today's most common file-transfer protocols send program data as "packets" followed by a sum of program bytes sent, or "checksum." When the second computer receives a packet, it does its own sum of program bytes and compares it to the broadcast checksum. If they don't match, it requests retransmission.

ProTerm supports the largest assortment of transfer protocols of any Apple II telecommunications program: XModem, XModem CRC, XModem 1K, XModem 4K, YModem, YModem G, YModem 4K, and ZModem. These transfer protocols support increasingly larger packet sizes and more-efficient error checking as well as other features resulting in faster and safer data transfer.

ZModem, the most advanced, even supports a feature called *auto-resume*: If an upload or download is interrupted owing to a bad telephone connection, the software will resume it at the exact point of the interruption. ProTerm also supports Kermit, an older and slower protocol commonly used by mainframe computer systems.

ProTerm also supports automatic Binary II coding and removal. Binary II, created by Gary B. Little, preserves ProDOS file information that would be lost during transfer. ProTerm produces a Binary II

APPLE II REPORT

MUST BUY!
FORGET IT
WORTH A SECOND LOOK

APPLEWORKS DATA DISK 103/104 DECEMBER/JANUARY 1991/1992

Teachers' Idea & Information Exchange
P.O. Box 6229
Lincoln, NE 68506
(402) 483-6987

- new AppleWorks templates and tips
- 128K Apple II
- requires AppleWorks (3.0 recommended)
- $39.95 (6 double-sided floppies)

Take a pause that refreshes with an AppleWorks data disk from TI&IE. Each bimonthly, double-sided disk contains several word-processor, database, and spreadsheet files. Issue 103/104 features a calendar generator, math games, a strategy game for two players, ideas on using AppleWorks for fund-raising, and a clue sheet for Where in Time Is Carmen Sandiego?. In addition, you'll find a database of celebrity addresses, a desktop-publishing bibliography, plenty of AppleWorks tips, guidelines for keeping a monthly budget, a list of African-American inventors, and several more surprises.

COMBINATIONS

William K. Bradford Publishing Co.
310 School Street
Acton, MA 01720
(800) 421-2009, (508) 263-6996

- new higher-math skills builder
- 64K Apple II
- $60

Combinations isn't a conventional game-driven math package with fancy graphics and wacky sound effects. This software is designed for youngsters who have completed a course in introductory algebra; it teaches them how to form the maximum number of combination sets from any given set of elements. Lessons consist of tutorials and practice sessions; help is available if needed. Several problems have practical applications. Unfortunately, kids must do their computations on paper, then enter answers on screen. An inexpensive math text (with an answer sheet) could probably do just as well — and for less money.

FRACTAL WORLD

Microgram Systems
P.O. Box 252
La Honda, CA 94020-0252
(415) 747-0811

- new fractal-graphics generator
- 128K Apple II or GS with 128K RAM disk
- color monitor recommended
- $9.95 Apple II, $14.95 5.25" GS disk, $19.95 3.5" GS disk

If you're looking for an inexpensive way to create and edit colorful non-Euclidean geometric shapes (which vary under different magnifications), consider Fractal World. This New Age creativity program finds and draws fractal pictures. Both Apple versions consist of four activities: find new fractals; put data on disk; colorize fractals; and display fractals. You construct intriguing pictures by manipulating color ranges, establishing new picture centers, and experimenting with magnification, not by painting with conventional electronic brushes. Fractal World is a program any ex-hippie will appreciate. Those of us living in the '90s, however, need more information on the general significance of fractals to keep us on the edge of our pixels.

GROUPWRITER

Sunburst Communications/
Wings for Learning
1600 Green Hills Road
Scotts Valley, CA 95067-0002
(800) 321-7511, (408) 438-5502

- new on-line conference software
- 128K Apple II or 768K GS
- requires AppleShare network
- $300

GROUPwriter gives the phrase "have your people talk to my people" a whole new meaning. This application is designed to run on an AppleTalk network; it introduces students (grade 4 and up) to on-line conferencing, collaborative writing, and electronic group discussions. Participants may access and comment on as many as 50 active conference topics; program options let teachers determine the topic range. You can print on-line discussions or save them as files for editing with a word processor. If a Macintosh version of GROUPwriter is also installed, Apple IIs and Macs can talk to each other on the same network.

Continued on p. 28

"wrapper" for a transmitted file and appends *.BXY* to the filename. ProTerm can remove Binary II coding automatically and restore a ProDOS filetype when a file is received.

One other point to keep in mind: Remote terminals (especially mainframes) often use different and outdated keyboard layouts, including function-key patterns, not supported by standard Apple keyboards. To utilize all a remote system's functions, your system must be able to use various key combinations to "emulate" it. ProTerm supports ANSI BBS, VT-52, VT-100, H-19, ADM-3a/5, ProTerm Special Emulation, and Televideo 910+ terminals.

JUST EASY

The most powerful telecommunications programs include a scripting language to automate operations such as logging on,

APPLE II REPORT Cont. from p. 27

INFORMATION STATION

Society for Visual Education
1345 Diversey Parkway
Chicago, IL 60614-1299
(800) 621-1900

- new research-skills builder
- 128K Apple II
- $144

The Information Station Coordinator (ISC), the world's only orbiting source of environmental information, is in trouble — it needs repair to avoid shutdown and dismantling. Students prevent it from ending up as space junk by finding answers to research questions; in the process, they learn to use electronic information sources, including an atlas, an almanac, an encyclopedia, and a dictionary. ISC also teaches youngsters how to take notes, interpret a library catalogue card, and search for up-to-date source materials in a periodical index. Intermittent coded messages appear on screen to spice up the action. This package provides a great (albeit expensive) way for kids to learn critical research skills.

KID-LEIDOSCOPE VOLUME II

MindPlay/Methods and Solutions
3130 North Dodge Boulevard
Tucson, AZ 85716
(800) 221-7911

- new language-skills games
- 48K Apple II
- $79

Kid-Leidoscope II contains versions of four popular MindPlay programs: Wordzzzearch, Tiffy Text, Race the Clock, and Ace Detective. These game-like activities develop environmental awareness while building vocabulary, memory skills, and knowledge of current events — but kids will enjoy them just because they're fun. They'll hunt for mystery words, create zany paragraphs with out-of-context parts of speech, find hidden pairs of words, and read for details. The package also includes a four-page newsletter covering ecological issues.

THE MOVING CRUST

Focus Media Inc.
839 Stewart Avenue
Garden City, NY 11530
(800) 645-8989, (516) 794-8900

- new geology simulation
- 64K Apple II
- $99

If you think The Moving Crust is a desktop sequel to Hollywood's Mystic Pizza, you're sadly mistaken. This interactive simulation presents a three-level course in the study of "plate tectonics": Youngsters take an electronic trip around the world, looking for proof that the earth's continents were once joined. Evidence may come from fossil distribution, rock formations, glacial striation, or the make-up of the ocean floor. This engaging simulation builds research skills and helps players learn about the dynamic nature of the earth's surface.

MUPPET LABS

Sunburst Communications/
Wings for Learning
1600 Green Hills Road
Scotts Valley, CA 95067-0002
(800) 321-7511, (408) 438-5502

- new early-learning skills builder
- 128K Apple II
- Muppet Keys compatible
- $65

Admit it — sometimes you watch Sesame Street just to catch up on the latest Muppet capers. With Sunburst's Muppet Labs, you can bring popular Muppet characters like Scooter, Miss Piggy, Fozzie Bear, and Bunsen into your life via your own small screen. When preschoolers and kindergarteners work through the program's charming activities, they build matching, classification, and memory skills, and strengthen their visual and auditory discrimination. One activity, called Math My Tone, will captivate even discerning adults. Muppet Labs comes with a well-written manual containing operating instructions, lesson plans, and black-line masters for several off-disk activities.

PERMUTATIONS

William K. Bradford Publishing Co.
310 School Street
Acton, MA 01720
(800) 421-2009, (508) 263-6996

- new higher-math skills builder
- 64K Apple II
- $60

This is another entry in the Bradford series Special Topics in Mathematics. Like Combinations (reviewed above), it's designed for students who have completed an initial algebra course. Youngsters learn to work with factorial notation, then to recognize and solve problems involving permutations. Every lesson contains tutorial and practice sessions, with on-line help available. Permutations requires that youngsters compute answers off line; nevertheless, it's more successful than Combinations because it does a better job of explaining subject relevance to everyday life.

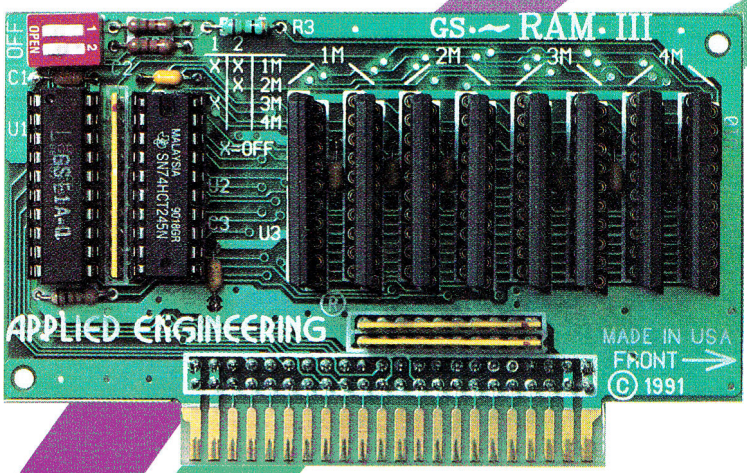
READABLE CLASSIC TALES

Orange Cherry Software
Box 390
Westchester Avenue
Pound Ridge, NY 10576
(800) 672-6002

- new
- 512K Apple IIgs
- hard disk recommended
- $49 home edition

Readable Classic Tales brings five popular stories to the GS screen: The Elves & the Shoemaker, Puss in Boots, The Queen Bee, The Frog Prince, and Rumpelstiltskin. Each tale features glorious sounds and terrific animated graphics. A screen appears with text and graphics, plus click-on icons letting readers animate the scene, raise the volume, turn an electronic page forward or backward, or quit the program. Level of interaction is a bit limited, but the package does very well as "lapware" — software that encourages adults and preschoolers to have fun working together in front of a computer screen. **— Carol S. Holzberg, Ph.D.**

It took 250,000 people to bring you GS-RAM III



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- ✓ No jumpers
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To place an order or for more information, see your authorized Æ dealer or call (214) 241-6060 today. Or send check or money order to Applied Engineering. MasterCard, Visa and C.O.D. welcomed. Texas residents add applicable sales tax.

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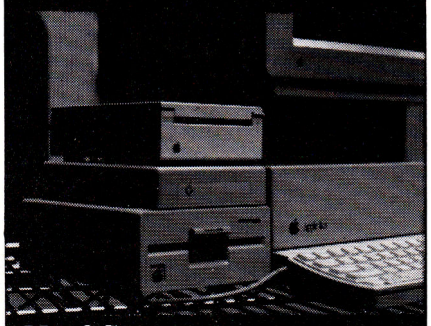
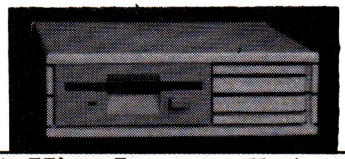
incl. Apple Hi Speed SCSI Card
and the NEW GSOS ver 6.0



Half Shell -- the hard drive that is 30% smaller than the floppy drive
1.4"x5.5"x7.5"
120MB(19ms) - $569

Hermit Crab 2.5"x5.5"x7.5"
40MB(25ms) - $399

New **Floptical Drive**
20MB per diskette



A-Hive Jr. -- small size
7.1"x7.1"x2.2"

Hard drive	50MB	$ 429
	120MB	$ 589
	200MB	$ 799
	510MB	$1469
Tape drive	155MB	$ 519

A-Hive -- expandable
9.9"x9.6"x4.3"

Hard drive	340MB	$1329
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Hard/tape drives combo
Hard/cartridge drives combo
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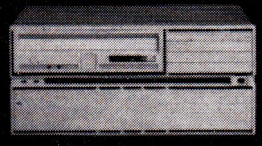

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Circle 231 on Reader Service Card.

Reviews

transferring files, and navigating through remote systems. ProTerm 3.0 is no exception, offering a complete and powerful macro language and an "autolearn" feature that means you may never have to write a line of macro code. When set to *AutoLearn*, ProTerm 3.0 will record your keystrokes as you log on or perform a task on line. Writing a custom script to automate access to the Apple II library on my favorite BBS, for instance, was easy.

ProTerm 3.0 adds a number of little extras that make a good telecommunications program great: disk utilities such as formatting, file duplication, locking and unlocking, copying, file viewing by traditional methods and by foreign terminal emulation, printing, renaming, setting filetypes, and creating directories. ProTerm 3.0 also includes a "snapshot" feature, available anywhere within the program, that sends a copy of your current screen to your printer. The program sports a nifty timed screen saver and supports unattended operation (auto-answer), letting your computer act like a bulletin board. A remote user can call your machine, get connected, and begin transferring files — easy.

ProTerm 3.0 is a powerful telecommunications program that can take your on-line Apple II to the max. It's rock-solid; it took everything we threw at it in stride, including GEnie automated log-ons and file transfers, as well as log-ons and transfers to local BBSes. ProTerm 3.0 solves most of the problems of the program's earlier versions and adds most of the enhancements users have been looking for.

One or two suggestions come to mind. The scrollback buffer should be more fully integrated with the main ProTerm screen, for one thing; currently, accessing the scrollback buffer is a separate operation. InSync should also remove the editor's memory limits and allow dynamic resizing of both the scrollback buffer and the editor to available memory.

The Apple II is a capable telecommunications platform, and ProTerm 3.0 underscores that. If you're serious about telecommunications, try ProTerm 3.0. It'll give you the features you need without making you pay the price.

Garry Howard
Calgary, Alberta, Canada

★ ★ ★ ★ ★

GOLD OF THE AMERICAS: THE CONQUEST OF THE NEW WORLD 1.0

Strategic Studies Group
8348 Monticello Drive
Pensacola, FL 32514
(904) 494-9373

- historical simulation of New World colonial expansion
- 1MB Apple IIGS
- 1.25MB or more recommended
- requires System 5.0.2
- two 3.5-inch disk drives recommended
- $49.95

Imagine traveling back to the 16th century, to a time when Europe's great colonial powers sailed the high seas in search of wealth and glory. Gold of the Americas, a Strategic Studies Group (SSG) historical simulation (recently ported over from MS-DOS to the IIGS), re-creates this exciting period with all the pomp, splendor, and ruthless political intrigue of a spectacular Hollywood movie.

Action begins in 1501. Would-be colonizers command magnificent expeditions under the flags of Spain, Portugal, England, or France against computer opponents (set to novice, normal, or expert level), or against up to three human challengers. Victory goes to whoever occupies the most territory by game's end. You have 300 years (30 turns) to establish colonial supremacy and plunder the riches of your newfound dominion.

The life of a colonial explorer isn't easy. Expeditions perish on stormy seas; colonies succumb to mutinous revolts, attacks by inhospitable natives, and the ravages of disease; swashbuckling privateers pillage your trading ships; rival explorers raid your fledgling territories and seize your hard-earned acquisitions. If these disasters don't carry you to the brink of financial ruin, the tax collector will —

unless you're smart enough to squirrel away your riches in a private fund the king's emissary can't find.

LET HISTORY RUN ITS COURSE

As with all good electronic simulations, Gold of the Americas is a game with many variables. Players decide whether action follows historical or random scenarios.

For historical games, activities remain true (more or less) to real events. In random games, players chart their own colonial destinies. The real action begins after challengers determine which colonial power to represent. They must raise armies, recruit colonists, and stake a claim to various provinces in North, Central, and South America.

Every turn represents a decade, and each decade consists of four distinct phases: *Acquisitions*, *Placement*, *Colony Management*, and *Reports*. Every phase requires you to perform a range of tasks, from raising an army and equipping warships to staging raids on enemy settlements, recruiting colonists, and exploiting the locals by forcing them to overproduce.

When other players (or the computer) take turns, there's always a shift in the balance of power. Rival colonies are established, a diabolical European power may declare war on your peaceful nation, some of your trading vessels may fall prey to the greedy exploits of merciless pirates, and everything costs money.

Reports keep you advised of your trading returns, political and economic conditions in your colonies, and the current status of your treasury. At the end of every historical period, a tax collector appears, requesting a healthy "donation" to the king's treasury. It doesn't do any good to protest.

Gold of the Americas is simple to play, but difficult to win. Just when you least expect it, you lose a territory to a national liberation movement. Enemy raids end in disaster, colonies disappear because settler populations dwindle, and expeditions in search of new territories fail.

Your privateers may be incapable of returning any money; they may even loot one of your own traders. Slaves revolt, garrisons lose troops, and your miners exhaust a territory's ore deposits. Don't despair — events may turn in your favor. A lot of territory changes hands in the last five rounds of play.

HARDWARE CONFLICT

Gold of the Americas is an entertaining simulation. The program features great GS graphics and a user-friendly interface, but meager sound effects. It ships with a user's guide that provides detailed play instructions; a brief tutorial helps get you started. GS owners will discover quickly that descriptions in the manual don't always reflect GS screen displays or keyboard activity.

Be sure to print a copy of the *ReadMe* file to learn how to move resources (icons) around on screen. Even with the file, it took me some time to figure out that you must issue a command to end a particular phase before the program lets you continue.

While Gold of the Americas isn't copy-protected, it won't necessarily run from a hard disk. It may be hard-disk compatible with an Apple SCSI card, but not with a RamFast SCSI card.

If you start up your computer from a *System* folder installed on a RamFast-driven hard disk and then try to run Gold of the Americas by double-clicking on its program icon (*Gold.Americas*), a dialog box appears, asking you to place MidiSynth (sound tool 035) into the *Tools* folder within the *System* folder. If you do that and reboot, you hear clanging and the program crashes. If you boot directly from floppies, Gold of the Americas runs with no problem.

THE GOLDEN AGE OF DESKTOP ENTERTAINMENT

The philosopher George Santayana once remarked that those who can't remember the past are condemned to repeat it. SSG, on the other hand, claims that those who don't understand history should be given a chance to rewrite it. In a 300-year power play for control of the New World, Gold of the Americas bestows the spoils on the player with the most-aggressive colonial policy.

If ruthless exploitation, callous bully-boy armies, and shameless privateering on the high seas do not your good fortune make, then you lack what it takes to shape the destiny of the New World. Keep at it, though. Practice makes the perfect despot.

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

Continued on p. 54

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† The author requests a specified donation if you decide to use the program.

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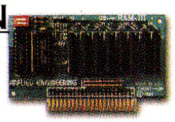

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RAM GS	2MB $139	4MB $179

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Apple IIe 80 column card		$27	
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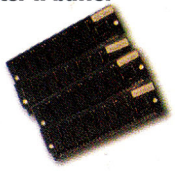
Memory Expansion Kits



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NOTE: 'Q' suffix denotes use of *Quantum* VCA mechanisms. All other drives use high quality *Conner* mechanisms.

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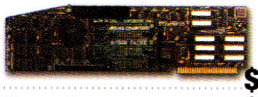
Æ TRANSWARP



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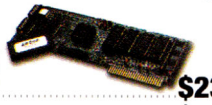
ZIP TECHNOLOGIES



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TOTALLY RAD MAC

It may be hip to be square if you're Huey Lewis & the News, but it's a death wish for any respectable Mac user. Truth is, Macs just wanna be cool . . . .

By OWEN W. LINZMAYER

It seems that no matter where they hail from, no matter what they do for a living, Mac users aren't content with just owning some computer that's friendlier and classier than a PC. Nope, they gotta be cooler than their fellow Mac heads. Luckily, it's easy to customize the Mac's operation to reflect your unique style and express your individuality. So, owing to a mind-blowing response to my "Way Cool Mac" feature (January 1992, p. 30), once again I've combed through the best user-group libraries, on-line databases, and commercial offerings in search of neat programs and products that fit one strict requirement: They have absolutely no redeeming value other than the totally radical coolness they bestow on Macs and their owners.

Illustration • Ned Shaw Photography • Ed Judice

Select Window
Me and my Mac
Totally
Apps
Data
Startu
Toile

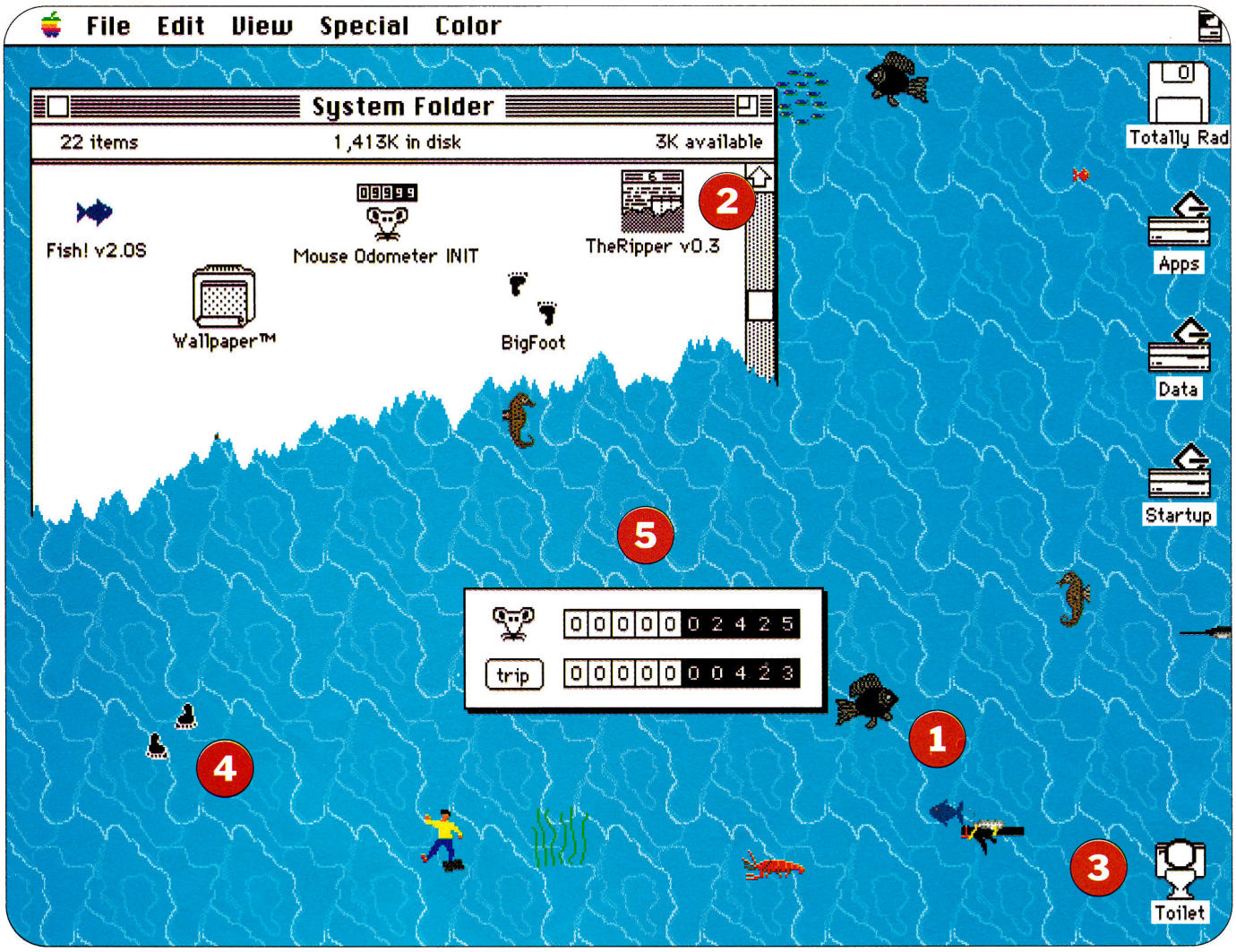


Figure 1. Macs just wanna be cool . . . .

1. **Wallpaper's empty-pool pattern provides an appropriate backdrop for Fish!'s sea creatures.**
2. **The Ripper "tears up" your document to the sound of shredding paper.**
3. **Toilet replaces the Trash icon and offers appropriate metaphors for Trash-related items as well as a digitized flushing sound.**
4. **BigFoot places a pair of animated wandering feet on your desktop.**
5. **Mouse Odometer keeps track of the total distance (in miles) your cursor has covered, plus the distance it's traveled since the last time you started your Mac.**

MINDLESS MONITORS

In "Way Cool Mac" I introduced you to **After Dark**, perhaps today's most popular "utility" (and, believe me, I use that term *very* loosely).

Basically, after a user-specified period of inactivity, this screen saver kicks into action, displaying fireworks, flying toasters, personalized messages, kaleidoscopes, bouncing logos, and so on, until you press a key or move the mouse. The animations are supposed to prevent static images from burning into the phosphors on your monitor, but After Dark is really just for showing off.

The original After Dark comes chock full of modules, but to meet the insatiable demand, Berkeley Systems has released **More After Dark**, with 26 new and exciting add-on modules.

FINDER FOLLIES

Taking out the trash is a drag, whether it's in real life or on the Mac. But not with **Toilet**, a freeware offering by Michael J. Fisher. Use **ResEdit** (a utility available from Apple Computer and Addison-Wesley Publishing) to replace the Finder's Trash icon with that of a working toilet (**Figure 1**). The icon, name, and any menu items related to *Trash* are all updated with appropriate commode metaphors. A gurgling digitized flush is also included for those of you with utilities — such as **ClickChange** or **SoundMaster** — that trigger sound effects upon certain Finder operations. (As of this writing, Toilet doesn't work under System 7.)

Wallpaper is a commercial control panel (sometimes called *control-panel device*, or *cdev*) from Thought I Could. It's billed as "an interior decorator" for the Finder's desktop, letting you display large desktop patterns in up to 256 colors (**Figure 1**). Normally, Apple's General control panel limits you to patterns no larger than eight pixels (*picture elements*, or dots) on a side, but with Wallpaper you can use patterns up to 128 pixels square, allowing for much more intricate repeating designs. Wallpaper comes with hundreds of beautiful predefined patterns, and you can edit them or create your own. Furthermore, Thought I Could is running

a contest for original designs and plans to offer the submitted patterns on a subscription basis.

DeskPat is a freeware desk accessory (DA) similar to Wallpaper. Written by Roy M. Lovejoy III, DeskPat allows patterns in up to 16 million colors (24-bit). Unlike Wallpaper, DeskPat comes with very few sample patterns, nor does it include a pattern editor. You can create new patterns in other graphics applications, however, and paste PICT images into DeskPat.

ColorDesk, a control panel written by Paul Mercer, is included in Microseeds' **Screen Gems** package. It allows Mac II computers to display complete pictures on the desktop, instead of the Finder's relatively boring repetitive patterns (**Figure 2**). Even if you have multiple monitors, ColorDesk can display only a single PICT image containing up to 256 colors.

In comparison, the **DeskPicture** module of Now Software's **Now Utilities** package is similar in function, but supports 32-bit graphics and multiple monitors. Nonetheless, you may be interested in the other programs in the Screen Gems package, including **Dimmer** (a screen saver), **Switch-a-Roo** (a function key for switching between monitor settings), and **TN-3** (an application for changing the Finder's *Color* menu).

Globe is another silly application by Paul Mercer included in Microseeds' Screen Gems. (It's also available in the public domain.) Basically, all it does is place a spinning planet Earth on the desktop (**Figure 2**). Earth is one inch in diameter and beautifully rendered in color with appropriate shading. Under MultiFinder or System 7, Globe can run while you're using other applications, so you can set it spinning on top of the *Trash*, for example, while you're busy writing a memo.

Eyeballs and **BigFoot** are two system extensions (INITs) written by Ben Haller (of Solarian II fame) and distributed free under the name **Critters**. You know how every mystery movie set in a spooky mansion has that one portrait whose eyes follow your every move? Eyeballs places a pair of peepers in the menu bar, and they follow your cursor around wherever it goes (**Figure 2**). With BigFoot, on the other hand (**Figure 1**), a pair of feet walk randomly around your desktop. (I told you this stuff was stupid.)

If BigFoot doesn't tickle your tootsies, maybe **Fish!** will float your boat. Fish! is a shareware program that turns the Finder's desktop into an animated aquarium. Assorted sea creatures swim behind application windows while you work, and fill the screen during periods of inactivity (**Figure 1**). You can adjust the behavior of underwater denizens via a control panel. If you register your copy of Fish!, you'll be able to edit existing fish and create your own species.

Andrew McGeachie's **Shutdown Slide** and **Shutdown Fade** are freeware system extensions that add a little pizzazz to the mundane task of turning off your Mac. Instead of the screen simply going blank when you choose *Shut Down* from the Finder's *Special* menu, Shutdown Slide causes the left half to slide down and the right half to slide up. Likewise, with Shutdown Fade, the screen fades slowly to black. With both extensions, when the screen is clear, the shut-down procedure finishes normally.

SILLY SOUNDS

Unauthorized *Star Trek* sound effects have long been popular downloads on bulletin boards, but Sound Source Unlimited recently received an exclusive license to distribute samples from the classic television series. Each **Star Trek Soundware** volume contains two 800K disks stuffed with 50 sound effects and a copy of SoundMaster, a control panel that plays sounds when certain events — such as emptying the *Trash* or ejecting a disk — occur on the Mac (**Figure 2**).

Unlike the low-quality recordings available previously, these authorized sound effects were recorded digitally from the original soundtrack masters, then saved as data files for playback on the Mac. You can use these files with any application capable of playing 8-bit SoundEdit files. Sound Source Unlimited currently offers only two volumes of Star Trek Soundware, but the company plans to license sound effects from other popular movies, so keep your ears open.

Remember the hilarious scene in *When Harry Met Sally* in which Meg Ryan embarrasses Billy Crystal by faking sexual climax in a restaurant? Well, Frank Price and Mark Weaver digitized that sound bite and hacked it into a free system extension named, appropriately enough, **Power-Orgasm**. Sorry, gang, this one's for mobile Mac users only: Whenever you plug in a power adapter, your PowerBook starts moaning and groaning in ecstasy. If you're going to be using your PowerBook in public, though, you can change the sound to something a little more prudish with ResEdit.

Talking Moose is a commercial control panel written by Steve Halls and marketed by Baseline Publishing. With Talking Moose in your *System* folder, during periods of inactivity animated characters pop up on screen and blurt out wisecracks and insults before disappearing (**Figure 2**). Not only do they interrupt your daydreams with their blathering, these cartoon characters also call out your menu choices and read alert-box messages, too. It's like having your own annoying little cheering section inside your Mac.

With the utility provided, you can add new sayings or change the way Talking Moose interacts with individual applica-

ORDER INFORMATION

To receive a copy of either inCider/A+ disk, send a check or money order (no purchase orders or CODs), payable to Owen Ink in the amount of $5 per disk, to **Mac Disk Offer, 1830 Lawton Street, San Francisco, CA 94122-3328**. Outside North America, add $2 per order. Please specify whether you want the new "Totally Rad Mac" disk, the original "Way Cool Mac" disk, or both. All programs are provided "as is" and may not work on all Mac models and configurations. Note that the nominal fee covers materials and shipping costs only; remember to pay appropriate shareware fees where indicated. **— O.W.L.**

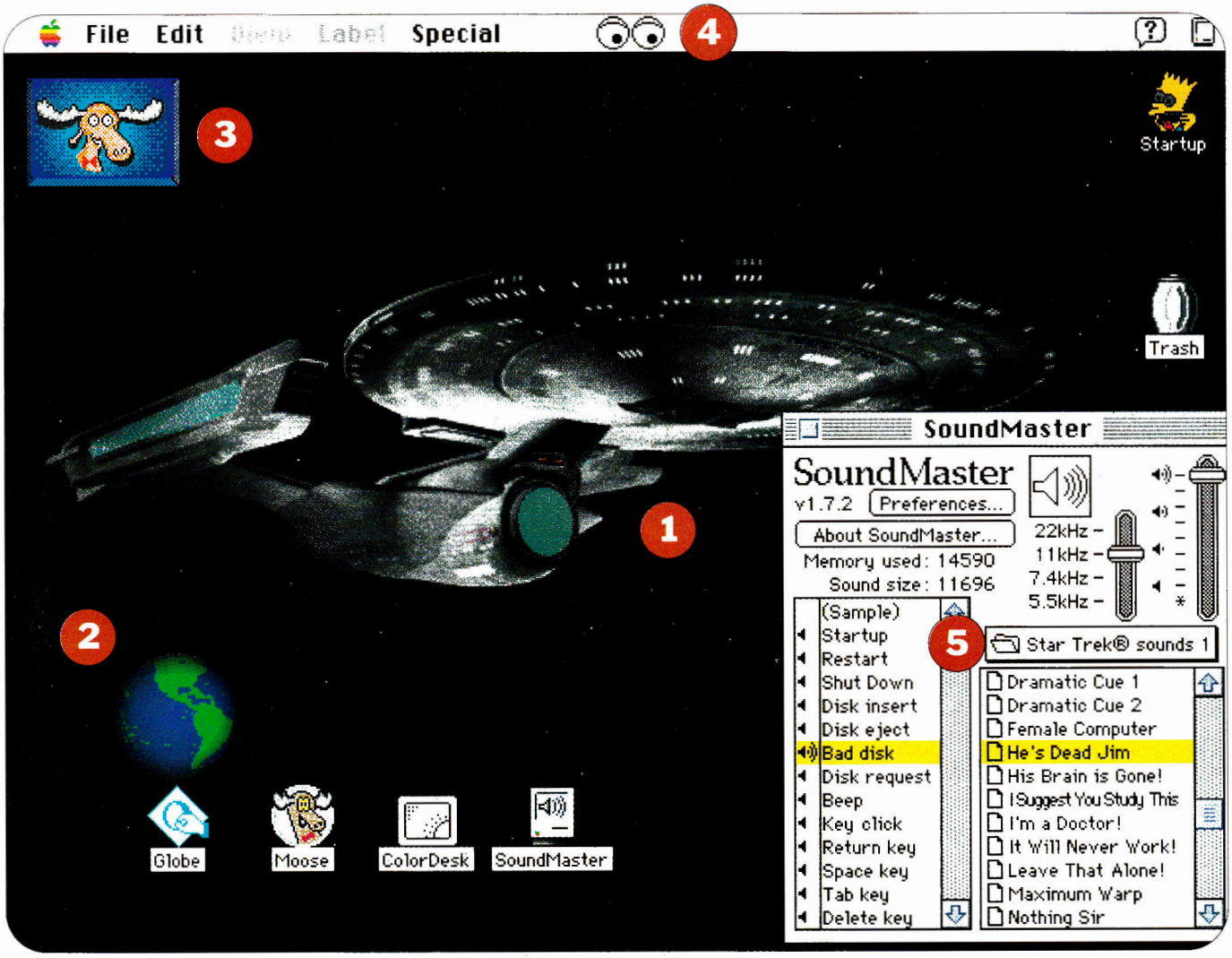


Figure 2. Design your own totally rad Mac universe . . . .

1. ColorDesk places pictures (in this case, a starship) on the desktop . . .
2. . . . while Globe animates the scene with a spinning planet.
3. Talking Moose adds animated characters who call out your menu choices and blurt out silly comments and wisecracks.
4. A pair of Eyeballs keeps tabs on your cursor and follows it around the screen.
5. Star Trek Soundware includes 50 sound effects (which you can link to system events) recorded digitally from the classic TV series.

tions. You can even add speech capabilities to your own HyperCard stacks.

Inspired by Rob Schneider's hilarious "Copy Guy" skit on *Saturday Night Live*, **Makin' Copies** is a freeware system extension written by Eric J. Hayes and Jim Wolff. Whenever you duplicate files, this annoying little bugger announces that you're "Makin' copies!" or "Still makin' copies!" This electronic peanut gallery includes a few other choice pieces of computer commentary, as well, but I'll leave them up to you to find.

CRAZY KEYBOARDS

Wacky Lights by Andrew Welch is similar to Rick Kaseguma's Key Lights, featured in my previous article. Both are public-domain system extensions that make the Num Lock, Caps Lock, and Scroll Lock light-emitting diodes (LEDs) on an Apple Extended Keyboard flash in a back-and-forth sequence.

Granted, Key Lights offers a few extra features, but some users have reported it to be more temperamental than the simplistic Wacky Lights.

MISCELLANEOUS MAYHEM

I wrestled over whether to include Sean Nolan's **Mouse Odometer** in this article, because sick, twisted minds might find that this program has some utilitarian value. It's a shareware system extension that tracks the distance, in miles, your cursor covers. It's even got a trip odometer to show you how far the cursor has moved since the last time you started up the Mac (**Figure 1**).

If you've read this far, chances are you're a fool for cool stuff. So is Bob LeVitus, the self-proclaimed "Dr. Macintosh" and author of ***Stupid Mac Tricks*** and its sequel, ***Son of Stupid Mac Tricks***. Each of these books is published by Addison-Wesley and comes with a 3.5-inch disk containing 14 "insanely great" programs. Granted, there's a little duplication between these books and my articles, but if you just can't get enough cool stuff, get your hands on these book/disk combos.

The Ripper is a function key (FKEY) that lets you take out your frustrations on the Mac. Whenever you press Command-Shift-6, the active window is torn asunder to the sound of shredding paper (**Figure 1**). It's a little disconcerting when your document is severed in half and the

bottom disappears, but The Ripper is harmless. To restore a window, simply close it and then open it again. The Ripper is freeware and was written by Steve Blackstock of Random Dot Software.

ASININE ACCESSORIES

If The Ripper sounds cool, but you're more physically inclined, so to speak, grab hold of **Smack Two**, a 5-inch-tall stuffed Mac with keyboard, created by Computer Fun to provide a harmless outlet for computer stress.

Whenever your real Mac causes problems, take out your frustrations on the Smack Two instead. Unlike your pricey-but-fragile Macintosh system, the inexpensive Smack Two is built for punishment. Its durable fabric is filled with soft foam, so you can punch it, throw it, and squeeze it without worrying about voiding your warranty.

The folks at Silicon Sports think most mouse pads are pretty generic, so they created **Hyper Pad**, a normal-looking mat covered by a thin layer of special heat-sensitive liquid crystals. When warmed by the heat of your hand from 70 to 90 degrees Fahrenheit, Hyper Pad changes from drab black to a rainbow of reds, greens, and blues. Use it as a mood ring for your mouse, or a doodle pad when you're bored.

This summer, the most fashionable Macs will be sporting **Screenwear**, a "tube top" made of lightweight, stretchable fabric that slips over the front and sides of 12- and 13-inch monitors. (There's a model designed for Classic-style Macs, too.) Screenwear comes in a variety of colors and patterns to suit your fancy. And since Screenwear isn't a dust cover, you can leave it on all the time.

Finally, just when you thought you'd seen everything, take a look at **HangOuts** from Oswamo Products. Ostensibly dust shields for idle floppy disk drives, HangOuts are made of soft, flexible plastic and come in five wacky designs: fish tail, human tongue, cow udders, frog legs, and grinning cat. HangOuts are available by mail order through Diskettes Unlimited.

EXCLUSIVE DISKS

Most of the shareware and public-domain programs mentioned here are widely available in user groups' collections and on-line services' download libraries. Not everyone has access to those distribution channels, though, so with the permission of the programs' authors, *inCider/A+* has put together an 800K disk containing the following programs and their related files: Critters (BigFoot and Eyeballs), DeskPat, Fish! (demo), Globe, Makin' Copies, Mouse Odometer, PowerOrgasm, The Ripper, Shutdown Fade, Shutdown Slide, Toilet, and Wacky Lights. (See the accompanying sidebar for ordering information.)

Also, in case you're an incredible procrastinator or haven't gotten the hang of the postal service yet, you can still order the disk that accompanied the "Way Cool Mac" article in the January 1992 issue. It contains a dozen different programs sure to make your Mac the coolest on the block. ❑

FREE-LANCE WRITER OWEN W. LINZMAYER USED TO BE A COMPUTER GEEK. NOW HE'S A COMPUTER GEEK WITH A TOTALLY RAD MAC. WRITE TO HIM AT 1830 LAWTON STREET, SAN FRANCISCO, CA 94122-3328. ENCLOSE A SELF-ADDRESSED, STAMPED ENVELOPE IF YOU'D LIKE A PERSONAL REPLY.

PRODUCT INFORMATION

After Dark 2.0, $49.95
More After Dark, $39.95
Berkeley Systems, Inc.
1700 Shattuck Ave.
Berkeley, CA 94709-1720
(800) 877-5535
(510) 540-5535

ClickChange 1.04
Dubl-Click Software
9316 Deering Ave.
Chatsworth, CA 91311-5857
(818) 700-9525
$89.95 list

Critters
Ben Haller/Stick Software
32 Deer Haven Drive
Ithaca, NY 14850
freeware

DeskPat
Roy M. Lovejoy III/Adept Solutions
524 Avenida Verde
San Marcos, CA 92069
freeware

Fish!
Tom & Ed's Bogus Software
15600 Northeast 8th St.
Suite A3334
Bellevue, WA 98008
$22.95 shareware

HangOuts
Diskettes Unlimited
2278 Trade Zone Blvd.
San Jose, CA 95131
(800) 222-6032
(408) 262-6660
$4.99

Hyper Pad
Silicon Sports
425 Manzanita Way
Woodside, CA 94062
(800) 243-2972
(415) 851-7900
$19.95

Makin' Copies
Eric J. Hayes/Jim Wolff
freeware

Mouse Odometer
Sean P. Nolan
3849 Klahanie Drive Southeast
Apartment 7-304
Issaquah, WA 98027
Internet:
seanno@microsoft.com
$5 shareware

Now Utilities 2.03
Now Software
520 Southwest Harrison St.
Suite 435
Portland, OR 97201-5258
(800) 237-3611
(503) 274-2800
$129

PowerOrgasm
Frank Price
America Online: FrankPrice
CompuServe: 74156,1307
freeware

ResEdit
Apple Computer
20525 Mariani Ave.
Cupertino, CA 95014
(408) 252-2775
freeware

ResEdit Complete, $29.95
ResEdit Reference, $14.95
Stupid Mac Tricks, $19.95
Son of Stupid Mac Tricks, $19.95
Addison-Wesley Publishing Co.
1 Jacob Way
Reading, MA 01867-3999
(617) 944-3700
(800) 447-2226

The Ripper
Steve Blackstock
Random Dot Software
40 Bartlett Ave.
Lexington, MA 02173
CompuServe: 73270,1150
freeware

Screen Gems
Microseeds Publishing
5801 Benjamin Center Drive
Suite 103
Tampa, FL 33634
(813) 882-8635
$79

Screenwear
Warren/Fisher
1350 Lawrence St.
Suite 100
Denver, CO 80204
(800) 487-9983
$10.95
12- and 13-inch monitors
$8.95 Classic Macs

Shutdown Fade
Shutdown Slide
Andrew McGeachie
32 Dover Road
Wellesley, MA 02181
Internet: geech@cs.bu.edu
freeware

Smack Two
Computer Fun
7343 Ronson Road
Suite H
San Diego, CA 92111
(800) 521-8484
(619) 279-1919
$10.95

SoundMaster
Bruce Tomlin
$15 shareware

Star Trek Soundware
Sound Source Unlimited
2985 East Hillcrest Drive
Suite A
Westlake Village, CA 91362
(800) 877-4778
(805) 494-9996
$49.95 each

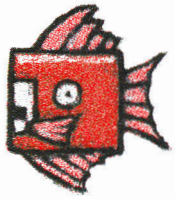
Talking Moose 4.0.1
Baseline Publishing
1770 Moriah Woods Blvd.
Suite 14
Memphis, TN 38117-7118
(800) 926-9676
(901) 682-9676
$39.95

Toilet
Michael J. Fisher
freeware

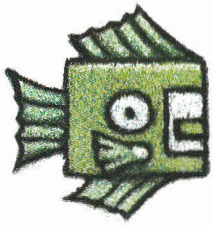
Wacky Lights
Andrew Welch
freeware

Wallpaper 1.0.1
Thought I Could
107 University Place
Suite 4D
New York, NY 10003-4524
(212) 673-9724
$59.99

CATCH OF THE DAY



Look to the future of the Apple II: As commercial development declines, freeware and shareware programmers cut loose with a bounty of creative products for home, school, and small business.



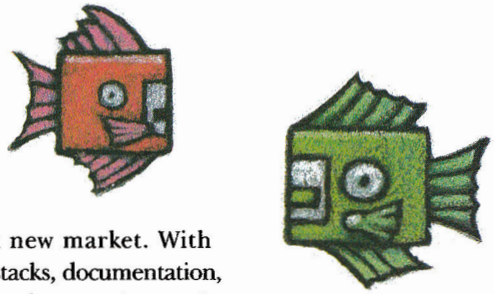
FIRST IMPRESSIONS CAN BE deceiving. If you visit your local Apple dealer or software store, for example, you might get the feeling that Apple II software development is at a standstill. Don't let those near-empty shelves fool you: New Apple IIe/c and IIGS programs continue to appear at an astounding rate.

The trick is that they're mostly *shareware*, *freeware*, and *public-domain* programs — software created not by the major third-party development companies you're familiar with, but by individuals and groups who make their products available at very low cost via on-line services, user groups, and specialized mail-order vendors.

If you're already using this type of software, chances are your program collection will last you well into the next millennium. If the concept of freeware or shareware is new to you, you're in for a money-saving treat. Whether you're after fun and games, a boost in small-business or home-office productivity, or a supplement to your classroom lessons, literally thousands of programs are available. The adage "You get what you pay for" has been replaced by "The best things in life are free." Or almost free.

By JOE KOHN * CONTRIBUTING EDITOR

Illustration • Tim Lee



reach a new market. With special stacks, documentation, source code, samples, and an *Extra Manager*, you'll be on your way to programming new transitions, button actions, and other goodies. Developer Pack requires HyperStudio 3.0 and a knowledge of computer programming.

Sensei. Miami Beach Productions, a French group, has now released Sensei — its final GS game. This ultimate karate simulation is visually stunning and contains some of the most beautiful computer graphics screens ever seen. It includes one- and two-player modes; in two-player mode, one person uses a joystick while the other uses the keyboard. The game allows for 11 different moves and provides 12 levels of challenge. Sensei includes realistic digitized sound effects and a fantastic soundtrack. This game was originally scheduled for a commercial release in France, and when the software publisher went out of business, Miami Beach Productions released it as freeware. Thanks, guys.

Simple Animation Program. If you like the Free Tools Association's animation demos and wish you could create similar software, you can — thanks to Kenrick Mock's freeware Simple Animation Program. SAP 0.5 lets you create animated sequences complete with jazzy Sound Smith soundtracks. You can add digitized sounds easily as well. No programming skills are required. All you need are 1.25 megabytes of RAM, an active imagination, and a paint program. Use your graphics package to create backgrounds, then add animated actors, dancing letters, and Sound Smith songs.

SAP includes three modules: *Projector*, to run the animations; *Actoredit*, to create action; and *Scenedit*, to piece your animation together. Also included are complete documentation and a step-by-step tutorial.

Sounds of History. Joel Helton, an educator from Tennessee, has produced a series of HyperStudio stacks called Sounds of History — multimedia in the truest sense of the word. Using a Quickie hand-held scanner, Helton input a number of photographs of historical people and events, then added associated recordings and other relevant text information.

Volume 1 includes memorable occasions such as the speech given by Edward VII as he abdicated his throne for the woman he loved; an account of the Hindenburg disaster; a rare sound recording of Thomas Alva Edison from 1912; a speech by Charles Lindbergh upon his return to the United States after his 1927 solo crossing of the Atlantic; and a version of the World War I-era tune *Over There*, sung by Enrico Caruso.

Volume 2 is devoted primarily to the sights and sounds of World War II. You'll hear Neville Chamberlain, prime minister of England, announcing the start of World War II in 1939. You'll hear his successor, Winston Churchill, proclaim during the Battle of Britain that "this was their finest hour." You'll hear General Dwight D. Eisenhower announce that Allied Forces have landed on the beaches of Normandy on D-Day. You'll hear Harry S Truman announce both the surrender of Germany on VE Day and the dropping of the first atomic bomb on Hiroshima. Jumping ahead 40 years, you'll hear the last words transmitted by the crew of the space shuttle *Challenger*.

Volume 3 could be called "Baseball's Greatest Moments." In this stack, you'll hear Lou Gehrig's 1939 farewell address at Yankee Stadium, when he calls himself "the luckiest man on the face of the earth." You'll also hear Babe Ruth's 1947 farewell address at Yankee Stadium; the announcer losing his composure as the New York Giants win the 1951 National League pennant on Bobby Thompson's famous home run; and the conclusion of Don Larsen's 1956 World Series perfect game. Perhaps the most famous of all baseball expressions, Abbott and Costello's "who's on first," concludes this stack.

Star Trek Classic. Joe Jaworski has updated a classic text-based adventure and created a stunning super-hi-res, mouse-driven version of one of the earliest games ever written for the Apple II: Star Trek Classic ($20 shareware fee, 1.5 megabytes of RAM required).

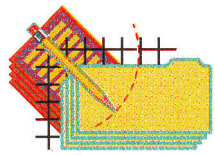
As Captain Kirk, you'll discover that your next mission is to make the galaxy safe from the Klingons. As the game begins, you'll hear the *Star Trek* theme song, digitized from the TV show. You'll soon learn that 21 invading Klingon ships have been spotted. If you don't stop them in 31 days, Federation headquarters will come under attack.

Just as on the USS *Enterprise*, you have access to the ship's computer, navigation system, and short- and long-range sensors. You'll be able to assess damage control, launch photon torpedoes, and direct phasor fire toward the enemy. Will you save the Federation? Stay tuned.

SOFTWARE, SOFTWARE EVERYWHERE

No one will dispute the statement that the number of new commercial programs for the Apple IIe/c and IIGS is somewhat limited now. A trip to a retail software store may be more frustrating than fun these days, but the silver lining to that cloud is the enhanced visibility of some very creative public-domain and shareware programs. You may have to spend some time poring over the huge number of options available, as quality in this genre varies greatly — but don't let *anyone* tell you there's no new software for your Apple II. ❑

CONTRIBUTING EDITOR JOE KOHN IS THE AUTHOR OF *INCIDER/A+*'S MONTHLY "SHAREWARE SOLUTIONS" COLUMN IN THE WHAT'S NEW SECTION. WRITE TO HIM AT 166 ALPINE STREET, SAN RAFAEL, CA 94901. ENCLOSE A SELF-ADDRESSED, STAMPED ENVELOPE IF YOU'D LIKE A PERSONAL REPLY.



PAPER TIGER 2

Tame the document search: Merge a database report with a word-processed letter to create a record for your family.

By RUTH K. WITKIN

"COMBO" COLUMNS — USING THE AppleWorks database and word processor or the word processor and spreadsheet — are the kind I like to write best. That's because they teach different facets of AppleWorks at the same time, plus they show off the power and pleasure of working with integrated software.

In this column, you'll design a new report in the *Documents* database you set up last month (May 1992, p. 40) and merge it with a letter you create this month. In the process, you'll create a report format as well as a letter format that includes a tab ruler. **Figure 1** shows the result. If you missed last month's column, you can request a reprint from the *inCider/A+* editorial department at 80 Elm Street, Peterborough, NH 03458, (603) 924-0262.

Now load AppleWorks and bring the database, named *IMPDOCS*, to the screen. The ten records you entered appear in the *Review/Add/Change* screen's multiple-record layout.

REPORT 4

First, create the report you want to merge (**Figure 2**). It will contain information that helps locate or replace important documents, plus notes and reminders. The fastest way to create it is to duplicate an existing format.

Press OA-P to get to the *Report* menu, type **4**, and press Return to select *Duplicate an existing format*. Press Return to confirm the *LOCATE/REPLACE* report format. Press OA-Y to erase the current report name, then type **LOCATE — NOTES** (the name of this new report) and hit Return again. You're now in *Report Format*.

In this report, you want to print only the *DOCUMENT*, *KEPT*, *LOCATION*, and *NOTES* categories; you want to delete the others. Press Tab three times to reach the *COMPANY/AGENCY* category, and press OA-D six times. The cursor is now on the *NOTES* category. Press Tab to skip to *SPARE1*. Delete all spares by pressing OA-D ten times. The cursor is now on *Ln64*, the indicator that shows the total width, in characters, of the remaining categories.

All of the category widths are fine except for *NOTES*, which needs to be wider. Press Left Arrow to settle on the *NOTES* category, and press OA-Right Arrow eight times. The indicator should now show *Ln72*.

Next have AppleWorks print a dash when an entry is blank: Press OA-O to bring up the *Printer Options* screen. Type **PD** and hit Return. Press Escape to return to *Report Format*. Your report is complete.

Turn on your printer. Now print the report to see what you're working with: Press OA-P, press Return to confirm the printer (or type a printer number, then Return), and hit Return twice more to move past the date and confirm *1* copy.

The printer whirs away to produce the report shown in **Figure 2**. Press OA-S to store it on disk. You're now back in the *Review/Add/Change* screen.

June 21, 1992

Dear Karen:

We really enjoyed our visit "out West" with you and Corey and the kids. After we got back home, my darling practical daughter, I gave considerable thought to our stimulating discussion about the stages of life. You're right, of course. It's time to simplify our lives and plan for a new future.

It took lots of hunting around, but your Dad and I finally developed a database (AppleWorks, of course) of all of the financial and other facts we want to track. We now know where our important family papers are located and who to contact if we ever need to replace them. Dad and I would like you to keep a record of what we found.

DOCUMENT	KEPT	LOCATION	NOTES
BIRTH CERTIFICATE	SHORELINE	SAFE DEPOSIT	COPIES IN DESK FOLDER
MARRIAGE CERT	SHORELINE	SAFE DEPOSIT	#1230-4560-XYZ
BANK BOOK	DEN DESK	CTR DRAWER	ACCT #123456
TAX RETURNS	BACK FILE	THIRD DRAWER	-
WILLS	SHORELINE	SAFE DEPOSIT	COPY IN DEN FILE
PASSPORT	DEN DESK	LEFT DRAWER	RENEW SEPT 1992
CAR INSURANCE	DEN FILE	TOP DRAWER	SINCE 1972
IRA & KEOGH	DEN DESK	FILE DRAWER	REVIEW JULY 92
CEMETERY DEED	SHORELINE	SAFE DEPOSIT	-
LIFE INSURANCE	SHORELINE	SAFE DEPOSIT	TERM $75K

We're having our Fourth of July barbecue soon. It has a real international flavor, what with Irina and Alla and their families coming over. Russians everywhere. I wish you all could be with us. I'm sending you an invitation anyway, of course, created on AppleWorks as usual. Wait 'til you see this one!

Love and Kisses,

Mom

xxxxx

Mom

Figure 1. Documents database report merged with family letter.

A LETTER FROM SCRATCH

Next, create the letter. Hit Escape to return to the main menu, and create a new AppleWorks word-processor file named **IMPDOC MERGE**. The *Review/Add/Change* screen appears, with the cursor in line 1 column 1.

Figure 3 shows the text of the letter, line numbers, and "blots" where you press Return. Word wraparound makes any word that can't fit at the end of a line move down to the beginning of the next line; press Return only to end a paragraph or to insert a blank line.

If you make a typo, press Delete to back up the cursor and erase the character. So that we're working with the same line and column numbers, type only one space between sentences.

Now press OA-Z to show blots on screen as you work. Enter the text as follows:

Line 1. Type June 21, 1992, then press

```
File:   IMPDOCS                                                  Page 1
Report: LOCATE-NOTES
DOCUMENT            KEPT          LOCATION        NOTES
------------------- ------------- --------------- ------------------------
BIRTH CERTIFICATE   SHORELINE     SAFE DEPOSIT    COPIES IN DESK FOLDER
MARRIAGE CERT       SHORELINE     SAFE DEPOSIT    #1230-4560-XYZ
BANK BOOK           DEN DESK      CTR DRAWER      ACCT #123456
TAX RETURNS         BACK FILE     THIRD DRAWER    -
WILLS               SHORELINE     SAFE DEPOSIT    COPY IN DEN FILE
PASSPORT            DEN DESK      LEFT DRAWER     RENEW SEPT 1992
CAR INSURANCE       DEN FILE      TOP DRAWER      SINCE 1972
IRA & KEOGH         DEN DESK      FILE DRAWER     REVIEW JULY 92
CEMETERY DEED       SHORELINE     SAFE DEPOSIT    -
LIFE INSURANCE      SHORELINE     SAFE DEPOSIT    TERM $75K
```

Figure 2. Documents database report.

```
LINE
  1  June 21, 1992
  2
  3
  4
  5
  6  Dear Karen:
  7
  8  We really enjoyed our visit "out West" with you and Corey
  9  and the kids. After we got back home, my darling practical
 10  daughter, I gave considerable thought to our stimulating
 11  discussion about the stages of life. You're right, of
 12  course. It's time to simplify our lives and plan for a new
 13  future.
 14
 15  It took lots of hunting around, but your Dad and I finally
 16  developed a database (AppleWorks, of course) of all of the
 17  financial and other facts we want to track. We now know
 18  where our important family papers are located and who to
 19  contact if we ever need to replace them. Dad and I would
 20  like you to keep a record of what we found.
 21
 22
 23  We're having our Fourth of July barbecue soon. It has a real
 24  international flavor, what with Irina and Alla and their
 25  families coming over. Russians everywhere. I wish you all
 26  could be with us. I'm sending you an invitation anyway, of
 27  course, created on AppleWorks as usual. Wait 'til you see
 28  this one!
 29
 30  Love and Kisses,
 31
 32
 33
 34
 35
 36  Mom
```

Figure 3. Text of family letter.

Return five times to end the paragraph and insert four blank lines. The cursor moves to line 6, as shown at the bottom of the screen.

Line 6. Type **Dear Karen:** and press Return twice. The cursor moves to line 8.

Line 8. Referring to **Figure 3**, type the entire paragraph that starts **We really enjoyed our visit "out West" with you and Corey and the kids.** At the end of the paragraph, press Return twice. The cursor moves to line 15.

Line 15. Type the entire paragraph that starts **It took lots of hunting around** . . . . At the end of the paragraph, press Return three times. The cursor moves to line 23.

Line 23. Type the entire paragraph that starts **We're having our Fourth of July barbecue soon.** At the end of the paragraph, press Return twice. The cursor moves to line 30.

Line 30. Type **Love and Kisses,** then press Return six times. The cursor moves to line 36.

Line 36. Type **Mom** and leave the cursor where it is, which should be line 36 column 4. This completes the letter, so press OA-S to store it on disk.

You want to be sure everything's spelled correctly, so press OA-V now to start the *Verify Spelling* command. The highlight is on *All*, which tells AppleWorks to check the spelling of every word in the letter. (Selecting *Word* checks the word under the cursor, or to the left if the cursor is between words. Selecting *Block* checks each word in the block of text you highlight.) Press Return to confirm *All*.

AppleWorks scans the letter and pauses with the cursor on the name *Irina*, an unknown word. Type **I** to tell AppleWorks to ignore this word. It now pauses on *Alla*, another unknown word. Again, type **I**. Next, AppleWorks pauses on *'til*. Type **I** again. This completes the spelling check.

MERGING LETTER AND REPORT

The last step is to merge the document report with the letter. First, get to the database: Press OA-Q to display the *Desktop Index*, type the number corresponding to *IMPDOCS*, and press Return.

Now print the report on the clipboard: Press OA-P to bring up the *Report* menu, and hit Return to *Get a report format*. Type the number corresponding to *LOCATE — NOTES*, and hit Return. Now press OA-P to reach the *Print the Report* screen. Type the number (typically **3**) corresponding to *The clipboard (for the Word Processor)* and press Return twice, the second time to move past the report date.

AppleWorks advises that the report is now on the clipboard. Press OA-Q to switch to the *Desktop Index* again, type the number corresponding to *IMPDOC MERGE* (the letter you just created), then hit Return. And there's the letter.

Move the cursor to line 23 column 1 (the start of the third paragraph) and press OA-C. Type **F** to select *From clipboard*. Like magic, AppleWorks pops the document report into the letter.

The letter still looks fine, but the report is more than a bit messy. Let's see how it looks on paper. Be sure your printer is turned on. Now press OA-P, hit return twice to confirm *Beginning* and the printer (or type a printer number, then Return), and hit Return again to confirm *1* copy. The printer whirs, and there's the letter. Hmmm — looks as bad on paper as it did on screen.

Formatting will get the kinks out of the letter. Press OA-1 to jump the cursor to the start of the document.

First change the margins: Press OA-O to bring up the *Printer Options* screen. Type **TM** (for *Top Margin*) and press Return. Type **1** and hit Return again. Type **LM** (for *Left Margin*) and press Return. Type **.6** and hit Return again. Now type **RM** (for *Right Margin*) and press Return. Type **.9** and hit Return again.

Finally, change the size of the text from the standard 10 characters per inch to the smaller 12 characters per inch: Type **CI** and hit Return. Type **12** and hit Return again. Press OA-S to save the settings, which also returns you to the *Review/Add/Change* screen. Move the cursor down to the document report, and you'll see a small miracle: The columns are correct. Next, delete the information in the AppleWorks header: Place the cursor on line 24 column 1 and press OA-D. Press Down Arrow twice, then OA-Right Arrow twice to highlight all three header lines, and Return.

You could eliminate the header before copying the report to the clipboard, but there's a down side: You'd also eliminate the category names. To have your cake (get rid of the filename, report name, and page number) and eat it, too (keep the category names), your best bet is to just bring everything into the letter, then delete what you don't want.

The cursor is on the *D* in *DOCUMENT*. Indent the entire report: Press OA-O to bring up the *Printer Options* screen once more. Type **LM**, press Return, type **.8**, and hit Return again. Press Escape to close the *Printer Options* screen.

An easy way to restore the normal left margin to the final paragraph is to copy the margin indicator at the beginning of the letter. Press OA-1 and place the cursor on the *Left Margin* indicator. Press OA-C and hit Return, which highlights the indicator. Press OA-7 to jump to line 37 column 3, press Down Arrow twice to reach line 39, and hit Return. The margin indicator is now in its proper place.

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APPLEWORKS IN ACTION

The last two items of text in the letter (*Love and Kisses* and *Mom*) belong in the middle of their respective lines; you can move them easily by tabbing. Except for the first tab, which occurs at the sixth character, AppleWorks marks tabs in five-character increments. Therefore, you could move each item by tabbing eight times. By creating a tab ruler, however, you can zip to the proper place with no fuss or bother.

Here's how: Place the cursor on line 47 column 1, and press OA-T to bring up the *Modify Tab Stops* screen. Hit Return to confirm *Modify current*. Now eliminate all tabs: Type **N** (for *No tabs*). Next, insert the tab you want: Hold down Right Arrow until the cursor on the tab bar (at the top of the screen) moves to column 40 (check the counter in the lower-right corner of the screen). Then type **L** (for *Left*) and hit Escape.

Now getting *Love and Kisses* where you want takes only a keystroke: Press Tab. Zip. Next move the cursor to line 53 column 1 and press Tab. Again, the cursor zips the text to the center of the line — oh, so simple.

Only one bit of formatting remains — underlining the word *this* at the end of the third paragraph. Place the cursor on line 44 column 70 and press control-L to start the underline. Move to line 44 column 75 and press control-L to end the underline. When you put the cursor on a caret, you can see that it means underline.

Now print the formatted letter. This is going to be good — trust me. Be sure the printer is still on. Press OA-P and hit Return three times. When the printer stops, your letter should look like the one in **Figure 1** — very attractive. Press OA-S to save it on disk.

NEXT TIME

If you're thinking about starting a small business — either for primary income or as a sideline — you can't afford to miss next month's business-startup spreadsheet. It shows what you need to consider, dollar-wise, before making your move. ❑

RUTH WITKIN IS THE CREATOR OF THE *SUCCESS WITH APPLEWORKS* TEMPLATE SERIES AND *RUTH WITKIN'S MONEY MANAGER* (A+ PUBLISHING, IDG COMMUNICATIONS). SHE'S ALSO THE AUTHOR OF *THE BEST BOOK OF APPLEWORKS* AND *PERSONAL MONEY MANAGEMENT WITH APPLEWORKS*. WRITE TO HER AT 5 PATRICIA STREET, PLAINVIEW, NY 11803. ENCLOSE AN SASE IF YOU'D LIKE A REPLY.

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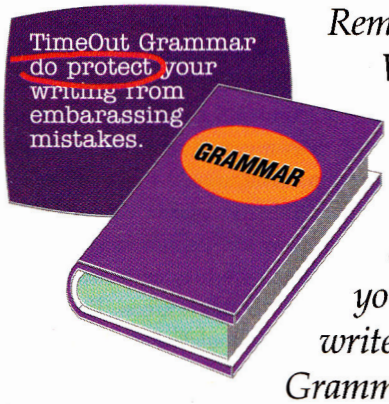

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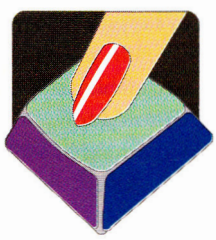

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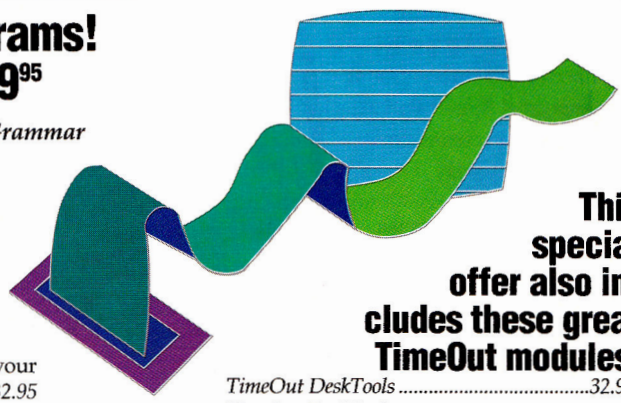

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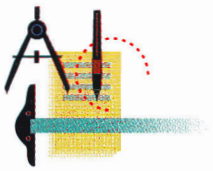

PRESS ROOM

AT YOUR FINGERTIPS

Keep program-function and "hidden key" reminders right where you need them.

By CYNTHIA E. FIELD, Ph.D.

SUMMERTIME AND COMPUTIN' IS easy . . . thanks to two inexpensive (about $10 apiece) desktop-publishing (DTP) accessories I stumbled upon during a brief spring-cleaning session. As I browsed through a gargantuan stack of Apple II and Mac mail-order catalogues that had piled up during the winter, I discovered two genuine DTP gems: **KeyCappers** printed key-top stickers, from International Datawares, and **Speed Pad II**, a mouse pad with transparent "cheat sheet" overlay.

COVERT CHARACTERS

One recent Press Room column ("Just Your Type," March 1992, p. 48) provided a short course on bit-mapped fonts of the "GS" persuasion — hundreds of which are available free in the public domain. You can use these fonts with Publish It! 4 on an Apple IIe/c or GS, as well as with 16-bit programs, such as AppleWorks GS 1.1, which require an Apple IIGS.

In that earlier column, I described a bonus utility that comes with Seven Hills' **SuperConvert**, an Apple IIGS super-hi-res graphics-conversion program. SuperConvert's *Font Key Chart* function (listed on the *Extras* menu) prints a table showing all characters in the fonts you install in the *System* folder on your Apple IIGS start-up disk. The list includes "hidden" extended characters, such as the trademark symbol and foreign-language accents offered by fonts like Geneva. (Many so-called "GS" fonts originated as dot-matrix Macintosh fonts and have much in common with their Macintosh counterparts.)

SuperConvert's capability opens up a convenient way to recall the key combinations you need to print symbols and accents such as ®, π, and ç on screen — and ultimately on paper. All you have to do is print a SuperConvert *Font Key Chart* for every typeface you use customarily, and keep the hardcopies near your GS.

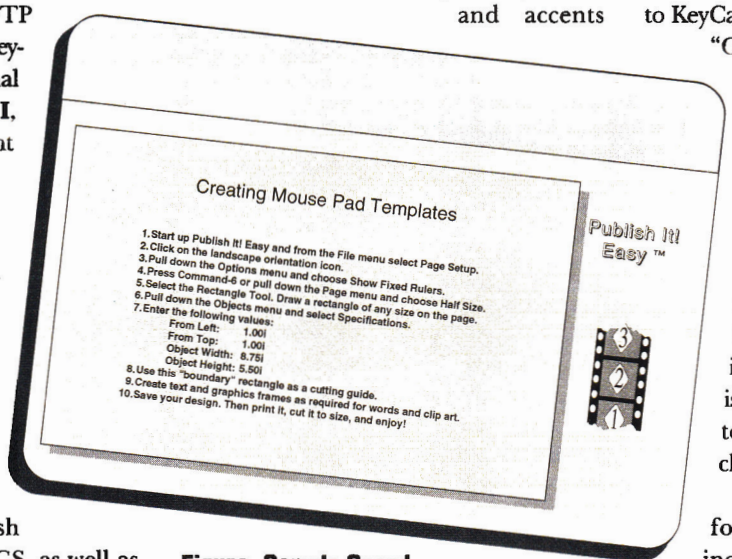

Figure. Sample Speed Pad II reference sheet.

The Mac's **KeyCaps** desk accessory provides somewhat more convenience in this area. A facsimile of the Mac keyboard pops up on screen when you choose *KeyCaps* from the *Apple* menu; toggle between the standard QWERTY layout and alternative characters by pressing the option key or a shift-option combination.

I've found a still more convenient way, however, for both GS and Macintosh users to keep key-command reminders handy. International Datawares' **KeyCappers** is a set of four dozen sturdy, transparent, adhesive stickers for Macintosh keys. Trim their top edges slightly with an X-Acto knife and they fit the GS, too. Extended characters on each sticker are printed in red and shifted slightly to the right, so that the black characters already on the key show through. For example, the *P* key on a Macintosh LC ends up sporting red upper- and lowercase *pi* symbols (Π, π) as well as a black uppercase *P*. Now thanks to KeyCappers, you don't have to use the "Columbus method" to create, say, ® on your GS. Just press the combination Option-r.

Note that before creating extended characters on the GS (in AppleWorks GS, for instance), you can save some aggravation by pulling down the *Apple* menu, selecting the *Control Panel*, opening the *Keyboard* icon, and making sure *Translation* is set to *Standard*, not *None*. If it's set to *None*, you can't type extended characters at all.

In an ideal world, all bit-mapped fonts for the GS or Mac would include every extended character represented in the KeyCappers stickers set. Not so. For instance, the Geneva font on my GS offers only about 60 percent of the KeyCappers set. Fortunately, that includes the characters I need most, such as ™, ®, and ©. Suffice it to say that for both GS and Mac users KeyCappers is an inexpensive way to increase productivity at home, in the office, or at school.

By the way, if, like me, you use both a Mac and a GS and you're budget-minded,

you can purchase just one set of KeyCappers and stick them on the Mac. Then, when you need to create desktop publications or format foreign-language documents on the GS, just swap keyboards. (I also use a trackball purchased for my Mac LC on my GS when the mood strikes.) For safety's sake, make sure both computers are turned off before swapping devices such as keyboards.

AT YOUR COMMAND

While KeyCappers can help you get a handle on extended character sets, you can keep program commands and functions literally at your fingertips with **Speed Pad II**, a cleverly designed "quick reference" mouse pad. Speed Pad II has one of the best nonskid rubber bases I've seen; it reminds me of the big pads used to cushion office typewriters. It also has one unique feature — a transparent plastic overlay flap. Just slip a reference sheet beneath the flap, and *voilà*: instant reminders about system commands and shortcuts.

Many possible applications come to mind. For example, you could use a Publish It! template to keep that program's Quick Keys commands within arm's length. Apple IIGS enthusiasts might create templates to help them remember alternative keyboard commands in AppleWorks GS or to master HyperCard IIGS HyperTalk commands.

Teachers could design templates to remind students about computer procedures or program commands. And because the templates are interchangeable, you can switch them as needed. When a different class arrives, just lift up the overlay, remove the Publish It! reference sheet, and replace it with one for, perhaps, AppleWorks GS.

I created my best-loved template for On Balance, a discontinued accounting program I still use. Because I catch up on finances only once a month, I often have trouble remembering the account codes I defined back in January. My On Balance template comes to the rescue and is a real time saver.

A ready-made Macintosh *Quick Reference Template* comes with Speed Pad II, but you can create your own. And, of course, you can use this mouse pad with an Apple IIe/c or GS as well. That's why this month we'll use an assortment of DTP programs — **Publish It! 4** (for the Apple II family), **AppleWorks GS 1.1** (for the GS), and **Publish It! Easy** (for Macintoshes) — to create blank, ready-to-customize templates for Speed Pad II reference sheets.

Speed Pad II comes in two sizes, 8.75 inches wide by 7 inches high and 11.5 inches wide by 10 inches high; I chose the smaller one for this month's project. Note that because of Publish It! 4's page-width limitation (you can't print beyond the 8-inch mark) and its inability to print in landscape (sideways) mode, the mouse-pad templates you create with it will be slightly smaller than the ideal 8.75 by 5.50 inches. Those created with AppleWorks GS 1.1 and Publish It! Easy should be perfect, though.

As in every column, I've tried to make this month's Press Room templates a snap to reproduce by providing the exact "specs" you need. Just create the objects I suggest and enter their dimensions — that's all there is to it. When you're ready to enhance the design, remember that mouse-pad templates can be as plain or fancy as you like, thanks to the text and graphics capabilities that Apple II and Mac DTP programs provide.

You might include your school's name or logo, or a picture of its mascot, for example. You could reserve a blank area for handwritten notes or even a user log. Store an electronic copy of each customized template under a unique filename on a data disk. That way you can edit templates quickly and print extra copies when originals wear out. And keep in mind that you can photocopy templates for just pennies apiece.

TWO FOR ONE: PUBLISH IT! 4

The Publish It! 4 layout lets you fit two templates on a single page. This program also boasts several time-saving features that help make mouse-pad templates easy to design.

One is the handy *Show Specifications* pop-up dialog box, which lets you enter object dimensions quickly and yet with extraordinary (thousandths of an inch) precision. The program's *Frame Borders* capability is another: Unlike other DTP programs, Publish It! 4 can create a printed border for text frames automatically. Because you specify its line weight (thickness), the border can serve either as a design element or as a guide for small publications you must cut apart.

The Speed Pad II template takes advantage of both these Publish It! 4 features. As a result, you can create this month's layout in less than ten minutes. On your mark . . . .

Get Publish It! 4 up and running. When the program loads, switch to *Size to Fit* view, if you're not already in that mode. (To change viewing modes, pull down the *Objects* menu or use alternate keyboard commands. For *Size to Fit*, press Open apple-4 .)

Select the text tool, and "rubber-band" a text frame of any size. (Hold down the mouse button while dragging diagonally. When the frame is the desired size, release the button.)

Press Open apple-M (OA-M), or pull down the *Objects* menu and choose *Show Specifications*. If a *Show Specifications* dialog box fails to appear, it's probably because the text frame you created isn't properly "selected." Click on the pointer in the tool palette and then on the text frame. Selecting an object supplies it with "handles" — tiny squares along each side and at the corners. Now press OA-M, or pull down the *Objects* menu and choose *Show Specifications*. (Publish It! 4 shortcut: Use the pointer to double-click on the object. A *Show Specifications* box pops up automatically.)

In the *Show Specifications* box, click the I-beam into the *Left Start* box, erase the contents of the box with the delete key, then type **0.250**. Press the tab key to move the I-beam to the *Top Start* box, and replace its contents with **0.250**. Typing these values makes the text frame you created begin a quarter inch from both the left edge and top of the page. Press the tab key, and make the frame's width **7.600** and its height **5.000**. Click on the *Frame Borders* check box.

Pull down the *Page* menu and choose *Frame Borders*. Adjust the border margin to **0.050**, and select the line weight you prefer. Your choice will apply to every bordered text frame you place on the Publish It! page.

It's easy to create a second mouse-pad layout on the same page. Click the pointer on the text frame to select it. Press OA-C to copy a snapshot of the frame to memory. Now press OA-V to paste the copy on screen. Press OA-M, and change the frame's *Left Start* to **0.250** and *Top Start* to **5.500**. The second text frame's width and height should be the same as the original's, and the *Frame Border* check box should already display an *X*.

Save your template as **Mouse.Pad**, or any other name you like. (The *Save As* option is located on the *File* menu. If you need to format a data disk, you'll find that listed there, too.)

Use the *File* menu's *Print* option or the OA-P command to print a draft copy of your template. With an ImageWriter II, insert continuous paper so that it lines up with the tractor-feed icon on the back of the printer. (Line up ordinary paper with the single-sheet icon on the back cover.)

Advance the paper so that its top edge lines up with the top of the hole in the plastic paper guide. You may need to experiment a little to locate analogous settings on other printers. Select Publish It!'s double-strike print mode for most-attractive results.

Cut out the two templates, either inside or outside the borders. Then test them under Speed Pad II's transparent overlay. If they fit, go back to your template and add text and graphics as needed for the reminders you want to create, and remember to save the file under a different name each time you customize.

MOUSING AROUND: APPLEWORKS GS

Creating a Speed Pad II template is even easier with AppleWorks GS 1.1. Start up the program's page-layout module. Pull down the *File* menu and select *Page Setup*. Click on the *Vertical Condense* check box and the landscape-printing *Orientation* icon. Now click on the *OK* button when you're done.

On screen you should see a work area that's 10.5 inches wide and 8.5 inches high. Use screen rulers as guides (if they're not already showing, select *Show Rulers* from the *Options* menu), and work in *Actual Size* and *Fit in Window* modes as appropriate. Use OA-W (or the *Options* menu) to toggle between modes.

Select the rectangle tool, then begin the rectangle at the 1-inch mark on the horizontal ruler and end it at the 9.75-inch mark. On the vertical ruler, begin at 1 inch and end at 6.50.

Annoyingly, the page-layout screen doesn't scroll automatically when you exceed its boundaries. Draw the largest rectangle you can see in *Actual Size* mode, drag the horizontal scroll bar, and increase the rectangle's width by dragging on one of its handles.

If the rectangle isn't selected, click on its perimeter with the selection arrow before resizing. Also, use the vertical scroll bar before increasing the rectangle's height.

Now save your template as **Mouse.Pad** or another name you like. Then print it and cut it out just inside the rectangle outline. It should fit your Speed Pad II precisely.

Time to customize: Use the text tool to draw the text frames you need. Incorporate original artwork or clip-art illustrations from AppleWorks GS' own graphics module.

To import artwork from a third-party clip-art disk, insert the disk into a drive and select *Open* from the *File* menu. Then locate the clip-art volume, open the appropriate artwork folder (if necessary), and select the file you want to import.

AppleWorks GS 1.1 will now create a graphics document automatically to accommodate the illustrations. Use the lasso or marquée tool to select the clip art you want to use. Press OA-C to copy a snapshot of the illustration to the GS' clipboard.

Switch to the page-layout document (*Window* menu), and press OA-V to paste the clip art onto the page. Move and resize the graphic to suit your needs. Save the file under an appropriate name.

OF MICE AND MACS: PUBLISH IT! EASY

Start up Publish It! Easy and select *Page Setup* from the *File* menu. Click on the landscape orientation icon. Pull down the *Options* menu and choose *Show Fixed Rulers*. Pull down the *Page* menu and choose *Half Size* (or just press Command-6).

Select the rectangle tool and draw a box of any size on the page. Now pull down the *Objects* menu and select *Specifications*. For *From Left*, type in **1.00i**; for *From Top*, type in **1.00i**; for *Object Width*, type in **8.75i**; for *Object Height*, type in **5.50i**. This "boundary" rectangle will serve as your cutting guide.

Now create text and graphics frames for your first custom mouse-pad design and save it under an appropriate filename. Print and trim to size. (See the accompanying **Figure** for a sample design.)

CRIBBING 101

KeyCappers can make life a little simpler for Apple IIGS and Macintosh desktop publishers. And a Speed Pad II mouse pad not only provides good traction, but lets you keep program commands at your fingertips. Whether they're dancing on an Apple IIe/c, a GS, or a Mac, you owe it to yourself to take a closer look at these inexpensive DTP helpers. ❑

PRODUCT INFORMATION

AppleWorks GS 1.1
Claris Corporation
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Santa Clara, CA
95052-8168
(408) 727-8227
$299

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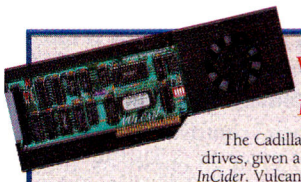

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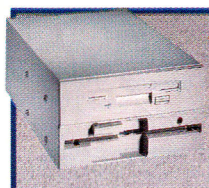

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Continued from p. 31

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FIRST AID WITH REDDY

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Perhaps all children's software should have a sticker on the box that says "Adult Supervision Recommended." Quality Computers' First Aid with Reddy definitely should — because it's talking about the health and safety of your child.

The software features "Reddy," an animated red cross, and Mr. Bungle, the victim of a distressing number of household accidents. The single-hi-res graphics images, while not state of the art, are cute, and the animation is lively and would captivate even preschoolers, although the program is obviously aimed at elementary-school children.

The problem is that without explanation and supervision, a child too young to comprehend the program fully might get the idea that it would be neat to emulate the accident-prone Mr. Bungle, who in one sequence is shown drinking a bottle of household bleach. First Aid with Reddy can increase you child's "safety awareness," but this is one program best experienced with an adult standing by to tailor each situation to the child's environment.

GUARDIAN ANGEL

The software begins by emphasizing general safety practices before moving on to specific crises. The child is cautioned to "look around" for hazards such as teetering objects, moving automobiles, stray dogs, and the like before doing anything else. Parents should discuss the potential danger of each situation with their children and reinforce the program's safety warnings.

First Aid with Reddy is basically a small, animated database. The main menu shows three selections: *Emergency*, *First Aid Action*, and *Review*. The *Emergency* screen brings up three more topics: *What Is First Aid*, *Emergency Action*, and *Getting Help*.

In *What Is First Aid*, the program explains the "ABCs" of first aid in greatly simplified fashion. Instead of *Airway*, *Breathing*, and *Circulation*, the software states that *A* stands for *Awake*. If the victim isn't "awake," the child is instructed to try to rouse him or her by "shaking or yelling." For a victim who has suffocated or broken his or her neck, however, that's less than desirable. The program would have done better to skip the letter *A* altogether and go directly to breathing and circulation. Here the software tells the child to get help at once if he or she hears no air moving or detects no heartbeat.

Getting Help features an animated phone that dials 911, then 0. Parents should go over this section with the child as to which emergency number is appropriate for their area. The program instructs the child to say, "This is an emergency call," and to tell the operator what happened and give the address. Good advice — as far as it goes — but children should be told to stay on the line so that emergency personnel can verify addresses and give instructions.

ON THE FRONT LINES

First Aid Action deals with specifics. Topics are choking, small cuts, big cuts, nosebleeds, animal bites, falls, electric shock, burns, and poison. In most cases, the first-aid advice is sound and appropriate for children. When Mr. Bungle chokes, the child is told to let him cough and get help right away. Good advice — no one expects an 8-year-old to do the Heimlich maneuver. The program should differentiate between small and large burns, however; advising the child to run cool water over the affected area and then cover it with a clean cloth is proper for minor burns, but inappropriate for serious ones.

The final part of the program is a review that may be too simplified. For example, after telling the child earlier to call 911 or 0 for help, 911 is the only number mentioned in this section. The review lets you print results, but the hardcopy is too small and plain to be a completion certificate and may be misleading to boot.

For instance, when I contrived to give the wrong answers to 17 of 20 questions, the program responded, "Congratulations. You got 3 out of 20!" Perhaps that's carrying positive reinforcement a little too far.

Don't expect Reddy to equip your school-aged child to handle neighborhood emergencies like a member of the rescue squad. The purpose of this program is to give a child simple guidelines and to teach him or her the cardinal rule of medicine: *First do no harm.*

But for all its limitations, First Aid with Reddy can be a useful tool when supplemented by thoughtful input from parents. It can help build your child's confidence during emergencies — and it may even save a life.

Sharon Webb
Blairsville, GA

★ ★ ★ ★ ★

WORDTRIS

Spectrum HoloByte
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Alameda, CA 94501
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nations. You earn points for each vertical or horizontal word you form before the game's well becomes swamped with orphaned letters. As you create words, submerged letter blocks float back to the top of the well, giving you (unlike Lenin) another chance.

Wordtris, which shares more than a few features with the classic board game *Scrabble*, is another entry in Spectrum HoloByte's Russian-born falling-blocks line-up. Countless computer gamers have already succumbed to the addictive allure of Tetris, Welltris, and Faces. Wordtris, in which each block sports a letter of the alphabet, is unquestionably more literate than any of its predecessors. But whether Wordtris is truly educational is a tough call.

Like *Scrabble*'s wooden blocks, Wordtris' electronic ones carry point values. Wordtris occasionally throws in a "blank" you can transform into any letter you choose — just press the appropriate key. From time to time the game also drops "bonus blocks." If you use the letter immediately to create a word, you score double — just as in *Scrabble* when you cover a pink square.

Wordtris recognizes legitimate words by comparing the ones you create to its large built-in dictionary. The back of the game box claims that the Wordtris dictionary contains 30,000 words, but a sticker on the cover says "over 60,000 words." Whichever it is, Wordtris recognized 99 percent of the words I created. You can also add words to a user dictionary if you like.

Not only did Wordtris award points for words I created intentionally, it gave points for those I stumbled into. Sometimes you might just as well let blocks fall where they may. They land on top of others and sink to lower levels in the well; without any strategy or skill on your part, additional words often form automatically. Somehow collecting points this way doesn't seem right.

Wordtris offers four modes: *Children's*, *Novice*, *Advanced*, and *Expert*. As you increase the difficulty, the letters fall faster, and you must create longer words. Each mode has ten levels, A to J. At first, it's easy to advance from one level to the next. To get from A to B, for instance, all you have to do is create five words. But F to G means amassing a total of 105 words.

In addition to its difficulty modes and challenge levels, Wordtris provides still other ways to up the ante. For one thing, you can turn off the next-letter display. You won't get any warning about the upcoming letter's identity, but playing with next-letter off adds 25 percent to each word's point value. You can also limit each game to two, five, ten, or 15 minutes.

If you tire of playing Wordtris alone, you can play the game cooperatively or competitively with a friend, or start a *Tournament* with up to three other players. You can also play *Head-to-Head* on line — remotely by modem or tethered to another Mac in the same room via a standard ImageWriter II serial cable. If you play with a friend on a single Mac, one of you must use the keyboard while the other uses the mouse (or a joystick).

The Wordtris package includes both black-and-white and color versions of the game. It plays the same either way, but the black-and-white version runs a distant second to its color counterpart — a visual delight featuring photorealistic graphics. (The rating above is a composite score.) Entertaining sound effects and Russian-style music add another enjoyable dimension.

Wordtris probably won't increase your vocabulary. The program should at least offer a print option to create hardcopy word lists. A real dictionary (that is, one with definitions) would be even better, adding significant value to this otherwise pricey diversion. As it is, if you win points for an unfamiliar word that's formed happenstance, your best bet is to call a time-out (use the game's *Pause* feature), write the new word on paper, and look it up later.

Wordtris is no more — and no less — educational than ordinary word games of this kind. Although the black-and-white version features the same multilevel game play and musical appeal, it can't compare to color Wordtris' graphically rich environment. Is it worth $50 to run a colorless and not-very-educational word game on a black-and-white Mac? Only you — and your software budget — can decide. ❑

Cynthia E. Field, Ph.D.
Wakefield, RI

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5	30	55	80	105	130	155	180	205	230	255	280	305	330	355
6	31	56	81	106	131	156	181	206	231	256	281	306	331	356
7	32	57	82	107	132	157	182	207	232	257	282	307	332	357
8	33	58	83	108	133	158	183	208	233	258	283	308	333	358
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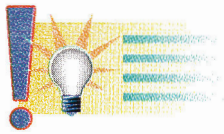

HINTS

MACRO MANIA

A definition here, a shortcut there — our information swap can help you stay one step ahead of frustration.

By WILL NELKEN

CELL EDITOR

Frustration! Ever made a typo while entering a lengthy revised formula in an AppleWorks spreadsheet cell? When you press Return, your computer beeps and the whole new entry disappears. The solution is to capture it before pressing Return, when you risk losing all, and that's where UltraMacros and its *cell* command come in. *Cell* reads into memory ($0) the current line of an AppleWorks word-processing file (AWP), the current category contents of a database file (ADB), or the current cell of a spreadsheet file (ASP).

If your "rememberer" is in good shape, you can perform this manually (UltraMacros installed) when editing a spreadsheet cell. Place the cursor bar on the cell whose formula needs adjustment and press OA-U (Open apple-U) to edit. The original formula will appear on screen just above the bottom line.

For demonstration, enter a formula you know AppleWorks will reject because of incorrect syntax. Press Open apple-Hyphen, which carries out the *cell* command, storing the new formula temporarily in memory. Then press Return. AppleWorks will beep and the original formula will reappear. Now press OA-Y to "yank" the original formula off screen, and SA-0 (Solid apple-zero) to write the contents of $0 to the screen. Your bungled formula should reappear for editing, without retyping the whole thing.

My "forgetter" is often better than my "rememberer" on such occasions, however, so I use a macro whenever I'm editing a spreadsheet cell. Instead of pressing OA-U to edit a cell, I press SA-U (Option-U). Cell Editor (**Listing 1**) automates the safety device described above. Using the *cell* command, it captures the edited entry in macro memory ($0) before you enter a return. If you mistype a formula, just press OA-Y to erase the old entry, and SA-0 to restore the new one from memory for repair.

EYE SAVERS

Some macros put the computer through its paces, flipping screens and menus more rapidly than you can read them. It's awesome at first, but it can also get annoying. UltraMacros' *display* commands offer a solution. **Display #off** freezes the current screen, while macro action continues behind the scenes. **Display #on** restores it.

When "unfreezing" the screen, you must perform some standard AppleWorks action that forces your computer to redraw (refresh) the screen, bringing the "live" display back. When freezing an open file display, you might try using OA-Q Escape, which calls the *Desktop Index* and chooses the current file again, or Escape Escape, which accesses the main menu. If you choose to freeze a display, any action that leaves it momentarily and then returns will do.

Listing 2's macros demonstrate proper use of *display* commands. They preserve the screen's appearance while saving the desktop file in the background; your work won't disappear while AppleWorks saves the current status of your file.

Notice that the first macro uses the labels *#off* and *#on* to direct the display commands. The second uses the values of those labels, *0* and *1*, to accomplish the same effect. You can use macro labels and their values interchangeably. UltraMacros' *Compiler* converts labels automatically to their values, but it's easier to read your own source code (the word-processor macro file) if you use labels.

Keep in mind that UltraMacros' *read* and *find* commands require an active screen display. If it's frozen, your macro will fail. Always write and debug your macros before adding display commands. Because you can't use them in every situation, make sure your macro is working properly before you try freezing the screen. ❑

```
start
=============================================================
U:<asp:          { limited to the spreadsheet               }
oa-U:            { enter the editing mode                   }
input:           { allow user input up to "RTN"             }
cell:            { capture completed input in memory before }
                 { ...passing the "RTN" on to AppleWorks    }
rtn>!            { exit editing mode                        }
=============================================================
```

Listing 1. Cell Editor preserves the contents of your spreadsheet cell during editing.

```
start
=============================================================
<sa-S>:<all><display #off: oa-S: esc: display #on: esc>!
[ save a file to the current path    ]
<sa-ctrl-S>:<all><display 0: oa-ctrl-S: esc: display 1: esc>!
[ save a file to its original path   ]
=============================================================
```

Listing 2. Eye Savers' macros freeze and restore AppleWorks screen action.

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The Duel: Test Drive II™: Race the Ferrari F40 against the Porsche 959, the world's fastest production cars. You can also go against the clock, race through picturesque scenery and contend with road hazards (including the police). A joystick is recommended and 1 Megabyte is required. **Order product number FL73 for only $20 for non-members or $15 for members.**

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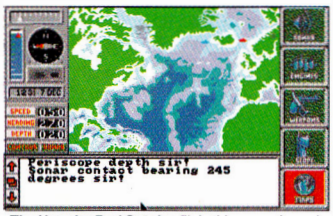

The Hunt for Red October™: In this game, based on Tom Clancy's novel, your mission as commander of the Soviet nuclear submarine is to defect, evade the rest of the Soviet navy and sail west to America. It features first-person battle views. Up periscope! **Order product number SF56 for only $15 for non-members or $10 for members.**

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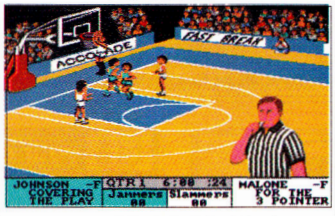

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Zany Golf™: This is what the GS computer is all about. Great graphics and sound. Each zany hole is a challenge and has its own theme. There's a pinball game, a bouncing hamburger hole, a hole that is constantly moving and a journey into Dr. Frankenstein's laboratory. Can you reach the bonus hole? **Order product number EA63 for $25 for non-members or $20 for members.**

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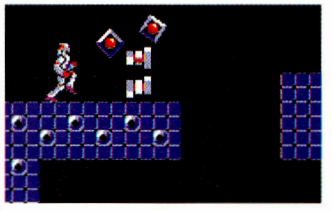

Thexder™: This action arcade game comes directly form Japan. You must pilot a robot through multiple attack scenarios. The robot transforms into a fighter jet (and back again) at the touch of a button. You'll have to use all your skills to reach the advanced levels. A joystick is required. **Order product number SL59 for only $20 for non-members or $15 for members.**

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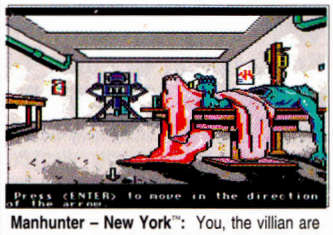

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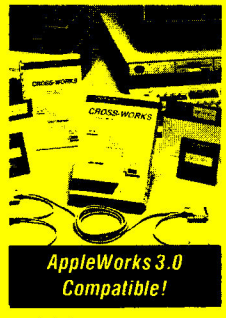

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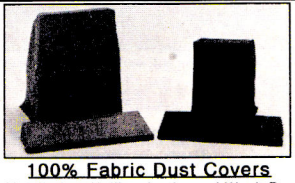

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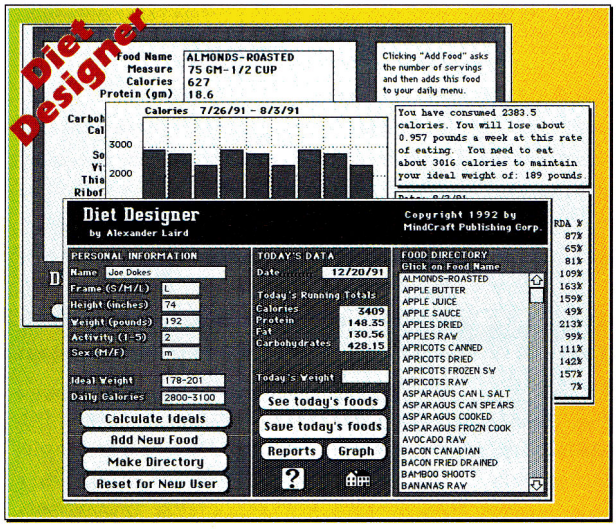

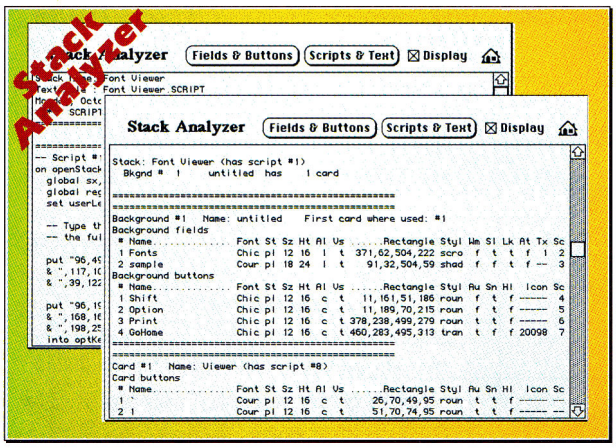

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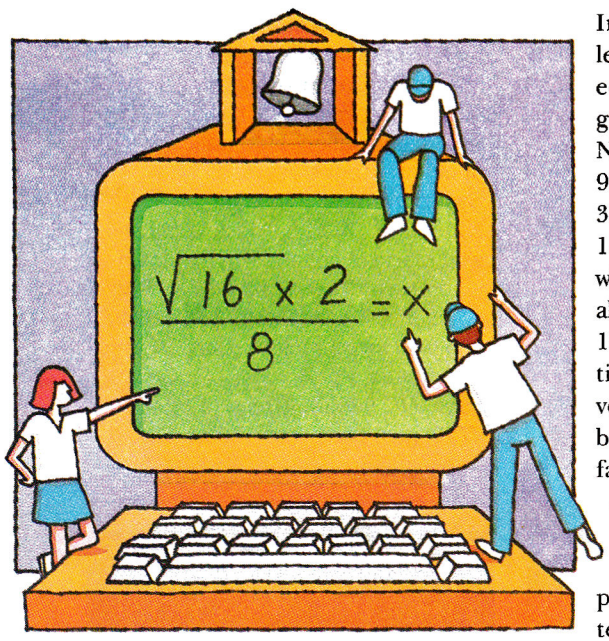
HOMECOMING 2

We, as a nation, can ill afford to deny our students access to powerful information technology.

To those who want change in education, I say there will be no renaissance without revolution." So declared President Bush, and in doing so launched a nationwide focus on the restructuring of public-school education at every level. Can computers contribute to this rebirth of opportunity? Indeed, as last month's column demonstrated (May 1992, p. 64), they may well be the key — the very vehicle that will transform traditional classroom education as we know it. On a recent trip to Indiana I had the chance to learn about a most innovative educational-technology program. The **Buddy System** (1 North Capitol Avenue, Suite 925, Indianapolis, IN 46204, 317-231-7145), incorporating 15 schools, places computers with modems in the homes of all children in grades 4 through 12. This project is truly revolutionary because of the sheer volume of technology that has been installed. The results are fascinating: The quality and depth of fifth-grade writing assignments, for instance, has improved markedly; parents are learning to use the technology themselves; and, in some cases, the student's computer system has provided a good incentive for parents to improve their own literacy skills.



By DAVID D. THORNBURG, Ph.D.

Telecommunications is a critical component. Homes are linked directly to schools electronically. Teachers post nightly homework assignments for students and parents to review. Electronic mail lets parents, teachers, and students discuss educational issues. Students "chat" with peers at other schools and collaborate on projects; they learn to access the resources offered by commercial on-line information services.

We, as a nation, can ill afford to deny our students access to powerful information technology, and the cost of providing this equipment is quite modest. Let's assume that the useful life of a personal-computer system is five years, and that each child will receive a machine with a 40-megabyte hard drive, color display, 2400-baud modem, and an integrated software package. You can purchase an entire MS-DOS or used Apple II or Mac system with these capabilities today for about $800.

Many parents would opt to buy the system outright. Others could finance their purchase through a local institution or a bond issue. If the purchase is spread over five years at 8-percent interest, the investment amounts to only 53 cents per day. Adding a CD-ROM drive and a printer brings the total cost to 87 cents a day.

And for those who couldn't afford it, schools could turn to a system already in place: A free-lunch program costs taxpayers about $1.80 per day; increasing this amount by only 30 percent could provide computers for these children also — a minuscule investment compared with the cost of other government programs such as the savings-and-loan bailout. Of course, system prices would drop precipitously as soon as vendors — including Apple — realized they were competing for the sale of 50 million computers in the first year alone.

An article in the May 6, 1991, *Tribune Star* of Terre Haute, Indiana, told the story of Deanna Overton, a sixth-grader who found school so difficult that she was failing most subjects a few years ago. Since the implementation of the Buddy System in her school in the 1988-89 school year, her grades have improved to the point that she's now earning As and Bs. Most importantly, she's developed a positive image of herself as a learner, and is actively engaged in school projects. As Deanna puts it, "This project has given me a head start with my future. Those who don't learn about computers will be lost."

Let's help all our children prepare for their future by implementing a program like the Buddy System in every community. It may be just exactly the kind of revolution U.S. public education needs. ❑

Illustration • Pat Morrison

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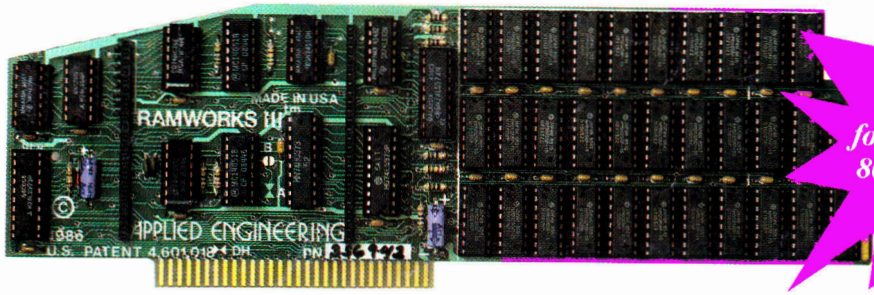

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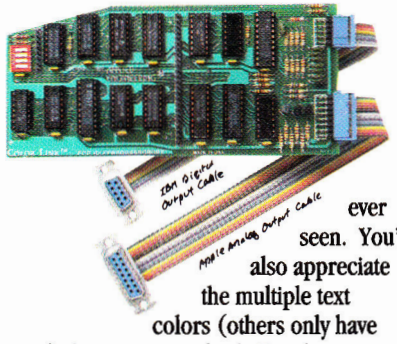
A larger desktop is just part of the story. Look at all the AppleWorks enhancements that even Apple's own card does not provide and *only* RamWorks III does. All of AppleWorks (including printer routines) will automatically load itself into RAM dramatically increasing speed by eliminating the time required to access the program disk drive. Switch from word processing to spreadsheet to database at the speed of light with no wear on disk drives.

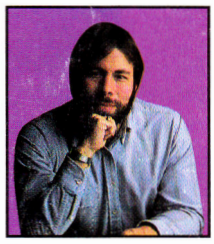
RamWorks eliminates AppleWorks' internal memory limits, increasing the maximum number of database records available. *Only* RamWorks increases the number of lines permitted in the word processing mode. And *only* RamWorks offers a built-in printer buffer, so you won't have to wait for your printer to stop before returning to AppleWorks. And RamWorks auto segments large files so they can be saved on two or more disks. You can even have Pinpoint or MacroWorks and your favorite spelling checker in RAM for instant response.

The most friendly, most compatible card available. Using RamWorks III couldn't be easier because it's compatible with more off-the-shelf software than any other RAM card. But unlike other cards, RamWorks plugs into the IIe auxiliary slot, providing our super sharp 80-column text (U.S. Patent #4601018) in a completely integrated system.

The ultimate in RGB color. RGB color is an option on RamWorks and with good reason. For only $129. it can be added to RamWorks, giving you razor-sharp vivid brilliance that most claim is the best they've



ever seen. You'll also appreciate the multiple text colors (others only have green) that come standard. But the RamWorks RGB option is more than just the ultimate in color output because unlike others, it's fully compatible with all the Apple standards for RGB output control, making it more compatible with off-the-shelf software. With its FCC certified design, you can use almost any RGB monitor because only the RamWorks RGB option provides both the new Apple standard analog and the IBM standard digital RGB outputs (cables included). The RGB option plugs into the back of RamWorks with no slot 1 interference. And remember you can order the RGB option with your RamWorks or add it on at a later date.



"I wanted a memory card for my Apple that was fast, easy to use and very compatible; so I bought RamWorks."

Steve Wozniak, co-founder of Apple

It's got it all.

- 15 day money back guarantee
- 5 year warranty
- Built-in super sharp 80-column display (U.S. Patent #4601018)
- Expandable to 1 MEG on main card (2 MEG expander available.)
- Automatic AppleWorks expansion up to 3017K desktop
- Accelerates AppleWorks
- Built-in AppleWorks printer buffer
- 100% compatible with all standard IIe software
- Compatible RGB option featuring ultra high resolution color graphics and multiple text colors with cable for both the new Apple and standard IBM-type monitors
- Self diagnostic software included
- Takes only one slot (auxiliary) even when fully expanded
- Socketed and user upgradeable
- Used by Apple Computer, Steve Wozniak and virtually all software companies.

RamWorks III with 256K	**$189**
RamWorks III with 1 MEG	**$309**
RamWorks III with 1.5 MEG	**$429**
RamWorks III with 3 MEG	**$629**
RamExpander + 1 MEG	**$209**
RamExpander + 2 MEG	**$309**
ColorLink RGB Option	**$139**

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