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A journal and exchange of Apple II discoveries

AppleFest Long Beach

AppleFest was held in Long Beach, California, on December 7th and 8th (Friday and Saturday). This AppleFest was held in conjunction with Macintosh/LA, a regional Macintosh show, and the smaller size reflected the regional flavor of the exhibition. But there were many reasons I saw to rejoice.

Dualing GTV. National Geographic's GTV interactive geographical study program was demonstrated on Friday morning in a session where the IIgs and Mac were presented side by side as equals rather than in what had become the typical "Mac first, then whatever other computer we make" format. Two groups of students demonstrated projects created with each system, showing the comparative strengths and weaknesses of each. In a crowning moment, a demonstration created by the Mac team actually used the superior sound of the IIgs to generate effects that the Mac couldn't manage. Demonstrating synergy of two product lines can sell more of *both* types of computers; that strategy could make Apple richer, especially if they juxtapose an equivalently priced IBM PS/2 system for comparison.

Following the GTV demo, Ralph Russo reported on the progress of the Apple II Business Unit toward resolving the Apple II's future. Apple continues their assertion that they have no intention of abandoning the Apple II product line, or of "orphaning" users. Russo referred to the Apple II as the "computing platform that started the personal computer revolution" and "the platform which propelled Apple into the ranks of the Fortune 500". He further emphasized that "we do not consider the Apple II as a disposable asset".

Russo continues to work on a new business proposition for the product line, acknowledging that "the challenge is especially difficult, given the nature of the product itself; it is, after all, an industry legend". He also acknowledged that the Mac occupies center stage at Apple, and that the Mac "has been our major revenue producer for the last four years".

Apple's primary goal is to add value to the investment customers have made in Apple II products. Apple will continue to develop the existing Apple II platform where it is feasible, including the hardware platform. Current efforts are focused on networking, memory enhancement, system software speed, and system cost.

Another goal is to make possible a smooth transition to the Macintosh platform for Apple II users who want to migrate to the Macintosh while preserving their investment in Apple II products.

The other avenue of enhancement is "to develop new ways to sell, service, and support the product line". Russo has concluded that the solution will be a new business paradigm to effectively use all resources of the Apple II product line. Russo wants to garner these resources and establish a new method of business operations.

The developer community will be a renewed focus. "We will articulate the developer strategy in our business. This strategy will identify market and revenue opportunities for those developers who continue to work on the platform."

Toward these objectives, an Apple II exclusive business unit has been formed within Apple. Those involved in Apple II engineering, marketing, evangelism, and customer support have been consolidated into this unit. Russo expects that the stated goals will be made real within the next few months.

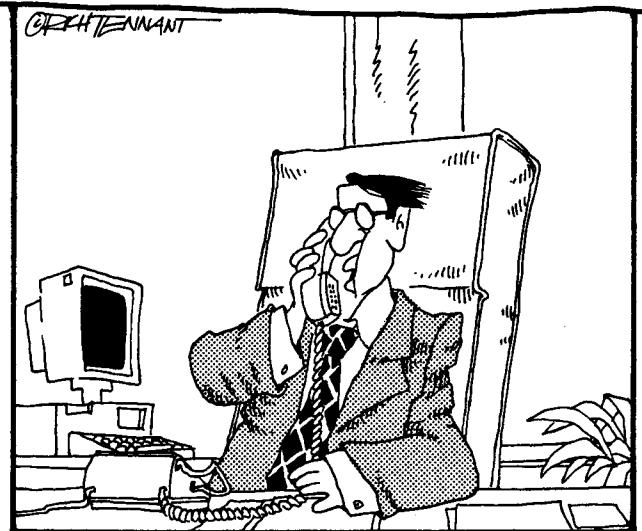
Apple announced HyperCard IIgs Friday morning. For a "toy"

computer, Apple sure shocked a lot of Mac people by creating a version roughly compatible with the Macintosh HyperCard version 1.2.5 (only one version behind the current 2.0). The IIgs version adds color, improved printer support, and a complete set of manuals to the Mac version that sold for \$50; the IIgs version will be priced at \$99.

HyperCard IIgs represents the investment of 25,000 engineering man hours over the past 3 years. If you wonder about Apple's intentions regarding the Apple II, that represents a substantial investment to throw away without trying to market the program and the necessary hardware to run it. The software will require at least 1.5 megabytes of RAM program memory (2.0 or more is recommended) and a hard disk or server volume. That will probably limit the immediate audience for *HyperCard IIgs*, but it may also have the desired side effect of encouraging current IIgs owners to enhance their systems. The more memory and hard disk space developers can expect the average IIgs user to have, the more powerful they can design their programs to be. Apple has delivered the first end-user product that forces the issue.

HyperCard IIgs will ship with a new System Disk (the currently announced version is 5.0.4). It seems the new 5.0.3 ImageWriter drivers have trouble with low-memory situations that *HyperCard IIgs* revealed during testing; Apple naturally wants to bullet-proof the system software better against what could be a relatively common problem. The *HyperCard IIgs* package will be sold through Apple dealers at

System Integration at Disney World



"LOOK, I HAVE NO PROBLEM RUNNING MICKEY-MICROS AND PLUTO-PCS THROUGH A TINKERBELL BUS, BUT WE'RE NEVER GOING TO HAVE A HUEY-DEWEY-LOUIE-LAN ON A MINNIE-MINI WITHOUT SERIOUSLY UP-GRADING ALL OF OUR GOOFY SOFTWARE."

\$99 (for six 3.5 disks and three manuals) and should be available by mid-February 1991.

Apple's booth at AppleFest was very active, especially where *HyperCard II*gs was being shown, and Apple had reserved a large seating area to do presentations on interactive multimedia featuring *HyperCard II*gs. Yes, there were many Macs in Apple's booths, but several Apple II systems were also there and the layout of the booths seemed to give the systems more parity since the two product lines were interspersed rather than segregated.

Apple also brought large numbers of copies of the promised Apple II Guide. This 231 page book is being distributed through Apple II dealers and user groups as a resource guide for the Apple II end user. It contains profiles of Apple II users, general information regarding Apple II capabilities and system enhancement, a history of the Apple II, and a set of information resources for locating assistance. If you are an active Apple II user, get to your user group or dealer and get your copy; in addition to being a useful publication, every copy Apple sees go out the door is a vote that says "I want more Apple II support".

One thing I noticed about this AppleFest was a number of bona fide Apple II companies that are becoming notable participants. As in the early months of the Macintosh, the Apple II has not seen many "established" companies bring out appropriate products developed for other systems. Developers seeking opportunities are starting to coalesce into a few new hard-core Apple II companies.

Vitesse (13909 Amar Road, Suite 2A, P.O. Box 929, LaPuente, Calif. 91747-0929) was present demonstrating their *Salvation* series of disk utilities, the *Quickie* scanner, and their *Harmonie* printer drivers. A Hewlett-Packard *PaintJet XL* large-bed color inkjet printer was cranking out Apple IIgs color graphics wonderfully. But the booth really overflowed the second day when a demo of the *InWords* optical character recognition software was conducted (*InWords* is still being refined, but WestCode hopes to ship the final version shortly after the first of the year).

Seven Hills Software (2310 Oxford Road, Tallahassee, Fla. 32304) showed examples of their IIgs printer driver utility for Hewlett-Packard printers, *Independence*, working with a *DeskJet 500* inkjet printer. *Independence* does not support the range of printers that *Harmonie* does, but some samples of graphics and columnar text that Seven Hills had looked better than the samples they displayed of competing drivers. We hope to get a *DeskJet* in our office to do some independent comparisons of the two programs.

Zip Technology (5601 Slauson Avenue, Suite 190, Colver City, Calif. 90230) was selling the *ZipGS* at their booth. On the first day of AppleFest, they sold out of the stock they had brought to the show.

Applied Engineering (3210 Beltline Road #154, Dallas, Tx. 75234) had a large booth, featuring their sound cards (the *Audio Animator* and *Sonic Blaster*) and their IIgs send-only FAX option for the *DataLink Express* modem (the FAX product is IIgs-specific since it is hardware and software based). The FAX option is not shipping yet, but Applied Engineering hopes to have it out later this month.

The *Visualizer* video digitizer resurfaced at New Concepts (665 W. Jackson, Woodstock, N.J. 60098) booth. New Concepts was also demonstrating *Emerald Paint*, a IIgs paint program designed to work in 3200 colors.

SSSi (4612 North Landing Drive, Marietta, Ga. 30066) had a booth showing their development tool, *Genesys*, as well as their set of IIgs New Desk Accessories, *DeskPak*. SSSI also sells a IIgs memory card from Harris Laboratories called *GS Sauce* that holds up to 4 megabytes of memory using the SIMM memory used in many current computers. A SIMM is a memory module consisting of RAM chips installed on a standardized compact daughterboard; installing this daughterboard into a SIMM slot is easier for neophyte users than installing loose RAM chips. Another interesting Harris Labs product announced was the *Velocitas*, a RAM disk card for the IIgs or IIe which uses pseudo-static RAM SIMM's for battery-powered backup of up to a month. The card is expandable to 8 megabytes with currently available SIMMs.

Of the Apple II Old Guard, Roger Wagner Publishing and Beagle Bros were prominent. Roger Wagner (1050 Pioneer Way, Suite P, El Cajon, Calif. 92020) was demonstrating *HyperStudio* in a series of sessions both days, and promoting third-party enhancements including a new *Xcmd* (*HyperStudio* external command) to control Apple's

new MIDI synth sound synthesizer tool (part of *HyperStuff ClipTunes*, \$39.95 from Triad Venture, P.O. Box 12201, Hauppauge, N.Y. 11788).

Beagle Bros (6215 Ferris Square, Suite 100, San Diego, Calif. 92121) was demonstrating their new *Outliner* (acquired from JEM Software) and *TimeOut SuperForms* (form layout and generation utility for AppleWorks) products. But the most popular new item was *Platinum Paint* for the IIgs, a IIgs paint program with loads of features and obvious heir to the stagnating *PaintWorks Gold* and *DeluxePaint II*.

Brøderbund Software (17 Paul Drive, San Rafael, Calif. 94901) was demonstrating a new *Print Shop Companion* for the IIgs (\$49.95). The *Print Shop Companion* can be operated alone or with *Print Shop IIgs*, and includes utilities for printing *Print Shop* images to paper for reference, designing and printing envelopes and labels, and an enhanced layout editor.

A company that has achieved success on other computers and is now coming to the IIgs market is PC Globe, Inc. (4700 South McClintock, Tempe, Ariz. 85282, 602-730-9000). They were demonstrating *GeoPuzzle USA* (a puzzle created from the USA map that also tests your knowledge of U.S. geography) and *GeoQuiz* (a quiz program using an integrated set of maps and questions) on the IIgs.

Digital Data Express (13636 S. Western Avenue, Suite 28, Blue Island, Ill. 60406, 708-389-7744) was selling the NAUGC *Generous Efforts of Many* CD-ROM disc of freeware/shareware and also had two NEC CD-ROM models that will work with a forthcoming IIgs driver. The NEC 3501 is a \$400 CD-ROM built around a detachable drive that can double as a portable (audio) battery-powered CD player (the battery pack is \$70). The drawback is that this drive is slow (access time of 1500 milliseconds, about twice as slow as the AppleCD SC). If you sacrifice portability, you can look to the NEC 72 drive (which is about twice as fast as the AppleCD SC) priced at \$625. These drives will be useable on a IIgs with the Apple High-Speed SCSI Card when you add a IIgs driver expected to be available later this month at \$59. A driver for the *RamFast* SCSI interface is expected in January 1991; there was no information on Apple II (non-IIgs) compatibility.

This AppleFest was the most upbeat I have attended since the fall of 1988, when GS/OS (System Software 4.0) and the IIc Plus were introduced. Even there, users were cynical about Apple's commitment to the Apple II. At this show, the feeling was different.

System software is often overlooked because it is considered to be part of the price of the computer. In *HyperCard IIgs*, Apple has delivered a product that users know Apple did not have to produce. One might question whether such an effort might have been better spent on other projects, but there is no question that Apple would have to be very stupid to throw that kind of investment away with continued ineptitude in marketing the IIgs. Most people refuse to believe Apple is that dense.

Many feared that the Mac/LA exhibition would overshadow the Apple II area. But the exhibition areas were comparable (the Mac side was a little larger, but then most of the Mac booths took up more space). Many Mac/LA badges were spotted in the AppleFest area. And they must have decided to take a while to look around, since most of us who walked over to the Mac side noticed thinner crowds than the AppleFest area.

Apple maintains that AppleFest is a regional show; it's unfortunate that Apple can't seem to muster enough support for at least one exclusively Apple II national event. But the Long Beach AppleFest demonstrates that a Mac presence does not have to be oppressive. It can even be enlightening—for both sides.—DJD

The envelope, please

Everyone knows there is a problem with the general perception of the Apple II's visibility among the rest of the microcomputer community. This absence has affected the Apple II's credibility in that community and, over the extended period that the problem has persisted, the viability of the Apple II product line as well.

We often point to Apple Computer itself as the source of many of these problems. This year, at AppleFest, Apple took a simple yet bold step to reverse this trend: an Apple II Achievement Awards ceremony held at Apple's own party for Apple II and Macintosh notables.

Apple polled a panel assembled from a cross-section of organizations that report on the Apple II, including magazines (*A+/inCider*, **A2-Central**, *GS Plus*, and *Nibble*) and electronic services (America Online, CompuServe, and GEnie). Apple itself participated in the voting as a tiebreaker, registering its votes before the other ballots were sent out (to eliminate any possibility of returning ballots influencing Apple's own voting). The voting was structured in such a way that the individual organizations each actually ranked their votes for several contenders in each category; this allowed the results to reflect those products that received the highest praise most often, and permitted resolving conflicts in categories where votes could be cast for oneself (such as the magazine and electronic service categories).

Matt Deatherage (a member of Apple's Developer Technical Support group) presided over the ceremonies in a tuxedo, lending an air of great dignity to the proceedings which were held on the lawn of the Long Beach Museum of Art. I'd like to pass on the names of the winner in each category, and (for most winners) some comments as to why I think each won.

Best Freeware/Shareware: *ShrinkIt* for the IIgs by Andy Nicholas. Andy started working on *ShrinkIt* as a project for his college classes. He probably didn't realize just how large an albatross the program would become in terms of the amount of time and work he would eventually put into it.

ShrinkIt began as a means of combining and compacting files or disks into an archive file that could be stored for future unpacking and use (saving disk space while stored) or transmitted to another computer (saving transfer time); see "NuFX eases file transfers", **A2-Central**, August 1989. The 8-bit version of *ShrinkIt* became the standard for archival almost immediately after its release; Andy created versions for both the older Apple II systems and the newer 128K systems, using the extra memory of the latter systems to add utilities to make working with files and disks within *ShrinkIt* easier.

When Apple announced System Disk 5.0, new features were introduced that forced Andy to start on a IIgs version. The IIgs version had to cope with extended files, which were used with the new system software (but not intended to be manipulated from ProDOS 8) and also the chameleon-like nature of GS/OS's support for multiple file systems. The IIgs version also had the IIgs's enhanced features and memory available and made development of a more efficient compression algorithm possible. So Andy came up with one, and then went back to update the 8-bit versions of *ShrinkIt* to support it (though they do not support some of the other IIgs-specific needs).

Andy's hard work has paid off. Apple, knowing a good and competent worker when they see one, hired Andy last month to be the programmer in charge of maintaining the IIgs Finder. Andy is already soliciting ideas for what people want to see.

Best Educational Software: *Katie's Farm* by Lawrence Productions, distributed by Brøderbund. Unfortunately, I am unable to comment knowledgeably on this program since I haven't used it myself.

Outstanding 8-bit Apple II Software: *Proterm* 2.2 by InSync. For the most part, 8-bit Apple II telecommunication programs remain superior in overall features to their IIgs counterparts. *Proterm*, though not the least expensive such program, is the best example of how feature-laden a "telecommunications" program can become. Its author, Greg Schaeffer, has seen fit to include not only the standard telecommunications functions, but a "host" mode (that allows another system to dial *Proterm* running on your computer and use it as a "mini-BBS"), extensible dial lists, terminal emulations, a macro language, and a "learn" mode that can watch you log on and convert the sequence to macros for future access. *Proterm* also incorporates an editor, disk utilities (including file and disk copy functions from within *Proterm*), and a large (up to 2.5 megabytes, given sufficient RAM memory) review buffer to retain incoming text data that you can later (during the same *Proterm* session) "clip" to send to your printer, a disk file, or the built-in editor.

The editor is atypical in that it has a comprehensive set of commands including cut and paste and reformatting of broken lines into paragraphs (or vice versa). The editor goes so far as to accept a series of embedded printer formatting commands similar to those used by *AppleWriter* to format a document for printout. If your only need for a computer is to collect and edit text via the modem, you may never have to leave *Proterm*.

Proterm works on the enhanced 128K IIe, IIc, IIgs, and Laser 128 systems. Originally published by Checkmate Technology, *Proterm* is now sold through its new publisher, InSync, P.O. Box 22146, Phoenix, Ariz. 85028, and through several mail-order companies.

Outstanding 16-bit Apple II Software: *HyperStudio* 2.1 by Roger Wagner Publishing. While everyone else was trying to decide what to do with the IIgs, Roger Wagner counted up the features, assembled the programmers to create an applicable product, and hit the ground running. As far as I can see, he hasn't stopped yet.

HyperStudio is the one program among those possible to consider for this award that exploits every aspect of the IIgs in such an easily accessible way as to make the computer's possibilities seem limitless. Although often compared to *HyperCard* for the Mac (and now the IIgs), the implications of *HyperStudio* are subtly broader. At the basic level, *HyperStudio* can be operated on the current minimal IIgs machine (1 megabyte, one 3.5 drive, and monitor) and do things that *HyperCard* can't do across the line on Mac systems without extra hardware or software. With the included sound digitizer, *HyperStudio* has the best out-of-the-box capabilities of any comparably priced hypermedia product; period. With the basic IIgs and *HyperStudio*, you have high-resolution graphics, animation, sound, and text at your beck and call via the simple *HyperStudio* mechanism of creating cards and stacks. In addition, you have several unique stand-alone utilities with which you can create startup effects for your computer (*HyperStudio's* *Sight and Sound* modules), record and edit sounds (*Sound Shop*), browse a library of sound files (*Browser*). If your monitor is a color monitor, you have something else the Mac version of *HyperCard* doesn't supply: the richness of color.

At the other end of the spectrum, I have seen Roger literally roll carts of hardware into a room to show off features of *HyperStudio* that allow you to add and use laserdisc players, CD-ROM drives, the Apple *Video Overlay Card*, touch screens...all without having to buy any additional *HyperStudio* software or hardware. With a mischievous grin, Roger encourages you to check Mac or MS-DOS hypermedia programs and see how expensive the same capabilities are to add; he has already researched the answers.

If you think you've taxed *HyperStudio's* capabilities before you've bought enough peripherals to bankrupt yourself, ask Roger about it. He can tell you about the *HyperStudio* capability to support externally added commands (Xcmds) and can even offer to sell you some compilations that his company publishes. Or you can probably find free-ware stack and Xcmd ideas floating around the public dataways; *HyperStudio* has freed both user's and programmer's imaginations.

Apple's new *HyperCard* for the IIgs is a different flavor of multimedia pie and will enter a market that Roger has legitimized; it will possibly expand into a market segment where *HyperStudio's* one notable deficiency versus the Mac *HyperCard* (the lack of the HyperTalk language) has caused some *HyperCard* snobs to snub an obviously powerful product. But then, maybe the world of hypermedia shouldn't embrace programmers as the best authors. Apple's own *HyperCard* IIgs team and other Apple II people have been complimentary of *HyperStudio*, and *HyperCard* IIgs's presence may not fuel a competition; these are two products that have a similar purpose but differing mechanisms of creating stacks. We think the two products will coexist; in many cases on the same person's shelf.

Besides, Roger's well out in front, and he's running hard with less baggage. But you'll hear more about that in a moment.

Best Innovation: the *RamFast* SCSI card by C.V. Technologies. Other than the availability of software (which is an issue not to be covered here), the two most frequent complaints about the IIgs we see are that it doesn't have enough graphics resolution (arguable versus other systems in its price class) and that it is "too slow". Applied Engineering and Zip Technology have addressed one side of the speed equation, the processor speed, with the *TransWarp* GS and *ZipGS* products. The Innovative Systems's *Floating Point Engine* addressed slow SANE math. But it took the *Ohio Kache Card* and then the *RamFast* to show what an intelligent disk controller could do to boost system speed. From our perception, in many cases speed limitations being blamed on the IIgs processor were actually due to disk access; adding the *RamFast* SCSI interface to your SCSI hard drive

and launching a disk-intensive program like AppleWorks 3.0 or *AppleWorks GS* (which load the program in stages from a disk) can prove the processor speed is not the only solution.

The *RamFast* itself has another innovation that shines: the installation software is mapped onto a ROM disk on the card itself; you can't lose the *RamFast* software without losing the card. Setting the card up from the supplied menu is a simple and painless process.

The *RamFast* includes one other feature desirable for new products; although it shines on the IIgs, it also shines on the Apple IIe. C.V. Technologies's address is 9431 Saddlebrook Lane, Suite #2C, Miamisburg, Ohio 45342.

Best Multimedia: Hyperstudio 2.1 by Roger Wagner Publishing. Yes, it's back. See the comments on *HyperStudio's* previous award above.

Best Development Tool or Language: Genesys 1.2 by SSSI. The major complaint in programming the IIgs is that it is too tedious to create the code necessary to support the preferred Desktop interface. *Genesys* is a prototyping tool that can be used to lay out and define elements of the user interface on the graphics screen; for example, you can create a window, drag it to size, position it on the screen, add buttons, an information bar, scroll bars, and so on without ever having to write a line of code. When you are finished (and you can create and save more than one element during the same session), *Genesys* can save the resulting program elements to disk as raw data or can create the source code in several IIgs languages for incorporation into your program. Delineating the languages supported is tricky since *Genesys* is extensible through Source Code Generators (SCGs); if an SCG doesn't exist for the language you're using, it can be added later. But the chances are that *Genesys* does support the language of your preference: C, Pascal, BASIC, assembly, Rez (Apple's resource compilation language), and so on.

One way to store the raw data of an element manipulated by *Genesys* is in a data structure called a resource. GS/OS's extended files are like Mac files in that they consist of two file "forks" or storage areas; one is the data fork that corresponds to what we think of as a "conventional" Apple II file structure, and the other is the resource fork that contains data in the specific format expected by a GS/OS tool called the Resource Manager. The beauty of the resource fork (and Resource Manager) concept is that data structures are defined independently of any specific program so that they can also be manipulated by other programs. For example, if the title of a menu is embedded in the program code itself and you try to alter it, you may end up changing it in such a manner as to destroy the ability of the program to use it. By storing the title in a resource using the prescribed format, the title can be altered consistent with its resource type and will not interfere with the operation of a properly designed program. It can also be used by other programs that recognize and manipulate resources. *Genesys* is such a program, and so is useful as a resource editor allowing users (even non-programmers) to alter the appearance of their program almost as if editing a word processor file. For example, the Mac uses the same concept to allow editing its visual design features; you can edit a series of menu titles and dialog messages to change the visual language of a program from English to French, for example. As more programmers discipline themselves to think in terms of resources and use them, *Genesys's* domain will increasingly expand from use as a development tool to use as a system utility.

Best Debugging Aid: GSBug 1.5 by Apple Computer. Many contributions Apple makes are "faceless"; we tend not to think of new System Software, Apple publications, and Apple hardware devices as "revolutionary" in many cases because they become such a staple of our world. Programmers universally recognize that being able to quickly and reliably track down problems in their code is at least as important as being able to write the code in the first place, and Apple's own *GSBug* is an indispensable aid in that regard.

Think of *GSBug* as a "super monitor" program that you can load and enter to execute your program and monitor its progress. When the program reaches a certain stage, or crashes in a manner *GSBug* can "trap", you can use the capabilities of *GSBug* to try and track down the specific part of your program that is causing (or being brutalized) by a bug. *GSBug* is currently still being revised by Apple and is only available through developer channels (including APDA), but it

is well known and respected in programming circles.

Best Apple II Periodical: A2 Central. I'm not going to say a lot about this; except "thanks". Weighing the fact that many of the other voters were competing periodicals, this is an exceptionally humbling award, and I plan to be humble (later, we'll see how our marketing people have treated it).

Best Online Service: America OnLine. Okay, we win one, we lose one. Since I do browse other services as time permits, I have to admit that the selection did not surprise me. The depth and quality of America Online's Apple II sections have been exceptional. All I can say is that we GEnie folks don't plan to make it easy for our friends at America Online to repeat next year.

Hardware of the Year: Apple High Speed DMA SCSI Card by Apple Computer. *A2-Central* was one of the publications screaming about the seeming inability of Apple to support its own line of peripherals (*Apple Scanner*, *Apple Tape Backup*) on the Apple II. When Apple responded, they responded big, and gave us not only improved peripheral compatibility but also improved performance over the previous Apple II SCSI interface. In addition, they kept the price for the new card the same as the old one; yes, there is no upgrade, but then the price is low enough that if you need the new features the price can easily be justified.

We've mentioned the *RamFast* SCSI's speed advantages; the Apple DMA SCSI card is not as fast in general use but does provide the important features of broader peripheral compatibility (for scanners, tape backup, CD-ROM, removable media hard disks, even on IIe systems) and an advantage Apple was bound to implement; synergy with the Apple IIgs System Software to tap the full 1 megabyte per second throughput of the card in special instances. Apple also included new SCSI utilities with the card that solved some rather "stupid" aspects of the older SCSI card utilities (such as limitations in sizing drive partitions). The new card does require an enhanced IIe or IIgs (the Rev. C card and *RamFast* will also run on unenhanced systems), but it delivers a broad spectrum of capability to the Apple II line. Now all we need is some third-party products based on Apple's IIgs scanner and tape drivers.

Software of the Year: Hyperstudio 2.1 by Roger Wagner Publishing. Again? You bet.

Special Award to Claris and the authors of Appleworks 3.0. Although the release of *AppleWorks 3.0* fell outside the time window we were allowed to nominate from, apparently it was mentioned frequently enough that Apple's judges added this special award to credit not only Rupert Lissner's original concept and implementation of the program, but also the continuing legacy of substantial improvement by Claris and (for the 3.0 enhancements) Beagle Bros. Admittedly, we'd like to see other programs that exceed the capabilities of the individual *AppleWorks* modules (word processor, database, spreadsheet) achieve greater acceptance, but the fact that *AppleWorks* dominates because many users find it comfortably adequate can't be denied.

Outstanding Individual Achievement: Roger Wagner. We've raved about *HyperStudio*. Now it's time to rave about its publisher.

During the presentation, the phrase used to describe Roger was "a tireless evangelist of the Apple II". Many of you who don't go to computer trade shows may think an evangelist is someone like myself who has a public forum and whines a lot. The latter is more like politician, who is trying to create an environment of opinion to sway a monolithic entity. What Roger does is more personal and immediately beneficial to the viability of the Apple II; he convinces *individuals* that the IIgs is the best computer for a purpose that they have ever seen, and that it is something that they have to own.

I have seen Roger work a crowd from dawn to dusk. His *HyperStudio* booth has always been filled near the point of angering the attendant fire marshall at several conventions I have seen him. He always has something new to show. He always has new ideas. He always stays calm (at least, that I've seen) while nailing someone into a conversational coffin when they assail the IIgs. Before and after the conferences you see him discussing ideas, opinions, and complaints about Apple and its products. I'm not convinced he sleeps.

At the Apple Fiesta in June of 1989, Tom Weishaar and I saw Roger running a demo designed around a *Campaign '88* laserdisc similar to a demo Apple was running in their own booth. Apple had relegated their IIgs to showing a paint program and a IIc Plus to demonstrating a K-6 educational program; their "dog and pony show" used a Mac II (including monitor), a second expensive video monitor, laserdisc, *HyperCard*, and stereo speakers. Roger had pretty much the same idea, except he used a single IIgs monitor and an *Apple Video Overlay Card* to display the laserdisc output on a IIgs with *HyperStudio* as the driving software. Subtract the cost of a IIgs from a Mac II, count up the difference, and you'll see why Roger's demonstration was drawing more people than the Apple booth.

At the AppleFest this spring, Roger showed up with an information kiosk (the "touch a button, see information on the video screen" type of system you see used in some shopping malls) built around a similar system. A touch window was used; by touching an icon on the IIgs screen, you selected the items (by topic, or map location) you wanted information on. Most of the information was displayed in IIgs graphics kept on the hard disk, but just to keep interest up Roger had a few options to demonstrate IIgs (and *HyperStudio*) capabilities. Tom Weishaar attended, and told me he watched several Mac enthusiasts walk away mumbling about the impossibly great IIgs graphics. He later realized that they had actually been confused by a laserdisc image displayed on the IIgs screen using the *Video Overlay Card* features in *HyperStudio*. Roger had put IIgs capabilities together in a manner that the Mac people apparently couldn't envision.

At the Apple Fiesta this past summer, Roger had set up a similar kiosk in the center of the exhibition area. Meanwhile, Roger was drawing Mac users into his booth by showing the IIgs properties off with *HyperStudio*. At one point, he showed a preview of an Xcmd that allowed recording a sound at the press of a *HyperStudio* button on screen and then playing it back; previously, you needed something like Farallon's *MacRecorder* (at about \$300) to do that with *HyperCard* on the Mac. Maybe that's why Apple felt compelled to add sound input to the Mac LC and IIsi.

At Long Beach, I'm sure Roger had an unusual feeling, competing with Apple's roll-out of *HyperCard* IIgs. But again Roger came prepared; this time he had collected an army of evangelists. For two solid days he had other people doing demonstrations for him to booths full of future converts. One of the high points was an implementation of *Dragon's Lair* (the laserdisc-based arcade game) using only *HyperStudio* as the controlling program and a *Dragon's Lair* disc rescued from a broken arcade machine. Roger didn't use the opportunity to relax, however; most of the convention I saw him collaring anyone faintly interested in the IIgs and working them into a fever pitch regarding it's untapped potential.

He of course used *HyperStudio* as an illustrative example of how to tap that potential. He would point out applicable distinctions in it and *HyperCard* IIgs, but I never heard any disparaging words. Everything I've seen about Roger indicates that he prefers to accentuate the positive aspects of his products rather than railing on flaws he perceives in the competition. (Though he has been known to demurely point out a competitor's weaknesses where appropriate.)

When you think about how the IIgs will succeed, it is obviously the people who put their nose to the grindstone and deliver tools to make the system uniquely usable that ultimately determine whether the machine will survive. As Apple revises its marketing aims for the IIgs, Roger's "tireless evangelism" may emerge to a broader audience; despite the current low profile of the IIgs, Roger packs in interested observers at education and trade shows, and says he has more people in the field demonstrating *HyperStudio* on the IIgs than Apple has sales representatives. He's not the only Apple II champion out there, but he has the products and the will to convince the mass market that the IIgs is a superior computer to its competitors in at least the emerging technology of interactive multimedia. Roger will even have a rebuttal to the editorial regarding the Mac LC in the February issue of *A+/inCider*; Roger's whimsy shows in his inversion of the original title to read "The IIgs: What the Mac LC Should Have Been". But his words are sober; Roger's love affair with the IIgs recognizes no conqueror and takes no prisoners.

Roger continues to find new ways to convince people to buy IIgs systems (and, of course, his products). He has put together a 10-disk

demonstration set of *HyperStudio* applications (including a run-time version of *HyperStudio*) that he distributes for \$10, including a 40-page *Hypermedia Resource Guide*. Roger has also instituted a "Hypermedia Test Drive" kit for loan to any school; the kit includes 15-20 complete copies of *HyperStudio*, a touch window, scanner, digitizer, laserdisc, other hardware related to multimedia, and a manual that can be used to conduct a short (1 or 2 hour) workshop (contact educational coordinator Della Smith at Roger Wagner Publishing, 800-421-6526).

Of course, Roger's motives aren't completely selfless; he wants to sell his software. But he has not chosen to follow on the coattails of Apple's strong marketing emphasis for Mac hypermedia. Instead, Roger has followed what he believes to be the technical lead of the IIgs in the multimedia field, and do what the Fortune 500 company has failed to do: find a way to sell the IIgs in a competitive market.—DJM

Miscellanea

Apple has formed two *AppleLink* address groups with an Apple II focus. Group addresses allow a large number of *AppleLink* participants to receive an item mailed to the group's name. The new *AppleLink* group addresses are intended to facilitate the exchange of technical information and solutions, announcement of new products and programs, feedback to Apple II engineering, promotion of trade shows and other gatherings of interest to the Apple II community, and to just share common interests. Using *AppleLink* will allow the discussions to be conducted in a more interactive way, since Apple employees and many other *AppleLink* members usually gather their *AppleLink* mail at least daily (if not more often).

AII.TECH\$ will be used for the discussion of technical issues. AII.NEWS\$ will be used for the discussion of items of general interest, including new products, general news, and so on.

If you are on *AppleLink*, you can have your account name added to one or both group addresses by sending your request to "subscribe" to *AppleLink* address AII.ADMIN.

MIDIsynth is now available through APDA. The MIDIsynth tool provides integrated access to several of the distinct Apple IIgs sound toolset functions (MIDI toolset, sequencer, sound synthesizer, and so on) to simplify the programmer's use of these varied tools. The APDA disk includes *synthLab*, an application for experimenting with the features of the toolset.

MIDIsynth is also available to license for IIgs software products; the first third-party application that we've heard of that uses MIDIsynth is the IIgs version of InterPlay's *Dragon Wars* game. Apple's tools may make it possible for the IIgs to blow away the competition's inferior sound capabilities. Now Apple needs to put a better speaker into the IIgs, like they do for the Mac systems.—DJM

Running with the enemy

Assume that you're considering buying a computer other than an Apple II (or compatible). Also assume that you feel a strong desire to access the vast software base for the IIe and its cousins.

What would you say to an Apple II peripheral card that emulated a 128K enhanced Apple IIe at normal (1 megahertz) and twice normal (2 megahertz) speed with all text and graphics modes, that supports up to four disk volumes (including hard disk and network volumes), and includes one parallel and one serial port, an Apple IIc-style game port, an Apple II-compatible disk drive port, and a ProDOS-compatible clock. And that installs in more than one specific model of host computer.

The last provision is the clue that this card is not the Apple IIe Emulator card that operates (only) in the new Mac LC. Instead, it's the *Trackstar* from Diamond Computer Systems, Inc., 470 Lakeside Drive, Sunnyvale, Calif. 94086, 408-736-2000, and it installs in one of many MS-DOS hosts with IBM PC/XT-style slots.

The *Trackstar* comes in two flavors: the *Trackstar e* and the

Trackstar Plus. The *Trackstar e* is designed to use with the older PC digital video standards (MGA, CGA, EGA). We tested a *Trackstar Plus*, which is designed to use with the current analog (VGA) video standard becoming common on most PC compatibles. The *Trackstar Plus* package comes with the *Trackstar* card itself, a set of three connecting cables, installation disk and a user's manual.

The *Trackstar* card is a full-length (about 13" long) card filled with IC's and connectors, including two 65C02 microprocessors. Of the three cables supplied, two are for video connection; only one of these cables is actually used, depending on the type of system the *Trackstar* is installed in. The remaining cable attaches to the *Trackstar* at one end; the other end terminates in an Apple IIc-style (9-pin) game port.

The manual is small but covers the procedures necessary for normal installation and use with a few minor exceptions. The first exception that we ran into was that the installation instructions only covered three specific IBM systems; the PS/2 Model 25, PS/2 Model 30, and PS/2 Model 30/286. Since we're relatively naive about the guts of these systems, it took a few moments to sort through the hardware descriptions and determine the proper course of action for our non-IBM clone system.

PC compatible slots are similar to Apple II slots; the card itself installs in a receptacle on the motherboard, and there is a "knockout" hole on the rear panel of the computer for accessing connecting cables and controls on the edge of the card (unlike most Apple II cards, for PC systems the design of the slots usually assumes any mounting bracket for access is part of the card itself). Installation of the *Trackstar* boils down to finding one free full-size slot for the *Trackstar* card itself (the mounting bracket on the *Trackstar* card includes the video output and disk drive port connectors), and (if desired) a second slot knockout for mounting the game port bracket.

We found the most appropriate installation description to be the one for the PS/2 Model 30, although the orientation of its slots is for horizontal installation of boards (our clone's cards install vertically). Simplified, the installation procedure involves running one of the supplied video cables from your existing VGA output to a connector on the *Trackstar* board, also connecting the game port cable to the appropriate connector on the *Trackstar*, and mounting the *Trackstar* and game port bracket in the selected slot locations. Finally, you connect your monitor to the *Trackstar* video port, and your Apple-compatible disk drive to the DB-19 port on the *Trackstar* bracket (if you have the older Disk II-style 20-pin inline connector, there is a place on the *Trackstar* card itself to attach it).

Software installation involves creating a workdisk from the supplied master disk (I just added the files to the clone's hard disk) and running the TSUTILIT.COM program file to set up the *Trackstar* environment. One item is the selection of the printer type as "IBM compatible" or "Apple compatible". The other is the configuration of disk drives.

The *Trackstar* supports the use of up to four drives. One of these may be an Apple-compatible 5.25 attached to the drive port on the *Trackstar* itself. The *Trackstar* accesses an Apple-compatible drive as an Apple II would; we booted several Apple II program disks (including copy protected software) from an Apple 5.25 drive attached to the disk port.

Other "drives" are represented by special files created on MS-DOS volumes (floppy drive, hard disk, or network volume) that the *Trackstar* recognizes as representing Apple disk volumes. One such type of file is a TrackStore file, which the *Trackstar* utility software creates by reading in an Apple 5.25 disk and storing the disk image into an MS-DOS file. Trackstore files can be "inserted" and "removed" into the virtual "Apple 5.25 drive" by a selection mechanism provided with the *Trackstar* environment. From MS-DOS, the files are recognized by a filename ending in ".APP", and may be manipulated with normal MS-DOS file utilities.

If you elect to use an Apple drive, it will be assigned as a slot 6 device (usually as drive I for use as the boot device). The second slot 6 device can then be an MS-DOS volume holding one or more TrackStore files; the first time you try to access the device from an Apple program, a selection screen will appear that asks you to select which TrackStore disk you wish to appear in the virtual drive from a displayed list. Move the cursor to the desired TrackStore file, hit Return, and you return to the Apple side of life with the selected disk online.

While performing the setup, the installation software will ask if you wish to assign two additional drives for use with ProDOS. If you elect to do this, you can create one or two ProDOS volumes of up to ten megabytes in size (limited by the available space on the drive selected to hold the file representing the ProDOS volume). These volumes will be assigned to slot 7 as drives 1 and 2. Once you boot into the *Trackstar*, you can use ProDOS utilities to format and use the drives.

The *Trackstar* monitor ROM and BASIC firmware is by Language Arts, the same people who brought you the *Laser 128* monitor ROM and BASIC firmware. The *Trackstar's* firmware does not seem to support all of the features of the current *Laser 128* ROM; for example, the *Trackstar's* monitor does not support the disassembly listing command. For higher compatibility, the configuration program allows you to save a TrackStore image of a DOS 3.3 System Master under the filename INIT (INIT.APP from MS-DOS) and select to load Applesoft from the FPBASIC image on the System Master file. Alternatively, you can elect to have FPBASIC loaded from an Apple diskette; the system will prompt you when it is ready to load Applesoft.

Running the system is only a little trickier than using an Apple II. From MS-DOS, you launch the *Trackstar* into Apple mode by running STAR.COM. STAR will ask you which volume you wish to boot from. If the selected volume is not the "slot 7, drive 1" ProDOS volume (PRODOS.HD1) or the Apple external drive, it's probably a volume containing TrackStore files and STAR will additionally ask you which TrackStore image you want to boot. Work through the selections and you'll be working on an Apple II clone.

The correlation isn't always direct. For one thing, you have no open- and closed-Apple keys; instead you use the PC's F9 and F10 function keys. This can be slightly awkward, depending on the layout of your keyboard.

There is also no reset key. Reset and several other functions are reached from a special menu activated by hitting the function key F1 followed by Escape. From this menu you can type several single-key commands: "R" to reset the *Trackstar* (equivalent to "control-reset" on an Apple II), "B" to reboot from the selected device (equivalent to "control-open-apple-reset"), "1" to switch the configured disk 1 (in case it's assigned to a TrackStore volume), "2" to switch disk 2, "+" to toggle Apple II+ mode, "K" to display a list of other control keys, "X" to exit to MS-DOS, and the "ENTER" key to return to the *Trackstar*. So, for example, you can reset the *Trackstar* from Apple mode by pressing "F1", "Escape", and then "R".

The additional keys shown by "K" are used to control system parameters. "F2" will toggle the graphics display between color and monochrome; you can use this to suppress color on programs expecting a monochrome monitor. Using a modifier key on the PC keyboard named "Alt" like a "shift" key, you can switch the speed of the *Trackstar*; "Alt-1" (hold down the "Alt" key and press "1") forces 1 megahertz operation, "Alt-2" pushes the system to 2 megahertz.

When you select "X" from the menu, you'll be asked if you want to terminate the operation of the *Trackstar*. If you choose "Y", you exit to MS-DOS and the *Trackstar* is shut down; you must run STAR.COM again to restart.

Otherwise, you exit to MS-DOS and the *Trackstar* will continue to operate until it requires some aspect of the PC's input/output resources, at which point it suspends operations and waits for you to return to *Trackstar* mode so it can claim the resource it needs. With the *Trackstar* running, you can switch between MS-DOS and *Trackstar* modes by using "Alt-Escape". Thus the *Trackstar* is a parallel processor that allows the MS-DOS and *Trackstar* processors to run alongside each other at the same time.

The unused function keys can have key sequences ("macros") assigned with the configuration software. Once defined, pressing the function key within *Trackstar* mode causes the defined keystrokes to be issued as if you had typed them from the keyboard.

The *Trackstar* also includes a set of utilities to allow transferring files between MS-DOS and Apple (DOS and ProDOS) format disks.

The *Trackstar* appears to be designed to run Apple software in a classroom environment where Apple II systems are being displaced by MS-DOS systems. The *Trackstar* does an admirable job of running software from 5.25 disks, provides (through Trackstore) a

convenient way to archive often-used disks on network volumes (Diamond's manual cautions that the use of copyrighted programs on a network must be approved by the software manufacturer), and provides a usable environment for ProDOS users requiring larger disk volumes.

There are two severe limitations for serious Apple II users. First, there's no provision for attaching an Apple-compatible 3.5 (800K) disk drive. This is probably not as severe a limitation for schools, where the use of 3.5 drives on Apple II systems may be rare due to the cost of the drives, and since most software is supplied and used on 5.25 disks. But for Apple II users running disk-intensive software, the 160K storage limit of normal Apple 5.25 disks is too restrictive. Moving such files to a ProDOS "partition" on the hard disk solves the storage limitation, but then large files have to be broken up to fit on a 5.25 and moved to another Apple. We've found 3.5 disks to be essential for practical, transportable data storage.

Second, there is no provision for expanded RAM above the 128K IIe model. This allows running the most popular "serious" Apple II program, AppleWorks, with only a limited desktop and few enhancements. Most importantly, it limits the use of the *TimeOut* applications.

The only other minor glitches encountered were the failure of the serial port to work with 2400 baud modems without losing characters (the port appears to be intended primarily for use with a printer, and doesn't support interrupts), and the inability to boot a few very heavily protected programs (the two I had trouble with were MicroLab's *Life-Saver* and Sirius Software's arcade game *Bandits*; both products have been defunct for quite some time). Diamond does have a list of sever-

al hundred programs that they have tested for compatibility.

The Trackstar has been available for several years; it will come into closer focus now as Apple tries to push its "dual processor" platform, the Mac LC with IIe emulation card, into the Apple II educational market. The Mac LC/IIe does allow attaching a 3.5 drive, and it does provide for expansion memory for programs like AppleWorks. We can assume that its firmware will be a faithful rendition of Apple's proprietary Apple II monitor and BASIC. We won't know where its limitations versus the *Trackstar* exist until Apple actually starts shipping this combination, so we'll reserve further judgement until we have the setup in hand.

However, we feel the *Trackstar* alternative represents several factors schools should consider. It has been in production for some time, versus Apple's LC/IIe. The *Trackstar* works in MS-DOS machines, which represent nearly all of the non-Apple II CPUs installed in K-12 currently. At \$445 (retail) the *Trackstar* costs over twice as much as Apple's card (announced at \$199), but the host computer can be significantly less expensive.

The last factor may be the most damning: the problem with Apple's solution is that, in typically Apple fashion, the user's choice of hardware is limited. If you want a Mac to run Apple II software, you have a grand choice of one machine; the Mac LC. With the *Trackstar*, you can select a platform ranging from basic PC clones to a full-feature 80486 behemoth. And if you change PC (or PC clone) models, it's likely the *Trackstar* can move with you.—DJJD



Ask (or tell) Uncle DOS

Disk interleave info

I have what must seem like a couple of dumb questions, but I can't seem to get any answers locally. I have a IIgs with all the usual peripherals.

Question #1: Is there any utility (or method) of determining the interleave of a previously formatted 3.5" disk?

Question #2: On a disk to disk copy (the Finder or *ProSel-16*), if the original disk has a 4:1 interleave and the destination has a 2:1 interleave (before the copying starts) what is the interleave of the destination disk after the copy is completed?

The basis for these questions is that I previously had an Apple 3.5 disk and daisy chained a UniDisk 3.5 to it. I formatted storage disks at a 4:1 interleave because of the UniDisk. In storing data, the disks droned on and on, especially storing files from AppleWorks 3.0. I finally acquired a second Apple 3.5 disk to replace the UniDisk, formatted blank disks with the 2:1 interleave, copied the 4:1 storage disks to these new disks expecting a considerable speed-up in disk activity. The results were most unspectacular. As nearly as I could tell there was not the

slightest improvement in disk access and storage times. What am I doing wrong?

Barney Woodruff
Camp Springs, Md.

The Free Tools Association's (FTA) copy program **Photonix II** will detect the existing interleave of a disk. **Photonix II** is published by Toolbox, 6 Rue Henri Barbusse, 95100 Argenteuil, France.

If you format the target disk at a 2:1 interleave and use a normal disk copy utility to copy the contents of the 4:1 original without reformatting the target disk, the interleave of the target will remain at 2:1. Most copy utilities will work this way. Most IIgs copy programs (and *ProSel's* ProDOS 8 IIgs disk copy utility) allow you to specify the interleave of the target disk for formatting.

Changing the interleave may or may not help file access times depending on what program you use to measure the change. Some programs such as AppleWorks process information as they read or write a file, and the processing time causes delays that an optimum interleave will have to take into account. Since you can't optimize the interleave for everything, Apple's suggested interleaves are based on what they consider to be the best compromise.—DJJD

Not as testy

Do you know of a program or a way to stop the LaserWriter NT from printing a test page every time it's started up?

John A. McLean
Courtenay, B.C.

PostScript guru Don Lancaster lists the needed incantations in his **LaserWriter Secrets** book (from Synergetics, Box 809, Thatcher, Ariz. 85552, 602-428-4073). The PostScript code to disable the test page is:

```
serverdict begin 0 exitserver statusdict begin false
setdostartpage end quit % true restores it
```

The PostScript code to enable the test page is:

```
serverdict begin 0 exitserver statusdict begin true
setdostartpage end quit % false kills it
```

Getting this code to the LaserWriter is a bit of a problem. Don, of course, suggests using a direct connection where you use the Apple as a terminal to type (or download) PostScript instructions directly to the LaserWriter using a serial connection. This of course assumes you can take control of the LaserWriter, which is not convenient in a network situation.

Both the IIe and the IIgs download a text file named IWEM when you select to use the LaserWriter as your AppleTalk printer and elect to download the "ImageWriter emulator". By replacing this IWEM file with your code, you can have the respective "chooser" function (the 8-bit Chooser of the Apple IIe, or the Control Panel LaserWriter CDEV of the IIgs) download your code thinking it is the emulator program. Since you probably want to use the emulator, too, we'd recommend you rename the original IWEM file, create the new IWEM file in the same folder (or rename an existing file containing the instructions as IWEM), select the LaserWriter and download the bogus IWEM file, then reverse the procedure to restore the previous IWEM file.

We tried it, and the LaserWriter retains the status for printing the startup page when cycled off and on, so the setting must be retained in some type of nonvolatile memory.

We let our LaserWriter print the test page since it gives a running count of the number of pages printed, and a sample of the current print quality. As a further caveat, Don's

notes on the procedure indicate that the test page should be left enabled on a LaserWriter NTX with attached SCSI hard disk as a means of verifying that your disk is still functioning.—DJD

Apple bashing?

As much as I enjoyed reading the article in "The Ides of October", I'm beginning to wonder if all this "anti-Apple" bashing is going to really do us all really good.

Not that I don't agree with everything said. Most of it is true. It's just that if Apple decides not to put out another Apple IIgs, or push it in any way (which is what apparently is happening); I don't really want to promulgate the advocacy of moving over to MS-DOS clones.

I like Apples. I work on an IBM PS/2 at my job, and I have no intention of going that way for a long time. They just don't interest me. The Apple IIgs is more of a Mac than you realize.

Of course, everyone is angry with Apple. However, on the other hand, technology marches on. The computer you buy today won't be worth much in three, maybe four years. When I bought my Apple IIgs in 1986, I was considering purchasing an MS-DOS XT. Well, the XT is now a doorstop, while my Apple IIgs is still a viable machine (although it could be upgraded). I've had some wonderful use out of my Apple IIgs; I certainly have

gotten my money's worth. And I will be using it for years.

Of course, it may not be getting much more new software. I'm disappointed, as is everyone else, that things have slowed down.

But I still won't go the IBM route. I like the Finder, and the Mac has more to offer me than an IBM machine.

It's true that Apple isn't the company it used to be; but I've enjoyed the company they keep. It attracts the best programmers and has the best users of any computer equipment I've seen. I was angry about Apple not upgrading my Apple IIgs, but I see no alternative available... The other companies aren't all that endearing to their users. Why, IBM or it's clones don't even write their system software!

So if you have to get a new machine, a Mac is worth considering.

Lynda Botez

Redondo Beach, Calif.

There are many people that can't (or won't) deal with the MS-DOS alternative, and having used MS-DOS since the days of the IBM PC/AT I can sympathize. I think I hold a lot in common with IIgs owners that really want to feel better about Apple's treatment of them so that buying a Mac could be a less traumatic decision.

However, I would guess that although most IIgs users (and Apple II users in general) are not grossly disappointed in what they have purchased, they are justifiably indignant about Apple working to shorten the useful life of the systems they invested in. And there are not many ways to rationalize away this realization; although Apple is now trying to reverse part of the trend through enhancements to the Apple II platform, an inexcusable amount of damage continues to be done by inept dealer support and marketing.

It remains to be seen whether the new Apple II business unit can restore faith; I can accept a valiant attempt that fails, but Apple has barely managed to throw the Apple II community an occasional bone in recent years and should not expect alienated Apple II users to be easily appeased. If someone sells me a well and then poisons it, I'd be reluctant to buy another from the same source, no matter how appealing the prospect appears.—DJD

More on the New Print Shop

I would like to add a little to Harry W. Barr's very helpful comments on the *New Print Shop* (A2-Central, p. 6.77).

First, according to the October issue of *A+inCider*, owners of the original *Print Shop* can call Brøderbund for a \$20 upgrade at 800-999-3256. For those who bought the original version after May 25, 1989, the upgrade is free.

Second, people like yourself and Harry who praise Brøderbund Software for giving us a ProDOS 8 version without copy protection are missing a chance to exhort readers to buy the program or the update rather than make and use an illegal copy. Only in this way will publishers like Brøderbund continue

to take the risk of offering us unprotected software.

Third, contrary to Harry's experience, I have had no compatibility problems so far with the *Zip Chip*. I have a IIe with an 8 MHz *Zip Chip* and I have used the Convert routine to convert ten disks of old *Print Shop* graphics, borders, and fonts to the new ProDOS format at full speed (at default *Zip Chip* settings for all slots) with no problems. Harry advises people not to try the Convert routine with the *Zip Chip* on. My advice is, try it; it might work. If it crashes, then try it again with the *Zip Chip* off.

Fourth, I have experienced a minor compatibility problem with Applied Engineering's *TimeMaster II H.O.* clock card (in slot 2). Every time I attempted to use the Installation option to install the *New Print Shop* on my hard disk, the program successfully created the subdirectory /PS, then stopped to report a disk error. Brøderbund's technical support suggested I remove the clock card during the installation and then put it back in. It worked, and has been working fine since. The incompatibility is only with the installation option.

Paul Edwards

Roswell, New Mexico

*I'm waiting to see if I get a letter next month that says "Gee, I installed the **New Print Shop** on my hard disk with the **TimeMaster H.O.** installed without a problem" (sigh)...—DJD*

In search of BPI

I come to you with a whisper of hope as I throw my appeal to the masses. For over a year I have tried to locate BPI single entry series software modules that run on ProDOS. Specifically, I need General Accounting, Accounts Payable, and Accounts Receivable.

I have pleaded with Computer Associates to sell me the software without any warranty. They tell me they have none. However, when a "glitch" showed up on my Inventory software, they sent me a new set of disks.

I have called software and computer stores. I have called people that told me to call other people. Are there any out there? Should I call the Smithsonian or maybe Sotheby's?

You might wonder why the obsession. Well, I think BPI software is tops. I have used it since its inception with the old DOS programs. Then they came out with the ProDOS version and made it fully compatible with AppleWorks. What else can a small business owner like me ask for? Unfortunately, by the time I had enough money to upgrade all the files to the ProDOS versions, BPI sold out and Computer Associates dropped the Apple II line.

If anyone out there knows of where or how I can get the rest of the ProDOS versions I need, please call me. You can reach me toll free at 800-777-9992.

Max Poggio

President

GMG Products Inc.

Springville, Utah

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