The Ides of October

I was not a fan of either history or English literature in school until we had a class assignment to read Shakespeare. One of the first plays we were assigned was *Julius Caesar*. You know the plot: a group of respected men, ostensibly friends of Caesar's, decide to wrest him from power, for their own gain, by assassination.

The part of *Julius Caesar* that gripped me was Marc Anthony's eulogy at Caesar's funeral. Anthony was stuck with the dilemma of addressing a crowd that had been convinced by Brutus and his cohorts that Caesar had been justly slain for being overly ambitious. Since the conspirators were prominent, respected men, Anthony could not directly "slander" them by accusing them of an unjust murder. Instead, he employed sarcasm to expose the hipocracy and treachery of Brutus and his cohorts. He bemoans how unfortunate it was that the ruler known to all as benevolent and wise had turned out to be so "ambitious" as to justify his murder. Anthony put the responsibility for the act at the feet of the conspirators without directly accusing them, quoting their derisions of Caesar while referring to them as "honorable men".

The rulers that came after Caesar didn't fair so well; one of the most notorious was Nero, who was supposedly so indifferent to the state of the empire that he "fiddled while Rome burned". Eventually, the empire fell to armies, which Romans likely considered "inferior", because Roman civilization had become complacent and even disdainful of the world outside their empire.

History repeats itself both in the large and small scale. One year ago, Apple's stock was slumping; its management emphasized only Mac products (mostly the higher-priced models) during the fall promotional campaign and the IIgs was given only token recognition. And Apple took it in the teeth in fall sales. Since that time, after shuffling a few high-level executives, Apple has emphasized the need to lower the cost of its products to be competitive and its recognition that the Apple II, which built Apple's empire, will need to be supported into the future. John Sculley himself has made these statements on several occasions. But he has also kept insisting that "Macintosh technology" is what people want.

In that context: "Friends, I come to bury the Apple II, not to praise it." There are two parts to this story; one (told here) is what Apple is doing to its Apple II customers in its ambition for the Macs and the second (in "Apple vs. ...Magnavox?" in this issue) is what the entire market is doing to Apple.

John Sculley is an honorable man. This year, on October 15th, Apple announced three new Macintosh models and started its fall advertising campaign and promotion in a roll-out "show" that oozed like a late-night "infomercial". Here are the systems that Apple spent (at least part of) your money developing.

The Mac Classic replaces the Mac Plus and Mac SE; it is based on the same "compact Mac" vertical design as the earlier Macs, with a built-in 9-inch black and white monitor. Like the previous compact Macs, it uses a 68000 processor running at 8 MHz (for a speed comparable to the Mac SE), and comes with one megabyte of memory standard (expandable to 4 megabytes). It does include an Apple SuperDrive (1.44 megabyte floppy that reads Apple or MS-DOS disk formats) and a keyboard and mouse, and the retail price is $999. The only other configuration is the addition of one megabyte of memory

(total of two megabytes) and a 40 megabyte hard drive at a system price of $1499.

The Mac LC is the "low cost color Mac". At $2499, the CPU includes a 16 MHz 68020 processor (giving about twice the speed of a Mac SE), 2 megabytes of RAM (expandable to 4 or 10 megabytes with an optional expansion card), an Apple SuperDrive, a 40 megabyte internal SCSI hard disk, a keyboard and mouse, but no monitor. The CPU expansion includes the standard Mac ports: printer, modem, SCSI, Apple Desktop Bus, and sound output. In addition, the LC has a video connector, a sound input (monophonic), and one expansion slot ("020 Direct Slot") access port.

The LC supports several monochrome and color Macintosh monitors via the built-in video circuitry. The LC is also the only Macintosh that will support an optional Apple IIe Card ($199) for running 8-bit Apple II software.

It will take us a while to find out how "no compromise" the Apple II emulation card is; the LC is not expected to be available in quantity until January 1991 and the IIe emulation card is not scheduled for release until March. The product information sheet for the card indicates that it can run at either 1 or 2 megahertz and will use up to 256K of the LC's memory as expanded Apple II memory. Both of

"IT'S A SOFTWARE PROGRAM THAT MORE FULLY REFLECTS AN ACTUAL SCHOOL ENVIRONMENT. IT MULTITASKS WITH OTHER USERS, INTEGRATES SHARED DATA, AND THEN USES THAT INFORMATION TO NETWORK VICIOUS RUMORS."

these may be considered "restrictive" against enhancements that many users have added to their current Apple II systems.

The Macintosh IIsi is the model that looks most productive to us; it uses a 20 MHz 68030 that should be up to five times faster than the Classic and its built-in video circuitry supports the same monitors as the Mac IIci (Apple High-Resolution RGB, Portrait Display, and Monochrome displays). It has basically the same port configuration as the Mac LC, with the addition of a connector for an external floppy disk, stereo sound output, and the presence of an 030 Direct Slot rather than the 020 slot of the LC. The IIsi price is $3875 without keyboard (the basic Apple Keyboard is $129) or monitor; the CPU includes 1 megabyte of memory, expandable to 17 megabytes.

The Mac Classic looks more like a clever marketing move than true revolution; it effectively provides the pricing of the slow-moving Mac Plus with the slightly better performance of an SE, but minus the internal expansion capabilities of the SE. Apple credits part of the cost reduction to the new motherboard design for the Classic, which uses fewer discrete parts. The SuperDrive (which has so far been excluded from the Apple II series) adds perceived value; it allows using a higher-density 1.44 megabyte disk format and reading MS-DOS disks that the Apple 3.5 drive cannot. But a cynic can only wonder why the SE was comparatively so expensive versus the Mac Plus to begin with.

The Mac IIsi looks like the revolution: nearly the power of the 25 MHz IIci in a box that costs at least a third less. Adding the 68882 math coprocessor (standard on the IIci) only adds about $250 to the retail price of the IIsi. This is good competition for the upper-middle range MS-DOS systems. We even ordered one for the office because our desktop publishing program, *Quark XPress*, running on a Mac SE (for all the flexibility it offers) makes you want to smash the computer. But realistically, at about $4200 for a complete (monochrome) system, the IIsi is still priced out of the reach of the mass market.

The curiosity is the Mac LC. It appears to be close to the original Mac II (which also used the 68020) in power, but with video support included and, of course, Apple II compatibility (minus slots) optional. The fact that Apple says the machine won't be available in quantity until January 1991, and the IIe emulator not until March, makes it sound as if the machine was "pre-announced" to stymie Apple II sales in the fall. The LC appears to have been designed and positioned specifically as an "Apple II killer".

Apple seems to feel that making the Apple II competitive is too ambitious. But has Apple really made its Mac product line competitive, or is it merely trying to use pricing to drive the market in the direction its executives see fit, away from an existing user base? Look at the pricing of the Mac LC compared to an all-Apple IIgs system: $1149 for the IIgs CPU, $399 for the Apple 3.5, $129 for the Apple II High-Speed SCSI Interface and $1299 for the Apple Hard Disc 40 SC with terminator and cable. The IIgs is over $400 more expensive!

The discrepance is easy to see by looking at drive prices. Apple apparently takes less profit on the Mac's internal drives. For example, the external Apple 40SC drive price is $1299, over half the price of the LC by itself and just $200 short of a Mac Classic with this drive built-in. Also, the current retail price of the SuperDrive has been lowered to the same level as the Apple 3.5. Does anyone think Apple might be leaning a bit heavy on peripheral pricing to the disadvantage of the Apple II? Of course, we have all seen the comparative investment of that money in the development of new products for the Apple II and Mac lines, and in the respective advertising for the two lines, and can comfortably say that the price difference is going into the bank, not into added value.

Apple Marketing: "Honorable men, all." As if on cue, one day after the new Macs were rolled out, Apple's new Apple USA president, Robert Puette, was quoted in the *San Francisco Chronicle* saying that Apple was phasing out the Apple II line. Apple issued a clarification to deny that that was the gist of his statement; here is Apple's clarification:

"We remain committed to our millions of Apple II customers and we want to make sure that they understand the high level of support that Apple has behind the Apple II line. We want Apple II owners to remain happy with their investment in Apple II technology and we continue to look for more ways to protect that investment and extend the life of Apple II products—both as standalone computers and as part of networks.

"We will continue to sell, support, and service the Apple II product line and provide enhancements to that line as long as customer demand warrants it. We plan to continue to enhance the existing product line through updates to system software and peripheral add-ons. We fully expect Apple II computers to continue to serve education and other customers satisfactorily for many years to come.

"On the other hand, we have no plans at this time to introduce new, standalone Apple II models. However, we will incorporate Apple II technology into current and future platforms, as we have with the Apple IIe card for the Macintosh LC. We believe that this compatibility strategy will preserve customer's investments in Apple II, while allowing them to move to new technology platforms if they wish."

Apple's technical service and support doesn't do a whit for the survivability of the Apple II if its lack of marketing support causes all the third-party developers to move on to other platforms. When Puette says Apple will continue to "sell" (rather than "advertise" or "market") Apple II products, he indicates that the money Apple earns on Apple II products will be cheerfully contributed to the "send a Mac to school" campaign. Only third-party support makes the Apple II viable; Apple has always been two steps behind in providing Apple II product support equivalent to what it supplies for the Mac. Several years of such inactivity is not a coincidence; it's a philosophy. The Apple II has survived despite, not due to, Apple's executives.

Apple has responded to pricing complaints about the Mac, but continues to deny Apple II users similar considerations. Why does a company that appears to have lost its competitive ability continue to make one of its own product lines visibly noncompetitive? We think the answer is obvious: Apple management has believed its own Macintosh sales pitch to such an extent that it simply doesn't like the Apple II. It has no interest in positioning the company to sell *Apple* products against the competition, only *Macintosh* products. The Mac ego has won over the Apple II heart and mind.

The only fall advertisement we have seen (in the November 1990 *Technological Horizons in Education Journal*) "featuring" the Apple II shows a line of Apple systems (IIe, IIgs, Mac Classic, Mac LC) with the captions "This year, the hottest topic in the classroom will be evolution." and "Introducing the new Macintosh computers." Apparently, Apple has decided that this is the promised "appropriate" visibility of the Apple II in Apple's advertising; obviously, the implication is that the IIe and IIgs are passe'. What a way to instill customer loyalty; it makes me want to bring my IIe to Long Beach and set fire to it in front of the AppleFest exhibition. (But I can't; air pollution and the plastic case prohibit me.)

Which brings us to an allegory regarding a later stage in the history of Rome...—DJD

Apple vs. ...Magnavox?

Financial publications have been questioning not whether the Apple II will be around in a few years (indeed, Apple seems to have succeeded in getting the Apple II entirely out of computer industry news reports), but whether *Apple Computer, Inc.*, will be around.

Apple is, as John Pothier of Vitesse has put it, "an 800 pound gorilla" in the world of Apple II marketing. Apple has felt comfortable spending its time bullying the Apple II market. But now they look up and see they are surrounded by a lot of other 800-pound gorillas from the MS-DOS forest; competitors have cut Apple's market share from 15 per cent to under 10 per cent in the last five years. And then there is the awakening King Kong: IBM.

We received several calls after Apple's fall announcements from education purchasers who wanted to know how to handle future purchases in the event Apple was actually phasing out the Apple II line. Here's pretty much what we think Apple is facing.

"Will Apple learn from Betamax?", the October 29 issue of *Forbes* asks. A short article compares the domination of MS-DOS clones in the personal computer market versus Apple's proprietary systems to the battle of the widely licensed VHS videotape format to Sony's Beta format; a battle that VHS eventually won on sheer numbers.

If you prefer, think of it as the "refined" Mac empire against the less refined (but more aggressive) Huns. Apple will assert that their machines are technologically superior and capable of superior software. Beta video enthusiasts are also quick to opine that the Beta format quality is superior to the VHS format. We can see merits in this argument; it's nice to have higher quality. *But it's nicer to have a wide selection of readily available software.*

Beta lost the war to VHS due to wider licensing of the VHS format. Beta was often first with new features, but VHS was often quick to follow, and one feature VHS led Beta in from the start was longer taping times. VHS prices also tended to be lower than the Beta machines, especially the flagship Sony products. Many users were prepared to live with slightly less quality in order to have lower equipment prices and tape costs. As inexpensive VHS machines proliferated, stores were more likely to carry a better assortment of software (prerecorded cassettes) for the VHS than the Beta machines. Eventually, many stores catered to VHS only; without easily obtainable software, the market for Beta machines was even more severely constrained. For home taping enthusiasts, there was (and is) no reason to move away from Beta as long as blank tape is available, but as the major market moved to "users" who primarily wanted the machines to play rented or purchased tapes, availability of tapes started driving the market. Eventually, VHS sales eclipsed those for the Beta format, and the effect snowballed. Sony finally cried "uncle" and gave up on Beta.

Apple is dangerously close to the software imbalance situation, but not for exactly the same reasons. Like home video equipment owners, most computer customers are consumers rather than producers of software either because they are intimidated by the process of programming the systems (either VCR or computer) for home taping, or just because their intent for the machine is to use pre-packaged software.

Not everyone wants to make movies, or can; not everyone wants to program, or can. But for those who do want to produce software, the barriers are lower compared to those for the prospective video director. Most video rentals are movies that cost millions of dollars to produce and distribute; many useful computer programs are written by one individual or a small group of programmers. You can become a freelance programmer much easier than you can become a freelance movie producer and Apple's immediate problem isn't the ability to get new software produced.

Apple's market is constrained with a different straight jacket. Apple sells its computers exclusively through a relatively small number of Apple Authorized Dealers. Most of Apple's competitors for the market sell through several additional venues, including mail order (with the blessings of the parent companies) and retail stores.

Apple insists their dealer network gives "added value" to the systems, and dealer support is part of the reason for Apple's pricing structure. On the flip side, if a dealer does not do a good job of supporting Apple systems, Apple's customers don't see the positive effects that Apple anticipates and are left wondering why they paid "extra" for the Apple label. Meanwhile, they wander through retail stores with rows of MS-DOS machines and wonder why a low-cost, widely-supported machine should not be their next choice. Why, even the "Apple" dealer may have some of these machines displayed attractively within eyeshot of Apple's own systems, which can only reinforce the omnipresence of MS-DOS in a buyer's mind.

Given the need to reach a broader market, Apple's competitors have not stood still. Even IBM, which (like Apple) has fought mail-order sales, now sells PS/1 systems through that mass merchandiser, Sears (see "Miscellanea", October 1990). This, plus a lower price point for a color system ($2000 retail versus $3000 retail for a Mac LC color system) has left IBM rather comfortable with the new Apple announcements.

Apple is making an attempt to present its systems as providing more value for the consumer dollar. Unfortunately, Apple WorldWide Products Manager Bill Goins's demonstration on the "New Product Information" promotional tape mailed after the October introductions seems to leave a significant gap between Apple's real competition and what Apple thinks its competition is. In comparing the Mac LC motherboard to a 386SX motherboard, Goins correctly points out that the bare-bones 386SX board needs to add 256-color video, sound input/output, and SCSI to match basic features with the LC. However, his first contention is that there are not enough slots left to add three

cards for these features. This sounded odd; I grabbed an issue of *PC Magazine* that reviewed twenty-one 386SX systems and the least number of slots available on any of the machines *after adding video* was three (five was the normal figure). He also put the price of adding the features at nearly $2000; even using well-recognized components, I could only generate a figure of about two-thirds that. During a similar presentation at Apple's October product roll-out, a SCSI interface was presented as costing a few hundred more than a $500 Western Digital interface that includes on-board caching and very high throughput.

Apple may have been comparing prices with Compaq or IBM, but these companies are not the real competition; their pricing is not representative of the industry at large.

Apple is losing the marketing battle on sheer visibility of its competitor's machines. As MS-DOS computer sales increase, so does the proportion of shelf space MS-DOS software gets at stores, feeding the cycle; it's the VHS versus Beta syndrome again. Plus, since these stores can't sell Apple systems, why should they carry Mac or IIgs software? (Oh, but Apple IIe/IIc software is fine; while Apple itself doesn't compete for space, often the same stores carry Laser 128 models.)

The highly discriminating user may hold out for an Apple system, but at some point even that "discriminating" user may get uneasy about the sheer sensory overload of MS-DOS omnipresence and decide that it's better to have a slightly "inferior" machine with wide support than a "superior" machine that is becoming a needle in a haystack.

I admit to being one of these; I was within an eyelash of ordering a new Mac IIsi when "comments" from Apple executives, and the subsequent inaction in reversing them, forced my thinking to clear. These people don't want to sell and support systems, they want to export a philosophy without regard for their existing customer base.

"Buy CD-ROM drive, get computer free." That wasn't the way the Montgomery Wards' ad read, but that was my immediate reaction on seeing the Vendex *Headstart LX-CD* package. It includes a 10 MHz 8088 CPU with 768K memory (640K for programs, with the remaining 128K configurable as a printer buffer), a 1.44 megabyte 3.5 drive, 40 megabyte hard disk, VGA (video graphics adapter) video interface card, three-button mouse, serial port, parallel port, 101-key keyboard, clock, 10 manuals... and a 680 megabyte CD-ROM drive with audio adapter and stereo output (with volume control and headphones). We have since found these systems offered at several retail outlets at a median price of *$800*, monitor not included.

But wait, that's not all. The unit also includes several CD-ROM discs: *Microsoft Bookshelf* (dictionary, almanac, *Bartlett's Familiar Quotations, Chicago Manual of Style, Roget's II Electronic Thesaurus*, a 130,000 record *Business Information Sources* address book, *Houghton-Mifflin Spelling Verifier and Corrector, Houghton-Mifflin Usage Alert* (grammar verifier), ZIP code index, and a set of standard business forms and letters), *The New Grollier Electronic Encyclopedia*, and a combination disc containing *PC Globe 3.0* (a graphic atlas with associated information database), *Hot Line Two* (a dialer and phone number database), a sample-size version of the *CD Guide Optical Edition* (a commercial database of audio compact discs), and 30 games. One audio sampler disc is also included.

Software supplied on the installation disk includes a menu-based selector (you can exit to the MS-DOS prompt if you like, but you never have to see it otherwise), two self-study tutorials (one on computers, the other on the *HeadStart* system itself), a very basic integrated software package (with word processor, spreadsheet, and database), disk utilities (file/volume utilities, backup, and optimizer), several "pop-up" desk accessories (in MS-DOS lingo these are called "terminate and stay resident" programs, or "TSRs"). And, as they say, much much more.

Assuming you can put up with MS-DOS, this CPU costs only about $100 more than an average (bare) CD-ROM drive. All you need to add to use the system is a VGA monitor (monochrome will run you about $150; color about $350 and up) and, if you like, a printer. The unit justifies the price even if you're only going to use it as an electronic reference source and never intend to use it as a general-purpose computer. If you're interested, you may have to hunt around for this

system; it was marked down from about $1500, and supplies seem to be going fast in our area.

This unit points out just how much lower in cost "main-stream" systems are going to be than Apple tends to recognize or represent. We've maintained in the past (and still believe) that comparing Apple's prices to "clone" PC prices is unfair to Apple. However, the components in this PC are at least "second tier" brand names: the video card is an *ATI VGA Wonder* for example, a respected name in the PC market. Vendex itself is owned by Philips, as in "North American Philips" and "co-inventors of compact disc technology". This is not some anonymous startup clone maker; this is a major consumer electronics firm that has taken technology and packaged it in a form attractive to the general consumer rather than a compartmentalized "target market". And you may also have heard of the company that makes the CD-ROM data/audio interface–Sony Corporation.

The Vendex points out how Apple strangles itself with "target marketing". We found out the CD-ROM reference discs were in the standard High Sierra format. So we chucked them into our AppleCD SC drive on a IIgs with the High Sierra FST installed and, sure enough, the files popped right up on the desktop (our Mac couldn't catalog the *Microsoft Bookshelf disc*, but the IIgs said the file system was fine). Here we have utilities of definite interest to IIgs owners, and Apple's feeble-minded marketing hasn't been able to spawn a IIgs version of the applications to access the data. A 10 MHz 8088 is no threat to a IIgs (trust us; we've used them side by side), but the difference is that Apple wants your Apple II running K-8 software, while Philips is prepared to give you *every business, education, and home productivity resource that their CPU will run,* and even put some of it in the box to use from the time you first get the system home. Which company would **you** rather buy from?

At one end (Mac marketing), Apple is trying to present itself as a competitive company. In terms of marketing, it isn't; even as Apple projects its message that Macs are competitively priced, the consumer's everyday experience tells him that MS-DOS systems are more popular. And entry level systems are cheaper, especially if color is an issue. They are expandable (try to add a color display to a Mac Classic). At the other end (Apple II marketing), Apple has been dissuading new customers and frustrating developers seeking market share.

The problem with living in your own world is that you can be trapped there. Expect to see the successors to the Philips machine (80286 and 80386SX versions, possibly with different combinations of the supplied software) in consumer electronics stores near you with a Magnavox, rather than a Vendex, logo. One salesman told us that Philips wanted to make the machines more visible and that putting a name more recognizable than Vendex on them was an immediate part of the plan.

Both Tom Vanderpool and I have these machines at home now; mine sits right across from my IIgs. The IIgs System Software beats MS-DOS 3.3 like a drum; copying or moving files on the *LX-CD* is like pulling teeth, and the performance is not what you'd expect from a turbo clone (I'm realistic about this, and plan to replace the *LX-CD* motherboard with a 25 MHz 80386). The applications (other than those supplied on CD-ROM) are pretty unexceptional, but they are essentially free. With *CrossWorks*, I have more data compatibility with the *LX-CD* than Apple has ever deigned to offer me with the Mac, and such transfers work two ways instead of always going irreversibly from Apple II to Mac. I can walk into any store and be inundated with rich alternatives for new software. I'd rather have Apple II software (and I buy Apple II versions where I can; MS-DOS versions of some applications and games seem to have a knack for being bland), but Apple has made that choice for me. I hope they and their stockholders enjoy shunting revenue to other companies.

Apple should recognize that these systems will probably be widely available soon. Shoppers are going to be stunned by the amount of software available with the system as well as the amount of aftermarket software and hardware and many Apple II users like myself will be more than happy to reward these consumer-oriented companies especially if it keeps money out of Apple's MacPockets. So what's to be said about Apple's marketing thrust?

Dumb. Very dumb.—DJD

Miscellanea

Okay, we've delivered the eulogy and the sermon. Now let's go to the dinner and get on with life in the Apple II world. Goods things are happening, too!

Apple has released IIgs System Software 5.0.3. Revisions include a much (make that *much*) faster ImageWriter driver, a real ImageWriter LQ driver, and the usual bug fixes and feature enhancements.

One very neat enhancement is in the Standard File dialog that Desktop applications use to select files; at the volume level, instead of using the Tab key or "Disk" button to step to each disk in agonizing sequence, there is now a "Volumes" button that brings up a list of all disk volumes on line. You then open the volume of interest and proceed to locate your file. For those of us who have "slow" volumes (notably CD-ROM or AppleShare server volumes where many files may exist in the root directory) or many disk volumes on line at once this selection process is much more convenient than the old way.

A pesky bug in the Resource Manager has also been fixed so that reasonably safe resource editing is now possible.

If your program checks the ProDOS 8 v1.9 global page for the version number, the version indicated is v1.8. Since there are no changes in the ProDOS v1.9 MLI, this shouldn't cause problems unless you want to know the specific version in memory for some other reason. It's just another way Apple's numbering systems leave us perplexed.

Apple II software sales have risen 10 per cent this year according to the Software Publisher's Association: this despite no visible positive marketing effort by Apple for that CPU line and dwindling Apple II (and Mac, incidentally) sections on local store's software shelves. We assume that most Apple II products must be selling through direct mail.

Zip Technology is shipping their IIgs accelerator products. All versions are supplied with processors running at 8 MHz. The Model 1500 *ZipChip GS* ($250) replaces the processor on the motherboard and incorporates an 8K cache. The Model 1525 *ZipChipGS Plus* ($300) contains 16K cache memory and adds DMA compatibility. The slot-based Model 1600 *ZipGSX* card ($350) has the same features as the Model 1525 but is user upgradeable to faster processors and more cache memory for more acceleration. Contact Zip Chip, Inc., 5601 West Slauson Ave., Suite #190, Culver, Calif. 213-337-1313, FAX 213-337-9337, to order or for more information. We hope to be getting a unit to evaluate in the near future.

ASIC Technologies' Tony Fadell, designer of ASIC's fast 65816-workalike chip, reports via the comp.sys.apple2 network that prototypes have achieved 17 MHz and that production samples made with new 1 micron processes (the "1 micron" refers to how small the circuit elements on the chip can be fabricated) may be able to achieve over 25 MHz.

Vitesse, Inc., has been busy. Besides enhancing their *Quickie* software (Tom Vanderpool has tried a similar scanner with the *Quickie* and with MS-DOS software and says the *Quickie* seems to do a better job), they've announced a suite of IIgs printer drivers and a new disk repair utility.

In addition to the *Quickie* software enhancements to support most 100 to 400 dots per inch (DPI) scanners with the II+, IIe, IIgs, and Laser 128, the update makes these scanners compatible with West-Codes *InWords* optical character recognition software. Vitesse will offer this "add your own scanner" package for $129 (for the controller card, two software disks, and user guide).

Harmonie ($49.95) adds support for several printers and a couple of parallel interfaces to the IIgs System Software. Supported printers include the Hewlett-Packard *DeskJet*, *LaserJet IIP*, *LaserJet III*, and *PaintJet*, the Apple ImageWriter, and the Epson *LQ* series (and compatibles). *Harmonie* also includes its own serial port and parallel card drivers for use with the printer drivers.

Salvation Deliverance ($49.95) is a GS/OS utility intended to validate and repair disk volumes. It will check the file structures and attempt to identify and rectify problems, and locate and mark bad

disk blocks.

Need to work with files inside of GS/OS applications? Seven Hills Software's *Disk Access* ($49.95) is a New Desk Accessory that installs on your boot volume and allows you to do disk and file maintenance without having to exit to Finder. As a matter of fact, if you decide you can do without Finder, a very small program launcher (whimsically named *Out To Launch*) is also supplied. The combination gives you the file launcher (minus icon support) and file utility functions of Finder, but with a faster startup time.

When opened, *Disk Access*'s window explodes to present an array of function buttons above an information window (usually the file list for the current working directory). The array of active buttons changes depending on your location on the hard disk and your selection of files, but basically all the file functions of Finder are available, plus a few extra like Find File (locate a file by name) and Show File (display the contents of a file).

Seven Hills is releasing new or upgraded versions of several products, including *Font Factory* (a IIgs font editor with font sets) and *GraphicWriter III* (a feature-laden desktop publishing program). We hope to look these over in future issues.

Micol Systems is working on version 4.0 of *Micol Advanced BASIC* for the IIgs. New features will include the ability to call all GS/OS functions, universal availability of hex numbers, support of 4-byte integers, use of commas in number formatting (such as "X% = 186,000"), editor enhancements, and (as they say) more.

Hardware maker ThirdWare (the *FingerPrint* folks) has moved to 3300 Corporate Avenue #116, Fort Lauderdale, Fla. 33331, 305-389-9009, FAX 305-389-9066.

Claris has announced an *AppleWorks GS* template contest for teachers. Entries must be postmarked no later than January 10, 1991, and will be judged by representatives of Claris, *The Apple-Works Educator*, and *TI & IE*. Call 1-800-747-7483 for entry forms and contest instructions.

Claris also announced a second edition of *The AppleWorks Resource Guide for Teachers and Parents*. It should be available through Claris and selected education dealers as you read this.

***InCider* Magazine is planning to supplement its current coverage of the Apple II with coverage of the new Macs.** Please note the word "supplement" is not the word "replace".

Meanwhile, *Nibble* claims to be the last Apple II exclusive magazine. Okay, if we don't count ourselves and *GS+* as "magazines" per se...

Our plans here at *A2-Central* are to continue helping and supporting Apple II users on into the next millennium. At that time we'll reevaluate the situation. This month we decided to show our commitment by purchasing *8/16* magazine from Ross Lambert's Ariel Publishing Co of Pateros, Wash. Lambert started *8/16* in March of this year to provide a monthly forum for 8- and 16-bit Apple II programmers and developers, both hobbiest and professional types.

Lambert published *8/16* in both paper and disk versions, which were available separately. Production costs have forced us to discontinue the paper version of *8/16*. The disk version will henceforth be known as ***8/16-Central*.** Subscribers to the paper version will get disks instead, using a conversion formula that's fair to everyone.

8/16-Central will be edited by Jay Jennings. Jennings was a contributing editor to *8/16* since its inception and was an *A2-Central* staff member even before that. See this month's catalog for subscription details.

An *A2-Central* footnote. Up till now, *A2-Central* has been organized as a sole proprietorship owned by Tom Weishaar and his wife, Kathy O'Connell. At our current growth rate, we should have gross sales in 1991 in excess of $1 million. Consequently, Tom and Kathy have decided to change the company's structure to a corporation. Ownership won't change, as Tom and Kathy will still own all the stock, just the legal underpinnings.

Our Apple II-related activities will continue under the *A2-Central* banner, but the official name of the corporation, which you may encounter from time to time, will be Resource Central, Inc. We see ourselves as a publishing company and we intend to continue expanding our family of publications. We are studying several different markets that we might enter, some of them computer-related and some not.

To beef up our Apple II customer lists, we've decided to take the advice we've been giving Apple and do some big-budget marketing ourselves. We've produced a red and yellow, 24-page version of our monthly catalog (this one describes all the products in detail) that will be mailed to our subscribers in the next few weeks. And also to a lot of people we'd like to have as subscribers.

Now that this monthly newsletter, *A2-Central*, has a whole car full of siblings (*Stack-Central*, *TimeOut-Central*, and *8/16-Central*) riding with it, I have three less ways that I have to try to split *A2-Central* itself; in the past, it has been difficult to determine the direction that *A2-Central* the newsletter should go. The direction I plan to take now is in locating and sharing details about new products for the Apple II. We'll continue to cover the major details of all Apple II activitites, however, so keep those cards and letters coming–Uncle DOS insists he'll continue to take on all comers.—DJD

Ask
(or tell)
Uncle
DOS

For those of you having trouble getting *AppleWorks GS*'s Page Layout module to size your super high-res graphics correctly when preparing to print in "Condensed" mode, disregard the directions in the reply to "*AppleWorks GS* draft printing" (*A2-Central*, p. 6.64). While importing the graphic into a page set up to print in condensed mode, use the Option key while **placing** (not **resizing**) the imported image on your page. Once the image is placed and visible, it will retain its dimensions relative to the page size until you drag a corner of the image to re-size it, or until you switch your Page Settings information. So if you do decide to switch to "Normal" or "Intermediate" print sizing **after** importing the image, you'll need to re-size the graphic manually to fit the image to the new page size. Or, if using "Normal", re-import the graphic without using the Option key while placing the image.

And someone put an "Easter Egg" in the *AppleWorks GS* "About" box. Make sure you have Cairo.18 installed in your "Fonts" folder on your boot disk. Launch *AppleWorks GS*, open a new word processor document, then pull down the "apple" menu and select "About *AppleWorks GS*...". When the "About" box appears, type the word "moof" and hit return to see the Apple Developer Support mythical mascot, the dogcow.

We mentioned jb Technologies last month in connection with hard disk repairs. We neglected their address, however; it's 5105 Maureen Lane, Moorpark, Calif. 93021, 805-529-0908, FAX 805-529-7712.

"Can you help us find...?" (p. 6.22) asked about creating an AppleWorks screen using larger characters for visually impaired users. We still haven't heard of a video driver to allow AppleWorks to use a large-scale font, but RC Systems had a different slant on the solution: among the adaptive technology devices they sell is *The AppleWorks Companion* ($49.95) that modifies the AppleWorks startup disk to add speech synthesizer support and new AppleWorks commands (string search on screen contents, editing command enhancements, ten user-definable macros, narration of documents for proofing). A utility to convert AppleWorks word processor files to ASCII files is also included.

The enhancements use no desktop space, and are compatible with Beagle Bros' *TimeOut* and most desktop expanders. AppleWorks 2.0 or later is required, as well as a *Slotbuster II* with speech synthesizer option or a *DoubleTalk* speech synthesizer.—DJD

Mac LC and IIe emulation

I have had the opportunity to read your publication several times in the past. Finally, I decided to cough up the bucks for my own subscription. While I was at it, I ordered the complete set of back issues. I think I made a good

investment. I am now enjoying current issues as they come in and filling in with five years worth of interesting information from the past. My special area of interest is Apple II networks. On this topic, I have questions and comments.

My main question is: will the Apple IIe card for the recently introduced Macintosh LC allow access to Apple II software on an Apple5hare file server? I think this would be important. Also, what will the price be for this card? I have heard different numbers.

My main comment is: Aristotle (Apple's ProDOS 8 based AppleShare menuing system) is the pits! How could the self-professed gods of user interface at Apple ever have released such a product? I have been amazed by it's total lack of merit ever since first using it in 1987, prior to it's wide release. However, to be honest, I have a self-serving motive for stating this opinion. The company that I work with has recently introduced a menu system that is AppleShare aware.

The product, *EasyShare IIx*, has many beneficial features, but one may interest you more than the others. It supports DOS 3.3 over an AppleShare network! I don't mean a few selected products, I mean most products from most publishers. For DOS 3.3 products, the menu system generally requires no product modification, supports simultaneous network and floppy disk access, supports the volume number parameter, and usually returns to the menu with just a keypress.

Brian Walker
LPC, LANPRO Corporation
2850 Metro Drive, Suite 413
Minneapolis, Minn. 55425
800-926-EASY
612-851-3250

We saw the Apple II emulator briefly in a Mac LC at our local Apple roll-out of the new Macs. What we noticed is that it definitely looked like a coprocessor, not seamlessly integrated into the LC. As a "bridge" machine, the IIgs beats the Mac LC hollow, unless you're bound and determined to "go Mac". Since the IIe card for the Mac LC isn't anticipated until next March, and the LC itself doesn't seem to be in local stores, detailed reports will have to wait.

*An **Apple Direct** article says AppleShare isn't currently supported on the emulator, but will be by its release date. The product information sheet lists the final retail price at $199, but prices have been known to change (the article in **Apple Direct** had the price at $249). Since the primary market will likely be to schools, Apple probably will price the card as a loss-leader to make the Mac LC bundle more attractive, so we expect the $199 figure to hold.*

*Since Apple seems determined to force our hand to supporting coprocessors, we're planning to get a Diamond **TrackStar** (Apple IIe emulator for MS-DOS machines) and look it over, too, just to keep your options open. We have no immediate plans to add coverage for either of the host machines, though (if we do, it will be in new and distinct publications).*

We've been turning our DOS 3.3 diskettes into coasters, but there is a lot of educational software out there that is DOS 3.3, so there may be a mad rush for your product for that reason.

We've heard several educational software companies are starting to re-write their software to work under ProDOS and with network

compatibility. Good network utilities will be in demand as software becomes network aware; as a program selector, Aristotle sent us back to the shelf looking for something with a useable interface.

We're still trying to figure out why Apple used number keys in some of the AppleShare utilities with MouseText windowing interfaces, rather than open-apple-O (for "Open") and so on.—DJD

Ingenuity drive repairs

I own an Ingenuity *OverDrive*. Any known source of parts?

Andrew Klimas
Randallstown, Md.

Bill Heineman says he can handle most repairs on Ingenuity drives at a reasonable fee; you can reach him at Custom Software, Inc., 7734 S. Broadway Road, Whittier, Calif. 90606, 213-695-3966—DJD

Slot 3 Clock

I would like to inform your readers who might have a *Slot 3 Clock* from Southern California Research Group (P. O. Box 593, Moorpark, Calif. 93020, 805-529-2082) that I have updated the ProDOS installation software for it. The update will install the clock driver into all official versions of ProDOS 8 (from v1.0 to v1.9) and is easily modifiable for future versions of ProDOS by the user. I have permission from Phil Wershba of SCRG to distribute this software to all those who wish to purchase it from me. Anyone interested can call me Monday through Friday from 9 AM to 5 PM Pacific Standard Time at 415-489-7024. I will determine a price for the update based on the number of responses I get. More responses will lower the price, as I just want to recoup for my time spent on the project. Any material and handling costs will be figured in also. Interested readers should call to discuss what they would be willing to shell out for the update and to give me their addresses so that I can inform them of my final decision.

For use in the Apple II, II+, or IIe I highly recommend the *Slot 3 Clock* card over the *No Slot Clock* chip. This card does not stick up in the way of peripheral cards like the clock chip. It is designed to plug into slot 3 in the IIe without interfering with the operation of any extended 80-column text/RAM card in the auxiliary slot. It supports Applesoft, DOS 3.3, ProDOS, AppleWorks, and any software accessing the date/time through the ProDOS Machine Language Interface. Its software installs directly into ProDOS so that a pre-boot is not necessary. It has a long-lasting replaceable lithium battery. (Mine is still ticking after four or five years now). The timing is adjustable if necessary. It enables time and date stamping of DOS 3.3 files when saving them to disk the first time. And it enables time and date stamping at all times in ProDOS.

James P. Davis
Hayward, Calif.

More DMA SCSI timings

As a fellow DMA SCSI card owner, I must reply to Udo Huth's letter ("Don't hang up", June 1990). I have a Jasmine 40 megabyte drive attached to the DMA card in slot 7 and I originally thought the system was hanging if the drive was not switched on. In practice, it "times out" after 20-25 seconds and continues from the 3.5 disk.

I have some comparative times for the old and new cards. My IIgs system has 3.25 megabytes of memory, a TransWarp GS, and my Jasmine's seek time is 28 milliseconds. The interleave is 1:1, which is better than 2:1 and the (unknown) original value, but I'm not sure if it's the best! Both times use the new drivers (which are slightly faster for the old card as well). A fascinating thing is that the times often vary up and down by several seconds under otherwise fixed conditions. The times listed are average timings:

	Rev. C	DMA
Boot to Finder	44.0	36.0
- 550K of DA's, etc.		
AppleWorks GS	24.5	17.5
- WP, SS, Comm		
ProSel volume stats		
- linear read	9.5	2.2
- random read	28.5	31.5
- OS overhead	4.5	11.1
Digitized sound files		
- 200+ blocks	3.0	1.0
- 600+ blocks	6.0	1.0
- 670+ blocks	6.5	1.5

The sound files were what convinced me to buy the card. I can play through a directory of sounds in (almost) real time— very impressive. The simple fact is that the card speeds up the transfer rate. If the drive spends its time seeking, as during a boot or loading a segmented file like *AppleWorks GS*, then the speed-up is minor. Give it a large file to load and you are talking "greased lightening". I am hoping Claris will provide an installation option to allow "true" preloading of *AppleWorks GS* so that people with enough memory and a DMA card will be up and running (all modules) in around 12 seconds!

Peter Watson
Box Hill North, Vic.

*The Apple High-Speed SCSI card does not maintain an on-card cache, so it does have a significant disadvantage when loading smaller files versus a card such as the **RamFast**, which retains some of the disk image in it's cache RAM. Using a drive with an internal track cache will offset part of that advantage, but not all. We really notice the **RamFast**'s speed when loading a program that uses several small files, such as AppleWorks 3.0 plus a large number of **TimeOut** files. The IIgs boot process also loads a large number of distinct files, and the **RamFast**'s speed is noticable there, too.*

*The Apple High-Speed SCSI Card takes advantage of a feature of the SCSI driver and GS/OS to be able to load large files very quickly; there is a command (documented in the **Apple High-Speed SCSI Card Technical Reference** from APDA) that allows GS/OS to pass the card a buffer location and request that the card load a number of sequential blocks from a file to the buffer, bypassing much of the operating system overhead. This is how the spectacular **Star Wars** demo is performed. However, this feature is only available with the combination of the High-Speed SCSI Card and GS/OS, so a IIe user will not see an equivalent benefit for large files. For those users, the **RamFast** provides the ultimate throughput in all circumstances we currently know of.—DJD*

VT alternative

Regarding "Terminal Emulation" (*A2-Central*, November 1990, p. 6.76): John F. Snow's *Snowterm* is a program that will do most of what the user wants by creating his own character set. And it's fast and IIgs specific as well. The only drawback is it only does text transfers (no protocol transfers).

Hugh Grant Delaney
Pinawa, Man.

SnowTerm is a shareware program that operates using the IIgs's Super High-Resolution display. It supports VT-52 and VT-100 emulations (minus the 132-column modes), and uses its own customized screen font for displaying text during communications.

Since *SnowTerm* uses a graphics font, support for international character sets is possible. The shareware release uses the USA character set for the VT-100 emulation, but a UK set is also supplied to users who register by paying the shareware fee. These fonts are not standard IIgs fonts, but it may be possible to create other character sets for the program. John points out that *SnowTerm* won''t switch between the US and UK sets such as the VT-100 does.

SnowTerm is $20 (add $5 for shipping outside of North America) from Snow Software, P.O. Box 58621, Salt Lake City, Utah 84158.—DJD

The *New Print Shop* revisited

I just received the November, 1990 issue of *A2-Central* (on disk) and I generally agree with Mr. Barr's "review" of Brøderbund's *New Print Shop*. I am especially pleased that I can now run (this version of) *Print Shop* from my hard drive and I made sure to comment on that fact when I returned the owner registration card to Brøderbund—I encourage everyone to do the same.

One other quirk of the *New Print Shop* surfaces if you use Glen Bredon's ProSel-8 as a program selector on your hard drive. If the ProSel-8 file RAM.DRV.SYS is run before you launch the *New Print Shop*, you will see the following:

The New Print Shop

/RAM Disk Required
Press any key to reboot

The solution is to warm boot the hard drive (seeing that RAM.DRV.SYS does not "run") and relaunch the *New Print Shop*, which then proceeds to run beautifully!

Skip Hayes
Billings, Mont.

Although Harry Barr mentioned a problem with using the *New Print Shop* with the *Zip Chip* on his system, many readers have notified us that they haven't had such problems. So your mileage may vary.—DJD

Revised *No Slot Clock* utility

I have used SMT's *No Slot Clock* in my Apple IIe for almost a year and have been totally happy patching ProDOS v1.7 from the *No Slot Clock Utility Disk*. The patches to the utility offered by Shirk and Broder for ProDOS v. 1.8, and 1.9 did not work on my disk and resulted in ProDOS coming back with a "Relocation Error". I called SMT (at their new number) and asked if

they had developed a patch for the latest versions of ProDOS. The SMT Tech Rep was courteous, knowledgeable about Apple computers (!), and very helpful. They have written an entirely new utility disk that (1) installs a *No Slot Clock* driver as the first ".SYSTEM" file on your disks and (2) contains the latest versions of both ProDOS and BASIC.System. The beauty of NS.CLOCK.SYSTEM is ProDOS is no longer modified and future upgrades will not result in the "Relocation Error" when using the *No Slot Clock*. The installation of the driver went smoothly, ending up as the first ".SYSTEM" file on each disk, thus assuring the *No Slot Clock* was available to ProDOS. Additionally, according to the READ.ME file, if the *No Slot Clock* is not installed, the driver does not load and the next ".SYSTEM" file is executed. This is a new utility, with a date of 16 Oct 90, and I doubt that its existence is well known since SMT has moved and they are not set up to deal directly with the public (they cannot take credit card orders and prefer checks). My order was filled in three days.

The price of the utility disk (including shipping) is $7.50. Specify that you want the new ProDOS *No Slot Clock Utility Disk*. You can contact SMT at:

SMT Inc.
310 Via Vera Cruz, Suite 112
San Marcos, Calif. 92069
619-591-4002

Richard Cheney
San Pedro, Calif.

Okay, okay, I plead the absence of any experience with the **No Slot Clock**. *Otherwise I probably would have noticed that the only change to the ProDOS 8 v1.9 patch we published last month and the v1.8 that we published in February is the REM statement.*

Apple prefers that utilities that add drivers to ProDOS work in the manner you've described for the **No Slot Clock** *patches; that is, the PRODOS file should be allowed to load and then a program should be used to add the driver to the ProDOS image in memory, rather than having the patches made directly to the PRODOS file itself. This insures that the format of the original PRODOS file remains known and intact.*

With SMT located, we'll defer the **No Slot Clock** *patch updates to them.—DJD*

CloseView and friends

InfoWorld (December 11, 1989, p. 53) says that "sticky keys...and CloseView... are built into every Mac and Apple IIgs sold". "CloseView" is supposed to assist low vision users. Is it in the "regular" IIgs, built into System 5.0.2, or is it a hardware modification only available with the ROM 03 IIgs? Can CloseView be invoked through software?

Also System Disk 5.0.2 has a CD controller NDA built in. Will this work with a non-Apple CD player? Does it need a controller card to do so such as a SCSI card or disk controller? Will it only play music or will it read the High Sierra standard data CD-ROMs. (Or do these CD's run only with IBM software?)

I've asked my local Apple dealer these questions, and gotten a blank stare in response.

Larry Naukum
Fairport, N.Y.

Apple is working on several "adaptive" additions to the IIgs system software, though it

looks like **InfoWorld** *jumped the gun a bit on CloseView. The first we've seen of it is on the new developer CR-ROM from Apple, "Night of the Living Disc".*

When using IIgs Desktop-based applications, CloseView allows you to employ selectable magnification to enlarge a portion of the screen to fill the entire display. This way, someone who has trouble working with the size of the objects employed in Apple's graphic interface can expand a problem section of the display in order to see what's going on. While in the expanded display, if you try to move "off the edge" of the enlarged screen, CloseView will scroll to the next portion of the actual Desktop.

Another enhancement currently shipping in a test version through APDA is the Video Keyboard NDA, which serves as an alternative character input device for someone unable to use a normal keyboard. Video Keyboard brings up a miniature version of the IIgs keyboard on screen for access via a mouse (or mouse-replacement pointing device). By moving the mouse cursor to a key and clicking, the equivalent keystroke is entered as if it had been typed from the keyboard.

For someone who can use a keyboard but has trouble pressing multiple keys at once, "sticky keys" allows simulating the multiple key-down keypresses by substituting a sequence of equivalent keystrokes. Instead of holding down Option-Shift-3 simultaneously to type Option-#, for example, with "sticky keys" you press Option, then Shift, then 3, sequentially. This feature is part of the ROM 03 IIgs; you can enable it by striking the Shift key five times in succession without moving the mouse. To disable it, press the shift key five times in succession again, or press two "modifier" keys (option, command, shift, control) simultaneously.

Just as Video Keyboard lets you use the mouse cursor to operate the keyboard, the ROM 03 IIgs has a "keyboard mouse" enabled by pressing Command-Shift-Clear. The numeric keypad can then be used to move the mouse cursor: "8" moves the mouse up, "1" moves it down and to the left, and so on. The increment of movement can be changed by pressing the keypad "" followed by 1-9 (or "0" for increments of 10). You click or press the mouse with the "5" key (the duration determines whether it's a click or a press); to drag, you press "0" to start the drag, move the pointer, then press "5" to end the drag. There are more equivalents, but if you have a ROM 03 IIgs they're all in the manual (pages 15-19).*

After the ROM 03 IIgs, the IIgs System Software gurus at Apple realized that they could add most, if not all, of the same functionality to the ROM 01 machine via software. Thus, part of the test suite sent out in the Universal Access disk package is an Easy Access.Init initialization program that provides sticky keys and the keyboard mouse for both the ROM 01 and ROM 03 IIgs.

The Mac versions of CloseView and Easy Access ship with the Macintosh System Software. The IIgs versions weren't present in our licensed version of 5.0.3; we don't know yet how they will be distributed.

The CD-ROM drivers and CD Remote NDA that Apple supplies with the IIgs System

Software are intended for use with Apple's SCSI interface cards and a CD-ROM drive; not an audio CD player (if you're interested in controlling an audio-only CD player, see "Picture this", in the July 1990 issue). Other peripheral cards which won't work with Apple's SCSI drivers will have to supply their own CD-ROM driver software.

Until recently, the only CD-ROM player that we've heard works is Apple's AppleCD SC unit; since Apple has dropped the price from the original $1199 to a more competitive $899, this isn't quite the scare it used to be. But **A2-Central** freelance Font Librarian Mark Collins recently discovered that a less expensive **Peripheral Land** (47421 Payside Parkway, Fremont, Calif. 94538, 415-657-2211) **CD-ROM** drive also works.

CD-ROMs can hold data in several formats: computer data formats, audio compact disk sound, and so on. In terms of computer data, the Apple IIe can read ProDOS partitions (if present) within the normal constraints of ProDOS (that is, only two partitions per slot are available at any one time, and a maximum total of four partitions split between slots 5 and 2 if the SCSI interface is installed in slot 5 and there is not another disk interface occupying slot 2). The standard CD-ROM High Sierra format can be accessed by application software running on the IIe; that is, the program that accesses the CD-ROM must include driver code to access the High Sierra format.

On the IIgs, GS/OS can access either ProDOS or High Sierra partitions of a CD-ROM via

its File System Translator (FST) capabilities (see "Apple vs. ... Magnavox" this issue). FSTs to allow accessing Macintosh and MS-DOS partitions are possible, but such software has not been announced by Apple as yet. There is a close approximation to a Mac FST, though, if you have the equipment: attach the CD-ROM to an AppleShare server (Mac, of course), install the CD-ROM as a network volume, and then access it from a IIgs workstation on the network. The Mac partition will be available to the server, and the AppleShare FST in the IIgs will allow you to communicate with the server. (You could also access these from the IIe using the ProDOS 8 AppleShare Filing Interface; see "Ask (or Tell) Uncle DOS", August 1990), pp. 6.52-54

The AppleCD SC includes audio outputs for CD audio, and the CD Remote allows you to use the CD-ROM as a very expensive audio CD Player from within a IIgs desktop application; it pops up a graphic representation of a remote control (see "The AppleCD SC drive", February 1990, pp. 6.3-5). When you exit GS/OS to ProDOS 8, the CD audio shuts off, however; maybe it's better not to count on the CD-ROM for your musical entertainment.

The Apple CD SC also includes a 5.25 disk with a IIe standalone application that allows you to control the CD-ROM drive as an audio player; you can use this to start an audio CD playing when you aren't using the drive for data.—DJD

No business with Apple

In the early- to mid-eighties, when the business world was racked with indecision as to which operating system to adopt (ProDOS, MS-DOS, etc.), our firm (which provides job cost analysis and accounting services for builders and contractors) opted for Apple (IIe) equipment. The computers were well-built and easy to use; enjoyed a fairly broad array of business and productivity software; and could be programmed quickly and easily with the built-in Applesoft BASIC. Our first machine was an unenhanced IIe with a DuoDisk, 10 megabyte Rodime hard disk, 15-inch ImageWriter, and a stack of manuals. Software was *BPI Accounting* (general accounting, accounts payable, accounts receivable, inventory control, and PR), *AppleWorks* v1.0, and one or two utility programs by Apple Computer.

Today, eight years and three more IIe's later, we have our machines pumped up with Ohio Kache and *RamFast SCSI* drive controllers, over 100 megabytes of high performance SCSI mass storage, 8 MHz *Zip Chips*, a 10 MHz *Rocket Chip*, and even a *TransWarp II*. Our software, too, has been upgraded whenever possible; including some sophisticated spreadsheets we've designed (using AppleWorks 3.0, powerfully enhanced by Beagle Bros), used in job cost analysis and financial performance.

Sadly, we now face a changeover to cheaper, faster, and more supportable 386 clones and face as well the time-consuming, expensive, and frustrating transition to the world of MS-DOS, OS/2, and *Windows 3.0*.

The reasons must be obvious to you, as you are closer to the industry than we. We have maxed out our equipment. We have maxed out our software. Long ago, Apple Computer relegated the IIe to K-12 and the teenager's bedroom, and then insulted the injured in an attempt to salve the Apple II crowd by creating the industry's slowest and least useful new com-

puter, the IIgs. The bulk of business software developers, witnessing the sad demise of the "business Apple" generally, and the Apple II and III market specifically, gave a quick shrug and turned their attentions to the business market (read: IBM compatible).

Apple Computer meanwhile, in keeping with its incredibly short-sighted and arrogant views that the pricey Macintosh was the only "true" graphics interface computer for business, is now throwing cheap Macs at the market in the vain hope that prospective buyers will not opt for the spectacular new windowing operating system from Microsoft. (Too late, Apple, they already have! See *Business Week's* cover story regarding Apple of a few weeks ago (October 15, 1990 issue).]

Now, only outfits like Zip Technology (aided and abetted by guys like Andy Vogan of C. V. Technologies, and possibly the folks at Cirtech and Applied Engineering) can keep small businessmen like me in the Apple II business. And don't talk to me about the IIgs. Our next $12000 worth of computer systems will not bear the Apple trademark. But a fully DMA compatible accelerator card or chip with a 10 MHz or 12 MHz processor would enable me and thousands like me to stay with our systems a year or two longer. No, the cost of going to a bunch of 386 machines is not in the hardware, it's in the software, the training, and the transition time. That cost can only be measured in the thousands of dollars. I'll pay quite a lot to ward off that expense and trouble, and so would thousands of others.

Thanks to Zip, C. V. Technologies, Cirtech, Applied Engineering, and others (and **no thanks** to Apple Computer) for keeping us in the Apple II business up to now. But Zip...please offer us just one more product that will keep us here just a while longer. We'll be watching and waiting; but please, not too long.

Tom Thomas
Thomas Associates
Topeka, Ks.

We'll continue to defend the IIgs; I'll only stop here long enough to say that the IIgs is not as "slow" as is rumored. But without seriously designed business software taking advantage of the enhanced features of the IIgs (you are better off running 8-bit software on 8 MHz IIe's in terms of speed), there's no way to illustrate it.

Current Apple II owners shouldn't feel that a dark cloud has suddenly settled over them; other than the significant contributions Apple's Apple II technical staff has offered in developer support and operating system and peripheral upgrades, if Apple Computer were to be blasted off the face of the earth tomorrow we doubt the average Apple II user would notice anything except a clearing of the air. Certainly the amount of pro-Macintosh and anti-Apple II advertising would shift dramatically in the Apple II user's favor. Apple hasn't shown the ability to lead or follow it's user base, maybe they'll now (finally) at least get out of the way. Or, if Apple's business performance doesn't improve, maybe the stockholders will force the necessary changes.—DJD