Shareware Solutions II

An Exciting Apple II Journey Into The Future

Volume 3, Issue 1 Spring, 1996

Heard It Through The Grapevine

Hard Drive Give Away

Everyone whose subscription was current at the end of February, 1996 was automatically entered into the Hard Drive Give Away Contest, and the winner of that contest is Keith Sagalow, a IIGS owner from Central Valley, New York. Keith is now the proud owner of a 120 Megabyte Focus Hard Drive.

From the time the contest was announced in the last issue until the time that Keith received his hard drive, several unexpected developments occurred. Tony Diaz of Alltech Electronics, the sponsor of the contest, informed me that he would be unable to donate the planned 80 Megabyte Focus Hard Drive, as Alltech was completely sold out of them; instead, Alltech donated a 120 Megabyte drive.

In the last issue, no mention was made of the method that Shareware Solutions II planned to use to choose the lucky winner. After that issue was completed, I contacted Auri Rahimzadeh to ask whether he might be able to convince his boss to choose the lucky winner. Auri's boss, as many of you know, is Steve Wozniak, the inventor of the Apple II computer. Auri was pleased to get Woz involved.

On the morning that Woz was going to choose the winner, I generated a text file from the AppleWorks based subscriber database and sent it to Woz, via Auri, and later received the following e-mail message: "The winner of the HD is Keith Sagalow. We threw all of the papers into the air, then we threw a dart at one. There were three names hit by the dart, but only one was legible, so Keith was the winner."

Thanks to Tony Diaz for donating the drive. Thanks to Auri for acting as an intermediary to Steve Wozniak. Thanks to Woz for choosing the winner. But most of all, thanks to all of you for supporting Shareware Solutions II.

Brutal Deluxe Visit

Olivier Zardini of Brutal Deluxe Software recently visited the Shareware Solutions II Worldwide Headquarters and we were able to spend five or six enjoyable and educational days together. Olivier arrived with his homebrew SCSI hard drive and from examining the contents of that drive, it certainly appears as if the Apple IIGS world has a lot to look forward to; two new Brutal Deluxe arcade games should be available before the end of the year

During his visit, arrangements were made to conduct a chat session over the GEnie online network, and some of the highlights of that three hour session included a long question and answer session about Convert 3200, with Olivier announcing that a free update is planned; that update will offer some support for the Second Sight card.

There was also quite a bit of discussion about Brutal Deluxe's System 6.0.2 update, and Olivier admitted that his programming partner suffered from a hard drive crash and that much of the work had been lost.

The freewheeling online chat session was attended by more than 30 people, and a good time seemed to be had by all.

Upon his return to France, Olivier started work on the next Brutal Deluxe release, a IIGS game that is inspired by a very popular game that is already available on other computer platforms. He expects that the game will be completed in the late summer of 1996, and it will be available as a Limited Edition from Shareware Solutions II for \$5, but only to those people who have purchased Convert 3200.

Olivier has been sending me a weekly update of the game, and it has been fascinating to watch his programming efforts evolve into a completed game. At this point, it is a work-in-progress that is lovely to behold but it is not yet playable. Given Brutal Deluxe's history of creating IIGS versions of other popular computer games, the next game should prove to be yet another smash hit. As Olivier recently told me, "The new arcade game will be our best program ever." Stay tuned for details.

Magic Eye Graphics

If you've been in a bookstore in

Shareware Solutions II

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Publisher/Writer: Joe Kohn Roving Reporter: Cynthia Field Contrib. Writer: Steve Disbrow Proofreader: Jane Kos

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A) The first 18 issues: \$55 for US/Canada; \$75 elsewhere.

B) The next 6 issues/Renewal: \$25 for US/Canada; \$40 elsewhere.

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E-mail Addresses:
CIS: 76702,565
GENIE: JOE.KOHN
INTERNET: joko@crl.com

the last few years, chances are that you've seen the "Magic Eye" series of books. Those books contain graphic images that at first glance look like a jumble of colors, but if you look at them in a certain way and for a certain length of time, they are magically transformed into three dimensional images that literally come to life and jump off the page.

Called random dot stereograms, thousands of images similar to "Magic Eye" graphics can be found on the Internet. Unfortunately, those images were created on computer systems with resolution greater than the IIGS can display on a single screen, and the 3-D effects are completely lost when those images are converted to the 320 x 200 graphic mode that the IIGS displays best.

Are Apple IIGS users therefore unable to enjoy random dot stereograms? Not anymore, thanks to Lee Golden, the Managing Editor of Softdisk G-S. Lee has granted Shareware Solutions II permission to distribute ThreeDer, a program that originally appeared on Issue 67 of Softdisk G-S. ThreeDer will convert any IIGS Super Hi Res graphic into a random dot stereogram, and display it on screen or let you print it out.

Effective immediately, Three-Der is available from Share-ware Solutions II for \$5. Despite its low cost, ThreeDer is not shareware or freeware; it remains copyrighted by Softdisk.

EGO Systems

The number of products available from EGO Systems just keeps growing and growing. They continue to sell ZipGS ac-

celerator cards, back issues of GS+ Magazine and several IIGS software titles that they publish, including Addressed For Success, AutoArk, and Balloon, but their product line now boasts many new additions.

EGO Systems was able to track down a former Apple II vendor who had unsold inventory, and was able to secure a limited number of copies of PublishIt v4, the premiere desktop publishing program for the IIe/IIc, and is now offering it for \$39.95. Also available in limited quantities is the PaceMark IIGS 4 Megabyte RAM card for \$109.

EGO continues to program new IIGS software, and is now offering several translators for Seven Hills Software's Graphic-Writer III desktop publishing program. The RTF Translator (\$24.95) allows GWIII to import "Rich Text Format" files into a page layout document with all formatting remaining intact, and their new AWGS Translator (\$14.95) allows AppleWorks GS word processing documents to be imported into GWIII with all font information, text, text colors, and paragraph justification and indentation remaining intact.

In addition to their own software, EGO now carries the entire catalog of TimeOut based AppleWorks enhancements from Office Productivity Software, including About Time (\$14.95), ShrinkIt Plus (\$29.95) and Statistics (\$79.95).

If you haven't yet seen EGO Systems brand new 20 page catalog, you owe it to yourself to contact them and request a free copy. Please contact EGO before ordering any products, as some of them are available only in lim-

ited quantities.

EGO Systems 7918 Cove Ridge Road Hixson, TN 37343-1808

800-622-3634 (orders only) 423-843-1775 (questions) 423-843-0661 (fax)

Basic Screen Blanker

Tom Zuchowski of the Eamon Adventurers Guild wrote a simple Applesoft Basic program that blanks his IIe's computer screen to prevent phosphor burn while his computer is not being used, and he'd like to share that program with you. He suggests that you type it in, save the program to disk, and then run it whenever you are going to be away from your computer.

In order to type the program in, you'll need to run Basic.System, which can be found on your System Disk or on many of your self starting ProDOS disks. Once you run Basic.System, you will be deposited at the Applesoft prompt (]). From that prompt, just type in the following short program, pressing your Return key after each line.

10 HGR 20 HOME 30 GET A\$: PRINT A\$ 40 TEXT 50 END

After you have typed it in, type the RUN command and decide whether you like this very basic and simple screen blanker. You can end the program by pressing any key, and you'll be back at the Applesoft Basic prompt.

If you're familiar with Applesoft's SAVE and PREFIX commands, just save the program to disk and then run it whenever

you are away from your computer for more than a few minutes. If you are unfamiliar with those commands, you may want to set up a self starting disk that automatically runs the program. In order to easily do that, format a ProDOS disk, copy ProDOS and Basic.System to that disk, and then startup that disk. Then, enter the above program and when finished, type SAVE STARTUP to save it to disk.

Low Cost Enhancements

Dr Steve Buggie continues to offer great deals to Apple II users; his most current hobbyist projects involve connecting IBM-style power supplies to Apple IIe or IIGS systems, and offering customized improvements to Disk II disk drives.

IBM-style power supplies generate the same voltages required by the Apple II, but they deliver 150-200 watts of power, more than twice the output of the standard 60 watt Apple II power supply. Problems associated with weak power can be reduced or eliminated by using an IBM-style power supply, and you can safely fill all of your slots or add extra disk drives without overloading the power source.

Dr Buggie includes cabling and connector plugs with the power supplies, and has them available in two sizes: 150 watts for \$27 or 200 watts for \$30. There is an additional \$5 required for shipping. Specify whether you plan to use the power supply on a IIe or IIGS, and please note that these power supplies are external, and will sit on the floor beneath your Apple IIe or IIGS.

As mentioned in the last issue,

Dr Buggie continues to tune up Disk II disk drives for \$5. But, he now offers to supercharge those drives by adding a front panel three position manual write protection toggle switch or by adding a front panel speed adjust knob. Each of these enhancements can be added by Dr Buggie for \$5, plus \$4.50 per drive for shipping and handling.

If you don't want to be bothered by boxing up your old Disk II drive, Dr Buggie will sell you one with both of the enhancements already installed for only \$24 plus \$4.50 shipping.

If you'd prefer to perform the modifications yourself, make sure you attend Dr Buggie's presentation at KansasFest.

Dr Steve Buggie UNM-Gallup 200 College Rd Gallup NM 87301

505-863-7504 (office) 505-863-2390 (home) buggie@unm.edu

On The Horizon

Dan Crutcher created Check-Works as a checking account program that works from within AppleWorks as a TimeOut module. He originally released CheckWorks as a shareware program for AppleWorks v3, and when Quality Computers released AppleWorks v4.0, they purchased the rights to Check-Works and re-released it as a commercial program available exclusively from Quality.

Unfortunately, by the time AppleWorks v5 was released, Quality had already started to scale back the scope of its Apple II software catalog, and they no longer seemed interested in of-

fering updated AppleWorks v5 compatible TimeOut-based programs. For that reason, Dan is working with Quality to have the copyrights for CheckWorks revert back to him, and he is also working with Shareware Solutions II to re-release all the various versions of CheckWorks. As planned, we will make three

different versions of Check-Works available in a single package, so that whether you use AppleWorks v3, 4.x or 5.x, you'll be able to write and print checks, maintain a checkbook register, show current balances, and reconcile accounts without ever having to leave Apple-Works.

It's expected that we'll have details in the next issue, but if you can't wait that long, look for an announcement online, or send a self addressed stamped envelope to Shareware Solutions II, and you'll receive notification when CheckWorks becomes available.

Lies, Lies, And More Lies

By Professor G. S. Gumby

Hello Again!

After far too long an absence, I am happy to be reporting on Apple II rumors once again. I am especially glad to finally be working with someone who knows the real meaning of journalism. Not only that, but Dr Field is a babe too. Oh, yeah, Joe Kohn is OK too I guess.

A Meaningful Relationship

If you've been wondering why nobody has come out with IIGS software for the QuickTake or QuickCam video devices, you're not alone. But that may change soon if the rumored IIGS QuickCam software comes to pass.

Yet Another KansasFest

In case you haven't heard yet, the committee who put together last year's successful Kansas-Fest is gearing up to do it again. This year's show will take place from July 17-21 (Wednesday through Sunday) at Avila College in Kansas City, Missouri. The cost will be a mere \$375 for the whole show, including all room and food fees. So, if you want to go, sign up now! If you know you want to go, and you've got an American Express, Visa or MasterCard, you can register

for the show by calling Kellers' Auto Electric (this year's KFest sponsor) at 908-775-0371. If you want more information on the show, send an e-mail to kfest.info\$@genie.com or write:

KFest '96 c/o Kellers' Auto Electric PO Box 391 Brielle, NJ 08730

Tangled Up In Hype

Just as the rest of the world begins to figure out that the World Wide Web is somewhat less thrilling than all the hype would have us believe, rumors are flying about the imminent release of three different web browsers for the IIGS. At this point, there's no word on when any of these will actually ship, but at least one of them should be ready no later than August.

Just You Wait

If you bought a Second Sight video card for your IIGS and you've been wondering where all the Second Sight-aware applications are...just wait. Sequential has said that they plan to support the card as fully as possible, but they are having some trouble moving forward with those plans since the card's soft-

ware designer left the company.

Is There Anybody Out There?

If this fine publication is the only Apple II literature that you know of, it might surprise you to find out that there are at least four other periodicals out there for you to latch onto. For example, II Alive still has four issues left to go before Quality Computers pulls the plug on it. Softdisk G-S (318-221-8718 for info) is still going strong and shows no sign of stopping. Juiced GS is a IIGS-specific newsletter that Joe Kohn spoke at length about in our last issue (direct your e-mail message to M.Jones145@genie.com for more information). And finally, there's even a NEW publication for you to check out. It's called The AppleBlossom and you can send e-mail to SteveC1021@aol.com for more information.

Speaking Of E-Mail

If you own an Apple II and you don't have a Genie account, shame on you! Genie is one of the few online services that still treats Apple II owners like human beings. Best of all, they've got new owners and new lower prices! For more info, call them at 800-638-9636.

Ask Mr 8-Ball

For those of you who aren't familiar with my old column in GS+ Magazine, my good friend Mr 8-Ball is the one source that I can always turn to when I need to get a rumor confirmed. So let's get right to those rumors!

Gumby: Rumor has it that a venerable Apple II company is looking to turn technical support for its Apple II products over to another company. True? 8-Ball: As I see it, yes.

Gumby: I've heard that Apple is going to be porting its new Copeland operating system over to the IIGS. True?

8-Ball: Better not tell you now.

Gumby: A miniscule avian told me that the programming on Wolfenstein 3-D for the IIGS has been done for months. Is it true that legal troubles are the only thing keeping it from being released? 8-Ball: My reply is no.

Gumby: I've heard that someone out there is working on a Kodak Photo CD viewer application for the IIGS. True?

8-Ball: Yes. Definitely.

Gumby: I've also heard that there are two separate projects to create an Apple IIGS emulator for the PowerMac. Will either of these ever see the light of day?

8-Ball: Very doubtful.

The Computer That Could Have Changed The World

Meet Mark Twain

Each year, Apple's User Group Connection co-sponsors a summer conference and convention for Apple User Group leaders, and it was at the July, 1991 convention that I first learned about Apple's imminent plans to release a new souped-up Apple IIGS computer, code-named Mark Twain.

The 1991 National Apple User Group Convention was held near me at the University of California in Berkeley. Usually the convention is co-sponsored by a local user group, but that vear it was co-sponsored by an individual – Raines Cohen – the founder of the Berkeley Macintosh User Group. At the time, I was wondering whether there would be anything of interest at the convention for an Apple II User Group officer, so I contacted Raines and was somewhat dismayed to find out that absolutely no arrangements had yet been made to offer any

Apple II sessions.

Not being one who is easily discouraged when it comes to the Apple II, I asked Raines about the possibility of offering some sessions for Apple II User Group leaders, and he agreed that if I wanted to coordinate all of the Apple II activities, I was welcome to do so. I was off and running.

I immediately contacted Tim Swihart, a well-known Apple II programmer who had been hired by Apple to serve in a managerial position in the then-Apple II division. Tim agreed to attend the convention and to give a talk. At the time, both Hyper-Card IIGS and System 5.0.4 had recently been released, so I expected that one or both of these would be the subject of his talk.

On the day that the convention started, I was surprised to see that Tim Swihart didn't come alone; all of the top level managers of the Apple II division accompanied him. Besides myself, there were no more than five other Apple II owners in attendance. What we heard that day was remarkable in that it was the first time, and possibly the only time, that Apple employees ever spoke to the public about the Mark Twain computer.

The Big Picture

During the summer of 1991, the Apple IIGS was alive and well, and Apple was still more than 1.5 years away from announcing its discontinuation. System 6.0 hadn't vet been announced, and the SuperDrive Controller Card was still six months away from being released. Those were hopeful and optimistic times; not even a year had passed since Apple CEO John Sculley proclaimed in an open letter to the Apple II community, "Apple's commitment to its 5 million Apple II users is to continue to create products that improve the functionality and performance of their computers. Apple will sell, service, and support the Apple II line well into the 1990s."

At the 1991 User Group Convention, the Apple employees were very excited and they had one item, and one item only, that they wanted to discuss with those in attendance: the soon to be released Mark Twain. They quickly rattled off some basic technical specifications: the machine would have a builtin 3.5" disk drive and a built-in 40 megabyte hard drive, and it would ship with System Software, AppleWorks GS and HyperCard IIGS pre-installed on the hard drive. They stated that the Mark Twain was intended to be sold primarily in the educational marketplace. They waved around a copy of Apple's most current marketing brochure, and it was there that our attention was directed towards the "Educational Bundle" - a package deal for educators that included a ROM 3 IIGS, external 3.5" and 5.25" disk drives, a 40 megabyte hard drive that came with System 5.0.4 preinstalled, along with HyperCard IIGS and AppleWorks GS.

As excited as the Apple employees were about the imminent release of a new model IIGS, they kept trying to point out that the Mark Twain was simply intended to replace the "Educational Bundle" then being offered for \$1,299. Although we never actually saw the new IIGS, we were led to believe that it was just mere weeks or months away from being released and that the last step in the process was to determine the pricing. Although no firm price was announced that day, the Apple employees indicated that the cost would be about \$999, which would place it in the same price range as the first of the "low cost" Macs that had been released in late 1990.

That was truly an exciting meeting, and I think all of us were thrilled to be the first Apple users informed of Apple's upcoming plans. Several weeks later, that same Apple II team traveled to Peterborough, New Hampshire to give employees of inCider/A+ Magazine their own sneak peek at the Mark Twain. Unlike at the User Group convention, an actual Mark Twain prototype was shown to the inCider/A+ editors. At the time, inCider/A+ had plans to devote an issue to the Mark Twain; alas, those plans never materialized because in the late summer of 1991, inCider/A+ was informed that the Mark Twain project had been cancelled. And, nothing more was ever heard from Apple about the project.

Fast Forward Five Years

After its cancellation, tales of the Mark Twain project took on almost mythic proportions. Stories circulated in the Apple II world about the cancelled project, and that community renamed the Mark Twain as the ROM 4 computer. Rumors about the capabilities of the Mark Twain circulated for years but nothing was ever heard from Apple, except for a well disguised reference to Mark Twain that appeared on the cover of the 1992 edition of Apple's "The Apple II Guide." But certainly no outsiders, aside from the inCider/A+ staff, had ever seen a Mark Twain. Until October, 1995, that is.

At the end of October, 1995, I was presiding over the monthly meeting of The GravenStein Apple User Group, and was busy

answering some technical questions about the Apple II when several Mark Twain computers literally walked themselves into my life.

Several days prior to the meeting, a fellow club officer received a cry for help over the telephone. The call started innocently enough: "Help. Something is wrong with my IIGS computer." The club officer tried to determine which model IIGS the caller had and tried to get as many details as possible. From the way the caller described her system, the club officer was unable to determine which model Apple IIGS she had, as there had been several references to a built-in disk drive. So, the caller was invited to bring her computer to the next meeting.

She did, and when the woman walked into the room, I was in the middle of describing how to convert various foreign format graphics to a IIGS format. I glanced over at her and her computer, and my jaw dropped. I instantly lost my train of thought, and quite frankly, I was so stunned by what I saw that I was temporarily at a complete loss for words.

The computer, at first glance, looked like a standard Apple IIGS. But. I noticed, there really was a built-in 3.5" disk drive. How was that possible? Needless to say, I no longer cared about explaining how to convert graphics. I wanted to know what that IIGS was. I rushed over and immediately opened the case, and there was a motherboard unlike anything I had ever seen before. It had only five slots, and a square shaped power supply. It had a built-in 3.5" disk drive and a built-in SCSI hard drive sitting just under the 3.5" drive.

Upon turning the machine over, I saw, just as plain as day, the notation on the sticker attached to the underside of the case – "Prototype: Mark Twain." The woman said she had two of them, along with a spare motherboard!!! Apparently, she had gotten them from a friend of a friend of a friend of a friend's ex-husband whose former sister-in-law's cousin used to work for Apple.

The woman had absolutely no idea how rare her computers were; to her they were just IIGS computers. On the spot, I offered to purchase her Mark Twains, but they were both currently in daily use, and there was no way she was going to part with them. Or, so she said.

Wheelin' And Dealin'

I was so distracted for the rest of the meeting that I never even noticed that the woman with the Mark Twain had left, and much to my dismay, I never even learned her name. While more excited than I'd been in a long time, I was also quite dismayed that the secrets which lay within the Mark Twain might really be lost forever.

Several days later, I was contacted by our user group's hardware wizard, our club's very own Mr Fix It. Ray MacAnally. Apparently, while I was distracted, Ray had made arrangements to take a look at the Mark Twains and to fix them if at all possible. Almost as if to taunt me, he told me that he was going to get the Mark Twains that very day. Upon receipt of the Mark Twains, he reported "the supports for the drives are fabricated from metal that have an unfinished look to them, and it is a real bear to disassemble the whole thing." He noticed

that each of the three motherboards he examined were slightly different. He also stated that "the floppy disk will not eject when the button is pushed, and this is due to a problem on the motherboard and not on the drive or switch." He bypassed that problem by rewiring the eject switch directly to the drive connector.

Before returning the Mark Twains to their owner, Ray told me that he planned to wheel and deal and to get one of those machines for himself, and wondered what it would be worth to me. I blurted out: "What do you want?" The response was: "A full blown, state of the art Macintosh system." I wondered, "How on earth am I going to be able to get such a system and not go bankrupt?"

During the next month, there were many more desperate phone calls made, and I eventually learned the name of the woman who owned the Mark Twains and was able to extract a price from her for the one remaining Mark Twain. All she wanted was "a full blown, state of the art PC clone." I wondered, "How on earth am I going to be able to get such a system and not go bankrupt?"

I looked at ads in the local newspaper, and saw that modern day Macs and PC clones started at about \$1,500, and that putting together two "full blown" systems for trading purposes was beyond my means. Who do I know, I wondered, who loves the Apple II but who sells Macs and PC clones? The long list I came up with had exactly one name on it, and that was Tony Diaz of Alltech Electronics. If anyone had access to great systems at low cost, it

would be Tony. As if on cue, Tony contacted me before I had a chance to contact him; he had already heard the tale of the Mark Twain through the Apple II grapevine.

Within just a few days, the deals were concluded, and I was heading off to sunny Southern California, with two Mark Twain computers well packed for the long ride. One of those Mark Twains was destined to be the one this very article was prepared on, and the other was destined to enter Tony Diaz's unofficial Apple II museum.

The Age Of Discovery

Tony Diaz and I spent the next four or five days literally immersed in the Mark Twain computers. We ripped them apart and put them back together again. We connected Focus hard Drives and CD-ROM drives. We tried every piece of software we had at our disposal. We ran System 6 and System 6.0.1. We ran diagnostics and dumped the ROMs to disk. We examined and compared the Mark Twain to both the ROM 01 and ROM 3. And, we've continued to examine those machines for the past six months. And in all that time, the only software programs we have found that wouldn't work on the Mark Twain were a few of the early FTA demo programs. We've made quite a few discoveries, the highlights of which follow.

A Guided Tour

Let's first get a perspective; when comparing the innards of a ROM 3 and a ROM 01, for the most part, the motherboards appear to be quite similar. Some more custom chips were added to the ROM 3, a new battery

holder was installed, and the amount of RAM on the mother-board was increased. There were also some minor improvements in power routing to decrease the "noise interference" levels that plagued the ROM 01, but to the average Apple IIGS user, the ROM 3 was essentially just a ROM 01 with an extra megabyte of RAM.

One look at the motherboard of the Mark Twain leaves no doubt that there were major and remarkable engineering changes made since the ROM 3 had been released. For starters, there is a slot cut into the front of the case where a 3.5" disk can be inserted. Upon opening the case, it is clear that the motherboard is 1.5" wider than in the two previous models and there are only five slots instead of the customary seven. The built-in 3.5" drive sits above a Quantum LPS 40 megabyte hard drive which in turn is connected to the built-in High Speed SCSI Controller which provides daisy chain capabilities, so Slot 7 is no longer needed. Additionally, the new built-in stereo sound circuitry has been improved over the previous models by virtually isolating it electrically from the rest of the motherboard; in essence, the entire area surrounding where Slot 7 would appear has been taken over by the built-in equivalent to a stereo card.

In addition to the 2 megabytes of RAM found on the mother-board, there are two 30 pin SIMM sockets that can each accept 1 megabyte SIMMs; therefore 4 megabytes are the maximum amount of RAM that can be utilized on the Mark Twain. Among the other new elements found on the motherboard are a Piezo Electric Speaker, the High

Speed SCSI card and a FDHD SuperDrive Controller chip set.

To add all of those additional components and still fit the motherboard in the same case, a lot of engineering miracles had to happen. In some ways, the Mark Twain has the perfect motherboard in terms of layout as everything is contained in its own area of the board. The built-in RAM has been moved to the very front edge of the motherboard, located near the power LED, and higher density surface mount RAM chips have been used so that only four chips are required to total the 2 megabytes of RAM supplied on the motherboard. In comparison, the ROM 01 uses eight chips to equal 256K, and the ROM 3 uses eight chips to equal 1 megabyte. Like both other IIGS models, the Mark Twain has 128K of "slow" RAM to remain compatible with the original design and to insure backward compatibility with the Apple IIe.

The two 30 Pin SIMM sockets on the Mark Twain are found in the exact same spot where the ROM 01 and ROM 3 memory expansion slot is located. Directly next to and above the SIMM sockets is the sound area with the Ensoniq chip. The Piezo Electric Speaker is also located above the SIMM sockets. Although that speaker actually sounds worse than the speaker found in all other Apple II models, full stereo output is provided via the rear port connection jack, making stereo speakers connected to the back of the GS essentially plug and play. Perhaps Apple never really intended for anyone to actually use the Piezo Electric Speaker.

Built-in sound digitizing capa-

bilities similar to that of the HyperStudio Slotless digitizer have been integrated into this section as well, with the input connector straddled on top of the stereo headphone/speaker jack. The sound hardware stretches over to the inner side of the printer port and immediately next to it is the last slot, slot 6.

Despite rumors that the Mark Twain is a speed demon, a standard 65C816-4 CPU running at 2.8 Mhz is found in the same physical location as it is on the other IIGS models; therefore, standard ZIP GS and Trans-Warp GS accelerators can be used on the Mark Twain. To the left of slot 1 is a square shaped higher output half size power supply with two +5 supply wires and a built-in cooling fan.

The power supply sits on top of a long metal assembly that extends the full length of the computer and attached to that assembly, in front of the power supply, is the floppy disk and hard drive unit. In between the power supply and the disk assembly is a gap of less than .5", and peering into that gap you can easily see the new location of the floppy controller hardware. Directly beneath that is the power supply connector and a 50 pin header for the SCSI/ Floppy daughterboard. Below, and occupying the rest of the board to the lower edge, is the High Speed SCSI controller. The floppy controller consists of a 344S0061A chip, which is Apple's SWIM (Super Woz Integrated Machine) chip that is also found on the SuperDrive Controller card and on newer Macintosh models. Despite the fact that the disk drive appears to be capable of handling high density disks, the functionality is limited to 800K due to lack of

FDHD firmware. Please note that the FDHD SuperDrive controller card wasn't actually released until November, 1991, several months after the Mark Twain was cancelled.

The SCSI hardware is also in a similar unfinished state; it consists of hardware similar to a High Speed DMA SCSI card, but it does not operate quite as fast as the High Speed SCSI card. Although the \$C700 memory location looks just like there is an Apple High Speed SCSI card attached to Slot 7, none of the standard SCSI utilities aside from ADU work with the built-in SCSI hardware.

Located in front of slot 1, and to the right of the SCSI/Floppy daughterboard header, is a 26 pin male header for attaching a ribbon cable that connects to the back of the computer in order to permit more SCSI devices to be part of a daisy chain. There is only one SCSI bus built-in, so there is a maximum of six additional SCSI devices that can be daisy chained to the SCSI controller.

Impressions

After discussing for months our Mark Twain discoveries, Tony Diaz and I have reached many of the same conclusions about the computer, and we have both enjoyed speculating on the motivations Apple had for designing such a computer and the possible reasons why Apple cancelled the project. Aside from the technical data presented above, all of which was directly observed with our own eyes, our conclusions are completely unsubstantiated and therefore impossible to prove. But, as long time Apple followers, we like to think that our conclusions are educated guesses.

For the past ten years, Apple has desperately been trying to cut manufacturing costs, and we believe that it was cost cutting measures that led to the development of the Mark Twain. After all, the Mark Twain borrowed several important parts from the Macintosh, including the hard drive/3.5" disk assembly and SIMM Sockets. Although the Mark Twain was a technological and engineering marvel, we speculate that the machine was dreamed up by Apple's marketing department as a way to partially reverse IBM's inroads into the classroom. It seems to us that if Apple offered a complete computer system for less than \$1,000 that would run all of the thousands of Apple II educational software titles, they'd have a big seller on their hands.

As things turned out, in late 1990 Apple did release a complete Macintosh computer system for less than \$1,000 and in March, 1991 Apple released the IIe card for the Macintosh LC. We speculate that it was the LC/IIe card combination that most probably delivered the 1-2 punch that knocked the Apple II family out of Apple's product line-up and that was directly responsible for the cancellation

of the Mark Twain.

Of course, we had several flights of fancy and imagined that the Mark Twain was actually built by several Apple II loyalist engineers who were trying to keep the Apple II alive by lowering the manufacturing costs. Or, we even imagined that it was to be Apple's "swan song," a parting present to the Apple II world.

In any case, the Mark Twain could have been a wonderful computer with amazing capabilities that didn't require lots of expensive add-ons. It could have been the ultimate Apple II. It could have been the second Apple II to change the world.

(Note: You are cordially invited to attend a public showing/demo of the Mark Twain prototype on Saturday, June 15, 1996 at 10 AM at the Trinity Community Church, 1675 Grand Avenue, San Rafael, CA. The Mark Twain will be shown as a fund raising benefit for the Graven-Stein Apple User Group; admission for non-members will be \$5.)

Shareware Solutions II would like to acknowledge the valuable contributions made to this article by Ray MacAnally and Tony Diaz. It would not have been possible without their help.

Stack Central/Studio City

What's It All About?

From 1990 to 1995, Resource Central and its ICON successor published an amazingly creative bi-monthly interactive HyperStudio based magazine-ondisk that originally appeared as Stack Central but was later renamed Studio City. During that time, a total of 30 issues were published and Shareware Solutions II is pleased to announce that all 30 issues are available once again.

HyperStudio, of course, is the easy to use award winning hy-

permedia construction kit for the Apple IIGS that permits non-programmers to create nonlinear interactive software that can contain any combination of scrolling text, digitized sounds, animations, or graphics.

Each of the 30 issues of Studio City is a veritable work of art that shows off the amazing capabilities of HyperStudio. Each two disk issue serves a dual purpose as both a showcase for the very best HyperStudio generated software ever created, and as an on-going tutorial and resource guide for those who want to learn how to tap the incredible power of HyperStudio to create inventive and creative software (often called stacks).

Each issue contains a potpourri of articles about HyperStudio, interactive tutorials, digitized sounds, beautiful clip art, custom XCMDs (short for External Commands), NBAs (short for New Button Actions), and examples of HyperStudio creations that often include detailed descriptions about how it was created and usually provides information on how you can use similar techniques in your own HyperStudio projects.

Although Studio City holds great interest to those who create their own HyperStudio stacks, there are a lot of wonderfully imaginative and creative stacks included that will be of interest to teachers, students and even small children. You don't need to be a hypermedia designer to appreciate Studio City. All it takes to enjoy Studio City is a desire to see the best that the Apple IIGS has to offer.

Requirements

HyperStudio, and Studio City,

require a IIGS, a 3.5" disk drive, 1.25 megabytes of RAM, and System 5.0.2 or later. You do not even need to own the Hyper-Studio program to use Studio City since a HyperStudio "player" program is included with all Studio City disks.

Ordering Information

If you've never experienced the wonders of HyperStudio or seen Studio City before, you can sample those wonders through a three disk Sampler Pack for only \$6.

Single issues are available for \$7 each, which includes shipping to anywhere in the world.

A six issue combo pack (choose any six issues) is available for \$36. Shipping charges are \$3 for US destinations or \$5 elsewhere.

You can purchase all 30 issues for \$120. Shipping charges for the entire set are \$6 for US delivery, \$10 for delivery to Canada and Mexico, and \$20 for Air Mail anywhere else.

As always, send checks or money orders (in US Funds only) made payable to "Joe Kohn" to:

Joe Kohn Shareware Solutions II 166 Alpine St San Rafael, CA 94901-1008

The Master Index

Issue 1: The premiere issue of Stack Central appeared in February, 1990 and although that first issue may have been a "little rough around the edges," it did provide a glimpse into the future glories that would evolve. In this issue, there are several newsletter-types of articles in-

cluding Future Hype which contains a wish list and vision of the uses of hypermedia and the IIGS. Stack Ideas provides guidelines for creating a hypermedia based user interface, and Hypermedia In Use describes a college level Physical Sciences project that uses HyperStudio to control laserdisks.

The HyperStudio stacks in this issue include a Question and Answer stack that addresses some elementary HyperStudio concerns. There are two geography related stacks: Geo Test is a stack that uses the test functions of HyperStudio to test your knowledge of countries in North and Central America, and Across The USA is the first installment of a group project designed to eventually teach about all 50 states. This first portion is a visual almanac about Kansas. Included are maps, demographic data, historical information, and digitized sound files of the state song and the state bird. In addition to the Kansas stack, there is a template for vou to use to create a similar stack about your home state.

There is also a stack that includes seven sound effects that you can use in your own creations. HyperMagic performs magic tricks from within Hyper-Studio, and HyperTubes teaches the notes of the musical scale.

Issue 2: The articles in this issue focus on HyperStudio; one describes a course about HyperStudio offered on television, while another describes the use of interactive video and multimedia education.

The HyperStudio stacks in this issue include two inventive stacks that describe how and when nearly 50 common phrases

and cliches worked their way into the English language. There's also a stack with six sound files that you can use with your own stacks. HyperSpace provides a simulated tour of our solar system, complete with factual information about all of the planets.

This issue sees the introduction of the first two of many Hyper-Studio add-ons called XCMDs that will appear in Stack Central and Studio City. Complete with step-by-step instructions on how to implement them in your own stacks, the Border XCMD allows you to easily change the color of the IIGS border, and Dialog XCMD allows you to create a custom dialog box with up to 30 characters and add a button to return the user to the current card.

This issue also contains two useful New Desk Accessories that can help you while you are using HyperStudio or any other GS/OS application that supports NDAs. File Manager allows you to copy, move, get information, or delete a file while within a GS/OS application. Write It is a mini-word processor that can be called up from within GS/OS programs.

Issue 3: The articles in this issue include vet another one that focuses on interactive video, but this latest article is accompanied by a videodisc controller XCMD. There's also a discussion about locking HyperStudio stacks and copyrighting them. There's a detailed and technical article, provided by the team that created HyperStudio, that serves as an XCMD Reference Guide and includes source code examples in several languages including Orca C, Pascal, and Assembler.

There are three more digitized sound files that can be used in other stacks, and an amusing Perplexing Puzzles stack that includes word puzzles, puzzles that involve puns, and picture puzzles that include animated solutions.

Issue 4: The articles in this issue include detailed instructions on installing and using Stack Central on hard disk drives. There is also an informative tutorial on using different fonts and text styles in HyperStudio stacks, and as a bonus, eight nice looking bitmapped fonts in various point sizes are included.

Color Stack was created by a six year old (with a little help from Dad) and it helps beginning readers to recognize and pronounce colors. Riddle Maze is a stack that was offered as a contest; subscribers were challenged to try to solve the cryptic word and pictogram puzzle, and were offered a \$100 prize if they could crack the code.

Issue 5: With this issue, we start to see some evolutionary changes to the basic design and layout of Stack Central, resulting in improved stack navigation and with less emphasis on newsletter articles and more focus on HyperStudio stacks. There is a short write-up about the HyperStudio related activities at KansasFest '90, and a continuation of the article about fonts, with special emphasis on explaining the differences between serif and sans serif fonts. To illustrate those differences. six bit mapped fonts in various point sizes are included.

Balloons is an informative stack about hot air balloons and the Letter Stack provides instructions, and beautiful looking examples, that detail how HyperStudio can be used to generate elegant hypermedia-based letters and correspondence. Melodia, created by a college level music teacher, is designed to assist in the practice of correlating musical notation with the sounds it represents in a simple melodic context; unfortunately, only three of the five included melodic samples work correctly.

Issue 6: The articles in this issue focus on new HyperStudio add-on products, and how to combine graphic elements with text items. In conjunction with the text article, there's detailed information and a Scroll XCMD that allows you to use scrolling text in your stacks. A second XCMD is included that will allow you to create stacks that can be easily navigated by people with disabilities who rely on adaptive input devices to control a IIGS.

There are two stacks devoted to Clip Art, and to make it easy for you to use the graphic images in your own stacks, eight Super Hi Res screens of clip art are included. There's a fascinating historical stack about the world's first jet aircraft, the Messerschmidt 109. There's a stack about various types of whales and in true hypermedia fashion, you can even listen to the song of the Humpback whale. Lastly, there is a Rapid Home Stack which will allow you to easily design a customized replacement for HyperStudio's Home Stack.

Issue 7: In addition to newsletter types of articles about Hypercard IIGS and AppleFest 1990, there's a fascinating hypermedia based interactive article about combining various text and graphic elements to cre-

ate and design a visually stunning HyperStudio screen.

There are four sound files that can be used in your own stacks, and an early version of Audio-Zap, a full featured GS/OS based sound editing program. The highlight of this issue is a creative stack devoted to Shake-speare's 55th Sonnet. It is quite detailed and includes everything from the anatomy of a sonnet to the history of Shake-speare's period. You can either read the sonnet or listen to it being read to you.

Issue 8: In this issue, there's a thought provoking article about using hypermedia in education that discusses the advantages of using the non-linear approach, as implemented in HyperStudio, over more traditional methods. There's also a stack based interactive article that introduces the concept of linking text with visual and graphic examples.

There's a HyperDialer stack which allows you to set up a computerized telephone directory with the capability of clicking on an entry and having the stack dial the phone number (if a modem is connected).

Much of this issue is devoted to Sound Smith, the now classic Apple IIGS music program. The Sound Smith program is included, as well as an XCMD and GS/OS Toolset that allows you to add wonderful sounding music to your own stacks. (Note: Because HyperStudio has been updated since this issue first appeared, there's a new article written by Joe Kohn that describes how to use these tools with HyperStudio v3.1)

Issue 9: With this issue, we

witness a magical transformation as Stack Central undergoes a transition from an informative and educational Hyper-Studio journal into a work of art. A new editor, a new editorial staff, a new staff artist, a new look, and fresh new ideas have come to Stack Central.

In this issue, we find many tutorials, directed at both advanced stack creators and beginners alike, that explain the inner workings of HyperStudio. The articles have been transformed into interactive animated tutorials, as best illustrated by Button School, a stack which includes six step-by-step lessons in creating three dimensional animated navigational buttons. In conjunction with the tutorials there are two additional and impressive stacks, Stupid Button Tricks 1 and 2, which show you just how sophisticated HyperStudio is when used as an animation studio.

There's also a tutorial stack, written by one of the programmers who created HyperStudio, that explains everything you could ever possibly want to know about using sound effects in HyperStudio stacks.

There are two text related XCMDs: LoadText and Save-Text. LoadText will permit you to easily add any type of diskbased text material to a stack and SaveText permits you to save user input as text, making it possible, for example, to have students take HyperStudiobased tests. The tutorials that explain the use of these XCMDs are excellent, and a stack based word processing program is included to illustrate just how simple it is to implement these useful XCMDs in your own stacks.

There are also five sound files, and seven screens of aviation related clip art. Lastly, there's a demo version of HyperBole, a HyperStudio based literary and poetry magazine.

Issue 10: In this issue, there is a HyperStudio related question and answer stack with many of the answers supplied by Hyper-Studio's publisher and his staff of programmers. There's also an excellent article about XCMDs that defines what they are and how to use them, and the article is accompanied by a Scroll XCMD that allows you to easily create animations by scrolling any section of a Super Hi Res screen at any speed.

Animation School is a four part tutorial that offers fascinating examples and detailed step-by-step instructions about animation, including how to use clip art to create animations, how to create single image animations that mimic advanced programming techniques, and how to create simple full screen animated special effects.

There's a clip art stack of human faces and a number of Super Hi Res graphic files that are all set up and ready for you to practice animating with your new-found animation skills.

Numbers Stack is an educational stack for pre-schoolers that will help them learn about numbers. HyperStates is another educational stack that is useful as both a reference guide and a learning tool. Using it, you can learn basic information about every US state and a quiz component will assist in learning the capitals of each state.

Issue 11: More changes are apparent with this issue as the

new editorial staff settles in. Stack Central has a new look and it seems to have developed a very wild and wacky sense of humor. There's a very long and fascinating interview with Roger Wagner, the publisher of HyperStudio. Additionally, the new resident artist has created his first installment of Pixel-Talk, an interactive and technical, yet humorous, article that explains exactly how the IIGS hardware makes pictures appear on the screen. To complement that article is the new SuperView XCMD that permits 3200 color graphics to be used with HyperStudio.

There's also a program that fixes a bug in HyperStudio v2.1, and a fascinating and well-done puzzle stack that was submitted by a nine year old girl. There's also a stack that can be used as a replacement Home Stack that will permit you to launch any ProDOS or GS/OS software applications. The title of one stack describes it completely: "Clip Art Made Easy, Or How To Use A Quickie And Platinum Paint To Do Clip Art Screens."

There are several more digitized sound effects and two clip art stacks devoted to Halloween and Thanksgiving. The Halloween clip art stack also happens to be animated. As usual, the clip art is also included as standard Super Hi Res graphic screens.

Issue 12: To reflect all the recent changes, the name of the publication has been changed to Studio City. This issue includes the brand new, and as yet unreleased at the time, HyperStudio v3.0 run-time module. To show subscribers just how advanced HyperStudio 3.0 is over pre-

vious versions, there's a stack that shows off some of the more amazing new capabilities including the new transitions. It also provides a peek at the new scripting language, offers a demo of New Button Actions, and demonstrates the seamless integration of 320 mode graphics and movable graphic items.

There's an amazingly creative stack called Dam Busters that tells the true story of the RAF's World War II 617 Squadron which used innovative technology for that time and faced incredible danger in destroying several key German dams.

PixelTalk presents an informative look at 640 mode graphics and offers an in-depth explanation of how palettes and dithering work. The third installment of Stupid Button Tricks offers more innovative animated navigational buttons. Noisy Hypermessages illustrates several animation techniques that can be employed as users wait for your stack to load. Additionally, there's a clip art stack devoted to winter and the holiday season.

There's also Tool Pak, a set of seven powerful XCMDs that provide access to the GS/OS file system from HyperStudio, allowing stack designers to perform such functions from within HyperStudio as create directories, create ASCII text files, or delete files.

Issue 13: This issue gives Studio City a brand new and quite unique look. When attempting to describe the new Studio City look, the editor wrote that the graphic artist responsible "has just about totally lost his marbles and his good taste." Perhaps he was just trying to be

playful in order to reflect the theme of this issue: kids and their parents. Then again, the new editor quite possibly lost his marbles too; look for hidden buttons to discover the editor's secret screens.

There are some serious stacks in this issue, including a question and answer session with Roger Wagner concerning the recently released HyperStudio v3.0 and a thorough review of DreamGrafix, a 3200 color paint program.

For teachers and parents, there is a tutorial about using Simple-Script to create multiple choice tests. The wonder of this stack is that you can simply cut and paste the scripts into your own stacks, meaning that even novices can now create HyperStudio based multiple choice tests. There's an inspirational stack created by a HyperStudio novice and her children that describes from a novice's perspective how to create HyperStudio stacks.

For kids, there's a stack that consists of one word scramble puzzle, two wordsearch puzzles, one mixed up quote puzzle, two crossword puzzles, and eight mazes that your youngsters can solve on screen or on a print out. There's also a bunny stack that features a poem with some fun animations for beginning readers and a poetry stack about a little girl and her dragon.

For kids of all ages there's another installment of Stupid Button Tricks as well as an assortment of five sound files and several screens of lovely seasonal clip art.

Issue 14: This issue also contains a mixture of information and stacks for both adults and children. The articles discuss

the latest release of Hyper-Studio.

There are six sound files, and three screens of clip art that depict dinosaurs, flowers and office tools. There's another installment of Button School that shows how to design navigational buttons using animation techniques to create the illusion of movement when clicked. There's also another stack for hypermedia novices, created by a novice, that describes and instructs how to add sound effects to your stacks. There are also instructions on how to create a HyperStudio screen saver along with a sample animated example. There's a beautiful looking tutorial, with examples, about how to create a three dimensional maze using Simple-Script. There's also a Tarot Card stack that may, or may not, predict your future.

Puppy Piano should be loved by all those who laugh during the holidays when they hear dogs on the radio barking to the tune of Jingle Bells. And lastly, there's a Spelling Quiz stack that can be customized to contain any word list.

Issue 15: This issue contains articles and information on the newest v3.1 HyperStudio update, HyperStudio animation and graphics conversion. There are two sound files and three screens of clip art focusing on fantasy themes, basic geometric shapes and schematic symbols.

The stacks in this issue are quite eclectic. There's a Dungeon Designer stack that shows how to create eight animated special effects for use in adventure games, and includes clip art and instructions for game designers. First Impressions shows exactly

how to create stacks with eyecatching animated title pages. Shape Games is a game that has pre-schoolers look at a sequence of shapes or numbers and decide which shape or number should come next. There's a fascinating stack on the SR-71 Blackbird supersonic aircraft complete with lots of scanned photos. There are five Screen Savers for HyperStudio v3, and a Saudi Arabia stack, written by a member of the US Air Force who had been stationed there. It includes maps, scanned photos and illustrations which help to explain the culture and religion of that country.

Issue 16: This is the first issue that comes with an Installer, a utility which permits one-click hard drive installation. This issue also sports a brand new "front end" interface.

There are articles in this issue dealing with HyperStudio stack design, with hints and tips on making stacks more efficient and take up less disk space. There are three sound files and three screens of clip art that depict birds.

Project Mercury is a historical stack that provides a glimpse into America's first manned space program. It includes an overview, biographical data about the original astronauts, information on each flight and a scrapbook of scanned photos. Beatles Songs contains information on the songs appearing on the Abbey Road and Magical Mystery Tour albums. Mini Surf is a stack about surfing on the South Shore of Oahu, Hawaii. Exploring Simple Script provides a tutorial about using the Combine command, and Mixing Modes provides instructions on how to combine 320 mode

graphics with 640 mode text.

Issue 17: In the issue, there are articles about recent updates to HyperStudio, six sound effects and five screens of clip art that depict animals, trains, and maps of the Americas.

First Impressions shows how to add animation and sounds to title pages of stacks. Painting Stack shows how beautiful art work can be painted on a computer screen. Stupid Button Tricks has more wacky animated navigational buttons and it includes the clip art that was used to create the sequences. Flight School explains by example the concept of using Master/ Slave stacks where the same information can be accessed in many different ways. Finally, Inside The NFL is a guiz to test how well you understand American football.

Issue 18: In this issue, there are two sound files and six screens of clip art depicting a moonscape, mountains, people and maps. Flight School continues with the Master/Slave stack technique and introduces the concept of using an auto exit card that allows, for example, stacks to be password protected.

HyperTextures shows owners of hand held scanners how to create textured background screens in stacks by scanning such common objects as carpets, wallpaper and tin foil. Tic Tac Toe is a game of Tic Tac Toe with information about how it was created. The Addition Stack asks 2nd graders to solve six math problems and when the correct answers are supplied, a graphic is displayed.

Issue 19: This issue contains some fascinating answers to

subscribers' questions, three sound files and six screens of clip art that depict children, the solar system, rabbits and maps of Africa.

Each and every stack in this issue contains a detailed description of how it was created, with explanations of how its Simple-Script works. There is an Address Book stack. There's an amusing stack entitled Ask The Guy/Ask The Kid that will forever replace your need to toss a coin to help make a decision. There's a stack entitled Fire Arms which is a database stack that's all set up for you to customize in order to keep track of any collectibles. HyperGolf is a seven hole animated game of golf. HyperHome is yet another Home Stack replacement; it includes a calendar, a program and stack launcher, a calculator and a link to the Address stack. Finally, there's Memory Helper Game, a children's game which is similar to Concentration.

Issue 20: Easter Eggs are messages that are often hidden in programs or stacks and are displayed when a particular button is clicked; this issue is filled with them. It also contains several product announcements, four sound effects and three screens of clip art that depict people, ribbons and hand tools.

Clipsters contains six 320 mode animations with instructions on how to use them in your own stacks. Current Events is a wonderful tool for teachers, as it will allow them to easily create their own customized daily or weekly stack focusing on the news of the world. Easter Eggs shows how to create hidden messages in a stack using the supplied AppleRead New Button Action add-on. Halogens is a

presentation about that group of five non-metallic elements found in the periodic chart. Metamorph contains three fascinating animations that show how plants grow from seeds, frogs from tadpoles and butterflies from eggs. 3-D Studio has to be seen to be believed; it is a stack that allows you to create three dimensional objects using a unique four way perspective.

Issue 21: This issue contains quite a few Apple II product announcements and six screens of clip art depicting classic cars, fish, paint brushes and maps.

View 32 is a New Button Action that allows you to use 3200 color graphics in your stacks. Academy Awards is a database like stack that lists all the winners of major awards from 1928-1992. Baccarat is a demo of a commercial HyperStudio stack: the demo explains the rules of Baccarat, contains a detailed description of how the stack was created, and allows you to play five hands. Chunk Expressions teaches how to use Simple-Script to grab part of a string variable and manipulate it in various ways. Daffynitions is a word game in which you are presented with a word and you have to choose the correct definition from several choices. Paint Brushes is a tutorial that shows how to use a paint program's brush tools to create special effects. Quantum Numbers explains how those numbers are used to describe the properties of electrons.

Issue 22: There's lots of news in this issue for Apple II users, as well as four sounds and three screens of clip art that depict animals, sweets and money.

Animals, Animals, Animals is a

board game for children in which 16 cards cover the picture of an animal; click on the cards to see a portion of the picture and to get a clue as you try to guess which animal is depicted. Hyper Chicago presents a fascinating look at the city of Chicago with a focus on the history, people, culture, architecture, economy and politics of that city. Fossils was created by an Earth Science teacher to demonstrate how living organisms turn into fossils. HyperStudio 3-D displays stereoscopic scanned photographs. Radio Buttons And Check Boxes teaches how to create within HvperSudio these common types of GS/OS user inputs.

Issue 23: This issue provides a sneak peek at 3-D HyperLogo, an add-on programming language for HyperStudio, as well as three sound files and three screens of clip art that depict reptiles, the classroom and the Space Shuttle.

New Frog & Fly is a game designed to be played by children with disabilities who use switch input devices. The stack makes use of two included New Button Actions – Scan and AppleRead. Guitar Chords demonstrates how chords are produced on a guitar and instructs proper finger placement to produce those chords. Review Stack, and its companion Test Stack, are wonderful time savers for classroom teachers as they allow them to easily create on-screen reviews and multiple choice tests. The Test Stack can even grade the students' tests. Lastly, there's Voyager Stack, a breathtaking stack that teaches about the twin Voyager spacecraft that explored the outer reaches of our solar system and sent back out of this world photos and data on the outer planets.

Issue 24: In this issue, long-time Studio City contributor Bill Lynn takes over as editor. Included in this issue is a cumulative index of everything that has appeared in the publication since it started, an interview with HyperStudio publisher Roger Wagner, ten sounds of animals, and three screens of clip art that depict Christmas, parties and arrows/icons.

There's a useful New Button Action, PrintField NBA, that allows HyperStudio users to print the contents of any text field by just clicking on a button. An Egyptian Hieroglyphics stack provides an introduction and overview of one of mankind's earliest forms of written communication. Scan and Match Sea Life is a matching game activity for youngsters with disabilities who use switch input devices. There are two stacks, Illusions and Optical Illusions, that prove that seeing isn't always believing. COWculate is a stack in which Bossy the Cow teaches youngsters how to add and subtract. Finally, the User Group stack can be customized by any user group to include general and specific information about the user group.

Issue 25: In this issue, there is HyperStudio news, hints and tips, ten sound files and three screens of clip art that depict birds, state flags and musical instruments. There are also three brand new New Button Actions. RunBasic allows you to run Applesoft Basic and binary files from HyperStudio. Load-Text allows you to load different ASCII Text files into a single text field without using Simple-Script. PopUp allows you to add pop up menus to your stacks.

HyperMoney teaches youngsters

about US coins. HS Magic Key is a program that will unlock any locked HyperStudio stack. Magic 8 Ball is an amusing electronic version of the classic fortune telling Magic 8 Ball. There is a stack about the Roman Empire that includes a database of all the Roman emperors. Scan Darts is yet another game for children or adults with disabilities who use switch input devices.

Issue 26: This issue includes a SimpleScript question and answer session and an interview with the author of HyperLogo. There are ten sounds, and four screens of clip art that depict state flags, magic and keys.

There are three New Button Actions. ClickLine NBA allows a HyperStudio user to click on a line in a read-only text field and it returns the literal contents of that line to a variable. GetLine allows a user to click on a button that overlays a read-only text field and it returns information about the text field to a variable. DoMenu NBA offers the HyperStudio stack designer access to many HyperStudio menu commands through stack buttons and SimpleScript.

Badminton, created by a Physical Education teacher, will answer every question you've ever had about the game of Badminton. Fantavision GS offers a review of the animation program Fantavision GS, and also includes an XCMD for running Fantavision movies from within HyperStudio, along with instructions for using the Mini-Script NBA to trigger that XCMD. Myxstyx is a board game that is similar to Chinese Checkers. Rushmore chronicles the creation of one of the most awe inspiring of our National

Monuments; the scanned images in this stack alone are worth the price of admission. Twisted Pine is a lovely children's story that features all three animation methods available to Hyper-Studio users.

Issue 27: In this issue, there is a review of a book that teaches about using HyperStudio. There are also ten sounds and four screens of clip art that depict food, music and state flags. There are also three New Button Actions. LockScreen permits stack designers to invisibly manipulate on-screen objects and reveal the changes all at once with any HyperStudio transition. SetMenubar allows stack designers to hide and/or show the menubar from an invisible button. SetFont allows a new font to be selected from Simple-Script.

Shades of Illusion was inspired by the optical illusion stacks in Issue 24, and all of the illusions in this stack are based on the juxtaposition of various shades of gray. The Panama Canal chronicles the history and the construction of the Panama Canal through the use of text, scanned photos, maps, and animations.

Issue 28: This issue contains some general Apple II news items, as well as ten sounds and four screens of clip art depicting watches and clocks, state flags, and birthdays and anniversaries. There's also a New Button Action, ClickWord, that allows any word in a read-only text field to be clicked, and that word is then collected into a Simple-Script variable.

Big Days helps you keep track of birthdays, anniversaries and other "big days" and it even allows you to create and print appropriate greeting cards to honor those events. Computer Mice provides mouse practice for young children in a number of charming and colorful activities. Jackie is a photo journal that pays homage to Jacqueline Kennedy Onassis. Egyptian Pyramid provides some very interesting information on what is inside of an Egyptian pyramid.

Issue 29: This issue includes detailed descriptions of two Apple II related conventions: The HyperStudio Festival and KansasFest. There are ten sounds and four screens of clip art that depict a fantasy theme and state flags. There are also two New Button Actions. GetPath allows the HyperStudio user to determine the active GS/OS prefix, and SetPrefix allows the HyperStudio designer to set the current GS/OS prefix, thereby avoiding the Standard File dialogue that pops up whenever HyperStudio can't locate a desired sound, text or graphic file required by a particular stack.

Heart explains how the human heart works; it stresses taking care of your heart by decreasing risk factors that lead to heart disease. Veterans' Day pays tribute to Veterans' Day with a stirring song and an inspirational reading of Colonel John McCrae's "In Flanders Fields" poem. Voting Machine keeps track of voters, collects balloting information and displays it in the form of election returns; this stack can be modified for your own use at the Moose Lodge or the elementary school. Word Play is an entertaining stack that displays graphic representations of common phrases that you try to decode.

Issue 30: In this issue, there is

a cumulative index that lists everything that has appeared in all issues. There are six holiday related sounds, and four screens of clip art that depict the holidays, small animals, the Space Shuttle and Egypt. There are also three New Button Actions and a HyperStudio Extra. Music Player allows you to play Music Studio, Sound Smith, or Synth-Lab music from within Hyper-Studio. Set Sound sets the system sound volume. HyperText NBA is designed to allow the HyperStudio user to click on a word in a read-only text field and find other instances of that

word anywhere in the stack. MousePoint is an Extra that can help the stack designer and HyperStudio script writer to locate the screen coordinates of particular points within a stack's card.

Calendar is a useful HyperStudio template for building and printing your own custom calendars; to customize it, just add your own clip art and highlight the dates that are important to you. Presenting With HyperStudio provides tips and a wealth of information on how to put your ideas across effectively in formal presentations.

Such A Deal!

ProSel

If there's just one utility program that every Apple II hard drive owner should have, it is ProSel! Available in versions for either Apple IIe/IIc or IIGS, ProSel is a combination program launcher, menu program and comprehensive set of utility programs. As a program launcher, ProSel allows you to create a customized menu of commonly run programs that can be launched by using the keyboard or a mouse.

But, it is ProSel's utilities that are legendary; it can perform such routine tasks as batch copy files or disks, display the contents of any file on a printer or on screen, lock, unlock, hide, unhide or delete files, exhume a deleted file, verify the integrity of a file, perform an alphabetical sort of a directory or subdirectory, compare directories or files, change file dates, move files, locate a string or a file anywhere on disk, or add password protection to files.

In addition to that suite of routine utilities, ProSel's greatest strengths lie in its ability to back up a hard drive, restore corrupted files or disks and optimize fragmented disks. The disk repair component is often successful in fixing disks that have damaged directory structures or bad blocks. But, they are so powerful that they can even retrieve information on a disk that has been formatted.

Despite the fact that ProSel has often been recommended and endorsed within these pages, not everyone owns it yet. For that reason, Shareware Solutions II has entered into an agreement with ProSel's publisher that allows us to distribute ProSel for the lowest price ever offered. ProSel-8 for the IIe/IIc is normally sold for \$40, and ProSel-16 for the IIGS is normally sold for \$90, but you can now take advantage of a special "Such A Deal" offer that slashes the price of ProSel. You can now acquire these exceptional programs directly from Shareware

Solutions II for \$25 for ProSel-8 or \$50 for ProSel-16, plus \$5 shipping to anywhere in the world.

(Note: A preview/demo disk of ProSel-16 is now available from Shareware Solutions II for \$3.)

The Gate And Space Fox

Shareware Solutions II is very pleased to announce that it has been named by Seven Hills Software as the exclusive distributor of Bright Software's IIGS arcade games: The Gate and Space Fox.

The Gate blends action, adventure, aesthetic pleasure and intellectual challenges to create a stimulating adventure game for the IIGS. You must battle enemies and solve puzzles to escape a castle's prison. Ultimately, your goal is to find and defeat your captor and bring peace to the land. The Gate features brain-teasing challenges, lots of action in smooth, synchronized animations plus exciting stereo music and sound effects.

The Gate requires a IIGS with 1 megabyte of RAM. The Gate is not copy protected, but it cannot be installed on a hard drive.

Space Fox is an exciting arcade game where you are an ace pilot who must guide your space ship through nine levels of assorted bad guys. Your mission is to destroy The Brain at level ten but you'll need to collect fuel, shield power and new weapons as you destroy your enemies. Skill and a bit of luck are needed to complete your mission because the higher the level, the harder it is to survive. Space Fox features fast action, smooth, synchronized animations and a stereo musical soundtrack.

Space Fox requires a IIGS with 1 megabyte of RAM and one 3.5" disk drive.

The Gate and Space Fox are now available from Shareware Solutions II for \$20 each, plus \$3 for shipping per order.

(Note: A preview/demo disk that allows you to play Level 1 of The Gate is now available from Shareware Solutions II for \$3.)

NAUG-On-Disk Bundle

In an attempt to make all the disks from the National Apple-Works User Group (NAUG) even more affordable than ever before, Shareware Solutions II has reached an agreement with NAUG Founder Warren Williams that now permits the distribution of all 65 issues of NAUG-On-Disk as a bundled package for a new lower price.

Originally available only from

NAUG for \$10 per issue, you can now purchase the entire 65 disk collection, spanning six years worth of AppleWorks related information, for \$150 plus shipping charges of \$6 for US delivery, \$10 for delivery to Canada or Mexico, or \$20 for Air Mail delivery anywhere else.

Each 3.5" issue of NAUG-On-Disk contains the complete text of all of the articles that appeared in NAUG's AppleWorks Forum newsletter, as well as all of the AppleWorks templates and TimeOut modules that were described in that issue, and all of the latest AppleWorks resource disks that were added to the NAUG Library in that issue.

A complete database of everything in this amazing and comprehensive collection of Apple-Works materials is included as part of the NAUG catalog and disk supplement that was offered in the last issue for \$5.

Shareware Solutions IIe/IIc/IIgs

A2 Disks Of The Month

The February and March 1996 issues of the GEnie A2 Disk of the Month have been combined. Informative text files included on this disk are the January issue of GenieLamp for programmers, the February issue of GenieLamp for end users, a detailed list of new features found in the recent Graphic-Writer III v2 update, an explanation of how PMPFax prints images, and a mid-January issue of the weekly Apple II oriented freeware II Something newsletter.

Software for the IIe/IIc on this disk includes DOS 3.3 Launcher, a utility that allows you to install DOS 3.3 programs or disks on a ProDOS formatted hard drive or 3.5" disk, and launch those programs via your favorite program launcher, such as the Finder on a IIGS or ProSel-8 on a IIe/IIc. Also included is a utility, Imunger, that allows you to convert disk image files, generally used with Apple II emulators, back to 5.25" disks, and Treasure, a game whose object is to discover six hidden treasures that are randomly placed within a 13x13 grid.

Software for the IIGS on the February/March A2 DOM includes 10 Super Hi Res graphics which demonstrate most of the advanced features offered by Platinum Paint. Micro Word is a HyperStudio-based word processor. ScreenPrint is a New Desk Accessory that allows you to print the Super Hi Res screen or to save a screen image to disk. Screen Saver New Desk Accessory is a screen blanker that operates from within GS/OS applications.

The April, 1996 GEnie A2 Disk of the Month includes the Genie-Lamp newsletter for both March and April. Software for the Apple IIe/IIc includes a beginner's guide to the HyperText Markup Language (html), the computer language which is the cornerstone of the Internet's World Wide Web. Also included is Co-Pilot-8, an offline reader for Genie subscribers who access Genie with ProTerm v3.1.

Software for the IIGS on the April A2 DOM includes Anime. a New Desk Accessory that helps you to create animations using any of the major IIGS paint programs. Daleks is a IIGS strategy board game. rPacker is a Finder Extra that compacts GS/OS files with resource forks. wInflate is a New Desk Accessory which allows you to collapse a window to just the title bar, which is quite useful if you have a crowded desktop and want to see the contents of another window. Chronos II allows you to place a clock in your menu bar that displays the date and time.

The A2 Disks of the Month are available from the Shareware Solutions II library, on 3.5" disk only, for \$5 each or \$8 for both disks.

EnviroWorks

Dr Cynthia Field's EnviroWorks is an earth-saving and moneysaving AppleWorks resource disk that can help you to become an environmentally aware "green" consumer. The disk includes an expandable database of dozens of companies that offer earthwise consumer products like reusable grocery bags, herbal flea collars, and compact fluorescent light bulbs. Also included is an EcoBibliography of books and magazines, recipes for natural nontoxic alterna-

tives to harmful household products, a checklist of 101 tips for saving money while you help to save the planet, and even ten tips that computer users can follow to conserve resources.

EnviroWorks is available from Shareware Solutions II on either 5.25" or 3.5" disk for \$5. Included as a bonus on the 3.5" disk version is an AppleWorks GS version of EnviroWorks. To use EnviroWorks, you must own AppleWorks Classic (v3 or later) or AppleWorks GS.

Shareware Solutions IIGS

Games '96

Although there appears to be somewhat of a slow down in the amount of new Apple IIGS freeware and shareware being released, two of the most enjoyable and addictive IIGS freeware games ever released have appeared so far this year.

Diamonds, by Richard Bennett, is quite possibly the most challenging and fun game ever written for the IIGS. It shares similarities to the classic games of Break Out and Arkanoid, in which you maneuver a bouncing ball in an effort to remove as many bricks from the board as possible. Unlike those older games, Diamonds has many different types of bricks that can only be removed by a corresponding colored ball, and it has a number of bricks that, when hit, result in instant death. There are 30 levels to clear, and each one becomes significantly more complex and involved as the game goes on. As the game progresses, you may find that it will take you several days just

to figure out how to avoid strategically placed death bricks, yet that's what makes Diamonds so challenging; it calls you back, again and again, as you try to win just one more time.

There's also an editor that allows you to create your own Diamonds' levels, and included as a bonus is a second set of nearly impossible to clear levels.

Diamonds includes an Easter Egg photo of the author, lots of sound effects, colorful screens, and fast action. It's a thinking person's strategy arcade game that is sure to be one of the most popular games ever created for the Apple IIGS.

PuyoPuyo is another thinking person's fast action strategy arcade game. Created by Bret Victor (aka Slixter), PuyoPuyo shares lots of similarities to Tetris and the Tetris spin-off Columns. It's a game where multi-colored pieces fall from the top of the screen, and you have to manipulate them, by moving or rotating them, so that

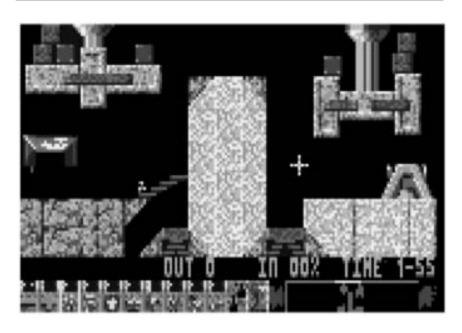
at least four pieces of the same color are touching each other. When four pieces do touch, they disappear and your score goes up. If you can't manipulate the falling pieces fast enough, they pile up, and when they reach the top of the screen, the game is over.

There is also a two player mode, where the object is to wreak as much havoc as you possibly can upon your opponent's side of the board to make his or her pieces reach the top of the screen before yours do.

PuyoPuyo is played using the keyboard, and its action is so fast and furious, you'll find yourself banging on your keyboard. There's music and sound effects, but above all, there's challenge.

Games '96, which includes both Diamonds and PuyoPuyo, is now

available from the Shareware Solutions II Library for \$5.



Coming Soon From Brutal Deluxe!

Joe Kohn Shareware Solutions II 166 Alpine Street San Rafael, CA 94901-1008

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