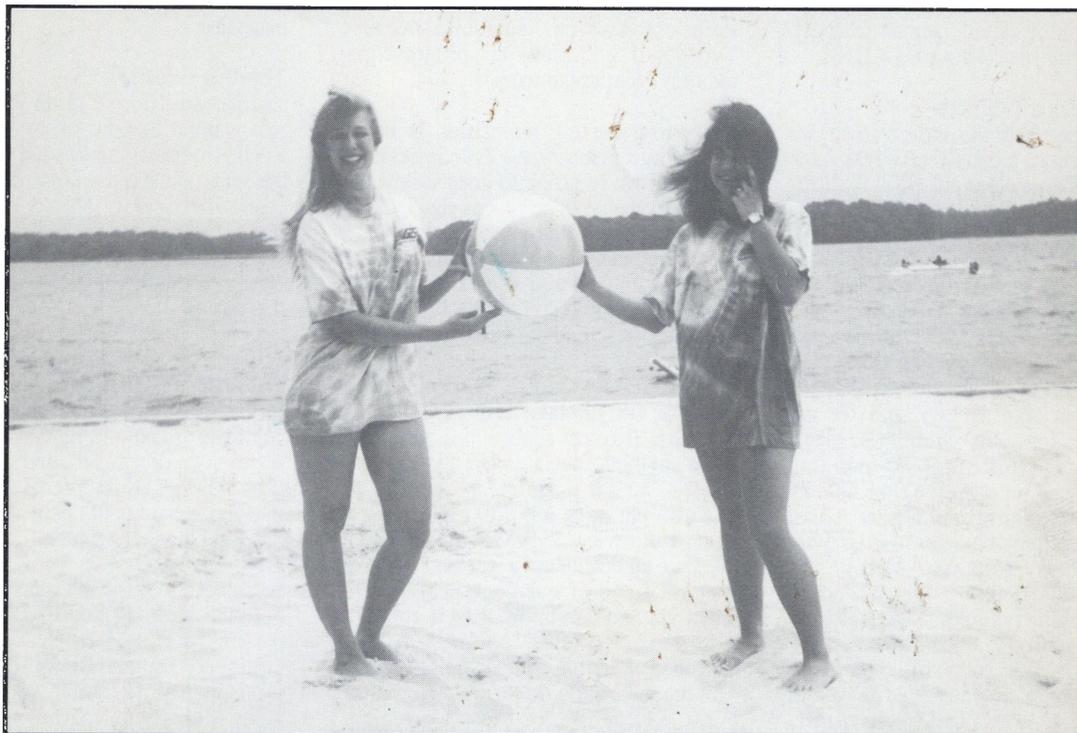




July
August
1993

Volume 4
Number 6

The First Apple IIGS® Magazine + Disk Publication!



Special Summer Fun Issue!

Catch .WAV's On Your IIGS

Bite the Bag at KansasFest 1993

Cruise With System Software v6.0.1

Write Twilight II Screen Blankers On a Hot Summer Night

Reviews

HardPressed

The Lost Treasures of Infocom • Quest for the Hoard 2
Your Money Matters • Zip Drive

Plus

AutoSave v2.0

Finder Binder

And, Almost a Full Page of Errata!

System 6.0.1

As you can see from this issue's cover, we got a little crazy a couple of weeks back and tie-dyed a bunch of our *GS+* T-Shirts. It was so much fun, and the shirts look so great, that we thought we would make them available to you as well. However, the time and extra materials required will make these a bit more expensive: \$15 each (which includes shipping to anywhere on the planet). At this point, we have two or three tie-dye shirts left (we sold some at KansasFest), and we are taking orders for more. Since these take a bit of extra effort (not to mention planning a tie-dye party), we'll be holding orders for these shirts until we get at least ten. (Of course, we won't take your money until we ship your shirt.) The good thing about this is that when you order your shirt you can request the specific colors (up to three different ones) that you want for your shirt before we make it. If you are interested in one of these shirts, give us a call (or send us e-mail) and we'll take your color and size requirements and get you on the waiting list.

New! Tie-Dye T-Shirts

As you can see from this issue's cover, we got a little crazy a couple of weeks back and tie-dyed a bunch of our *GS+* T-Shirts. It was so much fun, and the shirts look so great, that we thought we would make them available to you as well. However, the time and extra materials required will make these a bit more expensive: \$15 each (which includes shipping to anywhere on the planet). At this point, we have two or three tie-dye shirts left (we sold some at KansasFest), and we are taking orders for more. Since these take a bit of extra effort (not to mention planning a tie-dye party), we'll be holding orders for these shirts until we get at least ten. (Of course, we won't take your money until we ship your shirt.) The good thing about this is that when you order your shirt you can request the specific colors (up to three different ones) that you want for your shirt before we make it. If you are interested in one of these shirts, give us a call (or send us e-mail) and we'll take your color and size requirements and get you on the waiting list.

More Help!

The big news around the *GS+* Magazine office this time is that I've hired yet another person to help with the production of the magazine. His name is Bill Moore, and in the coming months, he's going to be taking over a lot of the technical support chores, as well as writing lots of articles and reviews for us. One of his first big projects will be our long delayed HyperStudio-based reprints of sold out issues of *GS+* Magazine. All we have to do is get *this* issue out the door first . . .

If Bill's name sounds familiar, that's because he's written a couple of reviews for us in the past (as well as a review that was published in a recent issue of *// Alive*), and I've mentioned that he was working on a feature article on how to move sounds from other computers to

your IIGS. Oddly enough, that article appears in this very issue.

TypeSet From WestCode

In the past few issues, I've mentioned a "top-secret" project that would be our very first stand-alone product. Well, the cat's out of the bag now: the product is TypeSet, and rather than publish it ourselves, it's going to be published by WestCode Software, the publishers of Pointless (which is good, because TypeSet is a "follow-on" program that requires Pointless to work).

Of course, the big temptation is to fill this whole issue with TypeSet related stuff, but we're going to keep it down to only two items. The first is the TypeSet press release, which appears in "What's New," and the second is an article on how the new EGOed lite uses Inter-Process Communication (IPC) to talk to TypeSet. We've also provided complete technical information for how your own non-application programs can talk to TypeSet and use IPC to take full advantage of TypeSet. (Normal applications don't have to do anything special to use TypeSet.)

It's also put us in a bit of a tight spot as to how to review TypeSet. At this point, we have an outside reviewer (i.e. someone that isn't one of our normal reviewers) lined up, and I think he'll do a good job with it. At this point, I'm also considering letting someone else actually edit the review too.

One final point about TypeSet: *TypeSet is a WestCode product*. We just wrote it for them. That means, while we *will* get royalties from the sales of TypeSet, you won't *ever* see TypeSet on the *GS+* Disk. And, you can't buy TypeSet from us. Finally, you shouldn't call us for technical support either. Sorry about that, but if we did all these things, we would be the ones keeping most of the money, instead of just a royalty.

Back To Beantown

The Apple EXPO East is the next big event we'll be attending. We'll have a much better booth (near the front) than last year, and it should be a great show. If you are there, feel free to stop by the booth and (as we say here in the south) "sit a spell."

Creeping Up

If things go according to schedule, we'll actually gain two more days on our publishing schedule with this issue! It

may not seem like much, but it's a lot better than slipping two days behind! Hopefully, we'll be able to gain an even larger amount of ground with the next issue (which will be our fourth anniversary issue, by the way). Of course, the Apple EXPO East is right in the middle of that period, so we might get delayed by that. As usual, we'll probably delay publication until *after* the show so that we can get a report in the next magazine.

Thanks Ellen!

Just in case I forget to do it elsewhere, I just wanted to take this space to thank Ellen Rosenberg of Resource Central for the great job she did putting together this year's KansasFest. Thanks Ellen, it was a blast. (For more about this year's KansasFest, be sure to see the "KansasFest 1993" article elsewhere in this issue.)

And of course, I also have to thank Tom Weishaar for having the conference, and for being such a good sport during the celebrity roast. Thanks Tom. And seriously, don't let this be the last KansasFest. (Next year, I want to do a live-action parody of "Itchy and Scratchy." It should be really gross.)

I also need to thank everybody that helped out with the roast and lunch skit. Those persons are: Matt Deatherage, Tara Dillinger, Dennis Doms, Sally Dwyer, Dean Esmay, Hangtime, Bill Heineman, Andy McFadden, Roger Wagner, and Joe Wankerl. My apologies to anyone I left out, and my thanks to everyone that helped with the entertainment!

ShareWare Solutions II

I just wanted to take a second to plug Joe Kohn's new newsletter *ShareWare Solutions II*. (See "What's New" in *GS+* V4.N5 for complete information.) Joe was passing out complementary copies at KansasFest, and I gotta say I was very impressed with it. Good information, good writing, and a very nice design.

If you are serious about your IIGS, you need to give this publication a try. So, if you missed it, here's the address to write for more information:

Joe Kohn
166 Alpine St.
San Rafael, CA 94901

That's all for this time.

Diz

CONTENTS

FEATURES

System 6.0.1—For Users.....	5
KansasFest 1993.....	9
Catch the .WAV: A Guide to Scavenging Sound Files.....	18
Secrets of Writing Twilight II Screen Blankers.....	41

PROGRAMS

AutoSave v2.0.....	12
Finder Binder.....	14
EGOed lite v1.0.1.....	21
Extra Bits.....	40

DEPARTMENTS

Writer's Block..... .. inside front cover	
Letters.....	3
Errata.....	15
Rumors, Wishes & Blatant Lies.....	23
How to Use Your GS+ Disk.....	24
How to Get System 6.....	26
GS+ Ordering Information.....	34
What's New.....	44
Warranty Disclaimer and Copyrights.....	45
GS+ Back Issue Information.....	47
GS+ Classifieds.....	48

REVIEWS

Castle Metacus.....	28
• HardPressed.....	29
• The Lost Treasures of Infocom.....	32
• Treasures From Heaven: Quest for the Hoard 2.....	35
• Your Money Matters.....	36
• Zip Drive.....	38

Products marked with a bullet (•) were review copies provided by the publisher.

ADVERTISERS

Alltech Electronics.....	43
Charlie's Appleseeds.....	48
C. E. Field Enterprises.....	4
ECON Technologies.....	27
Event Specialists.....	11
LRO Computer Sales.....	16, 17
Parsons Engineering..... inside back cover	
Pegasoft.....	8
TMS Peripherals..... back cover	
Zip Technology.....	46

GS+

Magazine

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On The Cover

This issue's cover has absolutely nothing to do with the contents of this issue, but since most of our readers are young males, we thought we'd give you a special treat! (P.S.: Buy your tie-dyed GS+ T-Shirt today to keep this type of cover coming!) Photo of Nory and Bob's girlfriend Rebekah Wanzel taken by Bob

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We use a Macintosh LC as a file server because we have to.

Letters

Dear GS+,

I enjoyed the articles in GS+ V4.N5 but I found some [omissions] that I would like to bring to your attention . . .

The KeyFonts Pro CD-ROM is a extended CD-ROM version of two pre-existing disk-based font sets. The KeyFonts package is a set of 100 Macintosh PostScript Type 1 [fonts], plus the same 100 fonts in Macintosh TrueType format. These [fonts] are on 800K Macintosh HFS disks, [and are therefore usable with System 6]. Thus the same process as is documented for use of the CD-ROM can be done with these disks *without* the need of a CD-ROM drive. The cost from MacWarehouse is \$49 (order item "FON 0480"). [Another package, called] More KeyFonts contains another 100 fonts in both PostScript and TrueType formats [MacWarehouse item number "PRD 0013" for \$49]. While this is only 200 of the 303 fonts on the CD-ROM (and costs \$98 vs. the \$30 for the CD-ROM) you do not need the \$500+ cost of the CD-ROM Drive to gain access to them. MacWarehouse and CD-ROM Warehouse (whose numbers you omitted from the article although you mentioned them) can be reached at 800-255-6227 and 800-237-6623 respectively . . .

Robert A. Rosenberg
Suffern, NY

Thanks for the information Robert! I knew about the two disk-based KeyFonts collections, but since I hadn't actually bought them, I didn't feel I should mention them in the review. Looking back, however, I can see that it was a pretty serious omission. I should also point out that these packages can also be found at your local software store (Software Etc. and Electronics Boutique are two places I've seen them).

Dear GS+:

As long as I have to use a stamp [to send in a Feedback form] I might as well write you a letter. I hope your sound "Scavenger" article includes getting sound files for "The Music Studio." I got some "SNG" files from The Public Domain Exchange and one was done by someone from the Toronto Atari club. I believe Music Studio is available for the Atari and that the Atari has a Motorola CPU; otherwise, the machine seems even more obscure than the IIGS . . .

Frank Gizinski
Racine, WI

Well Frank, Bill's sound article ("Catch the WAV"—it appears in this issue), doesn't have any information like that in it. It just deals with simple sound files. But, how to move complete music and song files is a good idea for a future article. As for the Atari ST, it does indeed have a Motorola CPU (a 68000 to be exact). And it's odd that you should mention it, because it comes up in at least two different places this issue ("System 6.0.1—For Users," and our review of the Lost Treasures of Infocom).

Dear GS+:

Your issue V4.N5, the second I have received, interests me greatly. you seem to be asking what your subscribers want from you. Like Mr. Mongrue of Baton Rouge [in the V4.N5 "Letters" column], I need information on how to use my IIGS to better advantage.

For example, I have recently compiled a cookbook using AppleWorks 3.0 and Publish It! 4, printed on my ImageWriter II. It was pulled into shape by J. P. Thompson of Bethany OK, using a Macintosh and a desktop laser printer. A page from each version is enclosed.

My question is, what equipment and program can I add to my IIGS to give a more professional look to my output? I am not averse to spending money to achieve my goal, but wasting money buying equipment I don't need or understand is undesirable.

My IIGS is ROM 1, purchased on impulse from a defunct Apple dealer; my printer is a 1985 model, and I use the IIGS as I used my IIe. There must be advantages to the IIGS that I do not know about . . .

If your mission is to promote the Apple IIGS, as I gather it is, there are many of us cheering you on.

Marjorie B. Hale
East Greenwich, RI

If you want to go on using your IIGS as a IIe, the solution is extremely simple. Just buy an Apple Personal LaserWriter NTR and hook it to your computer. This is basically the same printer we use for our proof pages, so you'll get the same quality from the NTR. Apple is practically giving these away in the latest Apple Catalog (call 1-800-795-1000 to request a copy) for only \$1,079. (That price includes next day delivery. I paid

almost \$4,000 for a similar printer four years ago, and I had to take it home myself.) Best of all, Publish It! 4 comes with everything you need to print to that printer. Other than the cables to hook it up, you shouldn't have to buy anything else.

But, if you want to use your IIGS as a IIGS, you will have to spend a bit of money before you can think about purchasing the laser printer. Joe wrote a very good article on this subject ("The Basic IIGS" in GS+ V4.N2), but I'll hit the high points again, just to give you an idea of what you are getting into.

First of all, you'll need as much memory as possible. Fortunately, the IIGS market has recently seen a glut of very inexpensive 4MB RAM cards. Some are as cheap as \$120. Best of all, that extra RAM can be used by both AppleWorks 3.0 and Publish It! So, this would be a good investment for you regardless of how you end up using your IIGS.

Next, you must get a hard disk! The current IIGS System Software comes on six 800K disks, and trying to use it from a floppy drive will surely result in lots of hair being pulled out. Realize however, that most hard drives will also require the purchase of a controller card to actually use the drive. (However, some internal hard drives, like the Zip Drive [which is reviewed in this issue] come with their own controller cards, so there is no extra cost.) Still, if you shop carefully, you should be able to get a fairly-large capacity hard drive, a controller card, and a 4MB RAM card for around \$500. Together with the Personal LaserWriter NTR, that would be a total cost of about \$1,600 and would give you a system almost exactly like the one I'm using right now to publish this magazine.

As for the advantages of using the IIGS as a IIGS. Hopefully, those will be self-evident as your subscription to GS+ Magazine continues!

If you have a question, comment or criticism about GS+ Magazine, we want to hear it! For a quick reply, include a phone number, e-mail address, or self addressed stamped envelope. Send your comments to:

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I fired *InCider**

Dear Apple II Enthusiast,

InCider magazine has gone the way of the dodo bird. But I haven't! I'm Cindy Field. And I'm pleased to be able to offer you a special deal on ready-to-use templates for **AppleWorks GS**, **AppleWorks 3.0**, and **Publish It!**

Originally sold by *inCider* for a princely sum, my templates can still help you get the most from your Apple II. Except now you'll have money left over to spend on other great products mentioned in *GS+*. Or maybe take the kids to a fast-food joint for burgers.

Either way, each of these Apple II packages includes a disk with ten templates and ready-to-run samples. Templates are word processing, database, spreadsheet, or desktop publishing files that are set up and ready to go. All you have to do is customize them for your own use. Each template package comes with clear documentation, either on disk or in booklet form. Those who have read my articles in *inCider* know that muddying the waters just isn't my style.

Neither is shortchanging folks. That's why I guarantee you'll be satisfied with the template packages you order through this ad. If one of my products doesn't live up to your expectations, return it within 30 days for a prompt, courteous refund. (Sorry, shipping and handling charges are not refundable.)

Hope to hear from you soon!



* OK, so I didn't exactly "fire" *inCider*. It was kinda the other way around. But these templates are still a great deal. Order today!

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System 6.0.1—For Users

By Steven W. Disbrow

Over a year after System 6 was released, System 6.0.1 is finally available! While the "x.0.1" designation suggests that this is nothing more than a bug fix, it's actually *much* more! System 6.0.1 contains lots of new features that will make your IIGS computing even better!

New Finder

The most obvious changes in System 6.0.1 are in the new Finder. First and foremost is the new *Keyboard Navigation* feature. Using this feature is as simple as typing the name of the item you want to select. For example, to select my hard drive partition that is named "Test", I simply hit the "T" key, and the Finder selects the first item on my desktop whose name starts with "T". If more than one item starts with the same letter, I would just quickly type the next few letters in the name of the item I want to select. For example, if I had two items, one named "Joe" and the other named "Josef", and I wanted to select "Josef", I would quickly type "Jos" to select it.

Another way to select things using keyboard navigation is to use the arrow keys and the tab key. Using the arrow keys you can quickly move from item to item, traveling around the screen either vertically or horizontally. Pressing the tab key tells the Finder to select the next item alphabetically. If you hold down the shift key while pressing tab, you'll be taken to the previous item alphabetically.

Keyboard navigation works on the Finder desktop and in any Finder windows that you have open. However, you have to let the Finder know if you want to navigate inside a particular window or among the

items on your desktop. To navigate the topmost Finder window, simply press the escape key. To navigate the desktop, press Command-escape.

Shuffle?

Speaking of Finder windows, it's now easier to switch between them. To send the topmost Finder window to the back, press Command-keypad-0. (That is, you hold down the Command key, and press "0" on the keypad. The "0" key at the top of the keyboard *won't* work.) If you want to bring a Finder window from the back to the front, hold down the shift key while pressing Command-keypad-0.

While this new feature is nice, it's not really as useful as it could be. For example, if the topmost window is not a Finder window (i.e. if it's a New Desk Accessory window), it won't work at all. Plus, it only works in the Finder. (If you want a utility that does this same trick [and more!], works with all types of windows, and works with *all* desktop programs, check out version 2.0 of our Shuffle utility on the GS+ V3.N6 disk.)

Point of View

Speaking again of Finder windows, the new Finder allows you to quickly and easily change the way items are sorted and displayed in a window. If the Finder window you are working with is displaying its items in one of the "list" views (i.e. by Name, by Date, by Size or by Kind), you can change that view without having to go back to the View menu. Simply click the mouse on the appropriate title in the window's information bar, and the view is changed automatically!

A.K.A.

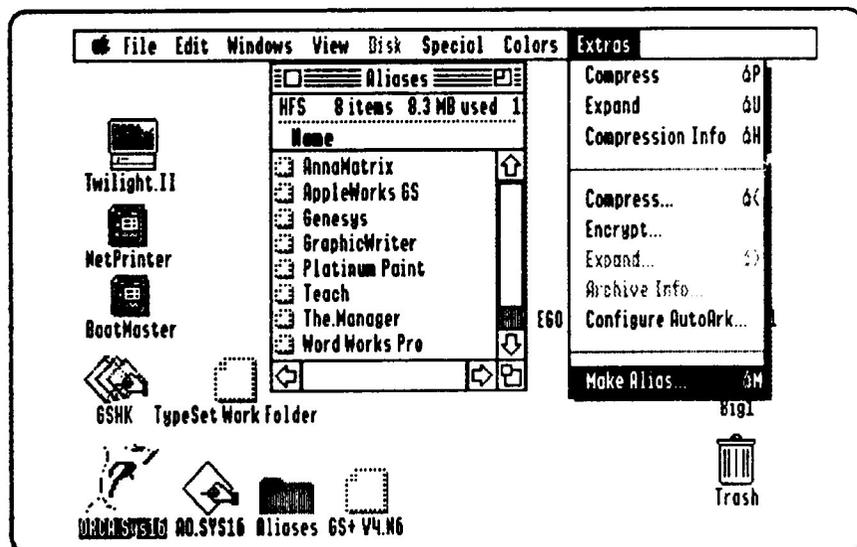
If your IIGS is attached to an AppleShare file server, one of the neatest things in System 6.0 was the EasyMount Finder extension that let you create an *alias* to your file server. (An alias is a small file that "points at" another item. So, for example, when you "open" the alias, you end up actually opening the item the alias was pointing at.) Instead of having to go through the AppleShare control panel, you could just double-click on the alias and presto!—You were connected! Unfortunately, very few IIGS owners are connected to an AppleShare file server, so very few people got to use this neat extension.

However, the new version of EasyMount that comes with System 6.0.1 makes this shortcoming a thing of the past. The new EasyMount not only lets you make aliases of file servers, but you can now also make aliases of applications and folders! What good is this? Well, on my system, I have a folder called **Applications**. In this folder, I've created aliases to the applications that I use most often. So, instead of dragging all of these applications out on my desktop, I just put the **Applications** folder there. When I want to run an application, I open the folder, and double-click on the alias of the application I want to run.

While this is great, it's nowhere near as powerful as aliases on the Macintosh. For example, on the Macintosh, you can create an alias for *anything*. On the IIGS, you are limited to aliases of file servers, applications, disks, and folders. Also, on the Macintosh, aliases are integrated into the operating system so that all Macintosh applications can use them. On the IIGS, aliases are only recognized by EasyMount, and only while you are in the Finder. To all other IIGS applications, aliases are just another file that can't be opened. Another annoying limitation of IIGS aliases is that they all have the exact same icon. The only way to tell what type of item the alias is for is to give it a descriptive name. This isn't always easy on a ProDOS disk, so I keep all of my aliases on an HFS disk.

Copying & Moving Things

When you copied things in previous versions of the Finder, you could hold down the option key to bring up a dialog that would let you tell the Finder how to handle any duplicate items it found during the copy procedure (i.e. should the Finder replace those items, ignore those items,



etc.). Now, however, that dialog is gone, and the Finder simply handles duplicate items on a case by case basis. So what happens now when you hold down the option key? Good question . . .

If you've ever needed to copy a file from one folder to another folder on the same disk, you've probably fallen into the trap of simply dragging the file from the source folder to the destination folder. Unfortunately, in the Finder, this has the result of actually *moving* the file out of it's original folder and into the destination folder. (Note that this only happens when you are trying to copy the file to a different folder on the *same* disk. If you are copying between two *different* disks, things work just as you expect them to.) So, the solution has always been to select the item you want to copy, duplicate it using the Duplicate item in the Finder's File menu, and then move the duplicate to where you want it.

In System 6.0.1 however, all you have to do now is hold down the option key while you drag the file to the destination folder! This forces the Finder to actually make a copy of the file and save it in the destination folder! This is extremely handy, and a great time saver.

Magic Routing

Inside the System folder on your startup disk, there are several other folders that are used to group things like control panels and New Desk Accessories together. If these files aren't in the proper folders, your IIGS won't recognize them when it starts up. The new Finder makes it easy to be sure you have things installed properly by a process Apple calls "Magic Routing." For example, if you drag a font file on top of your System folder (to copy or move it there), the Finder will inform you that the file belongs in a special place inside the System folder and will ask if it should put it there. If you say yes, the file will automatically be copied into the Fonts folder! This works for all types of system files, including: control panels, Classic Desk Accessories (CDAs), device drivers, INITs, Finder extensions, File System Translators (FSTs), fonts, New Desk Accessories (NDAs), rSoundSamples and tool sets.

While this is a really keen feature, there is a very annoying bug in Magic Routing—it only works *once*! After that, the Finder forgets that the System folder is on your startup disk! (It will be redrawn as a standard folder after Magic Routing has been performed.) The only way to fix it is to close your boot disk and reopen it. The Finder will then realize that the System folder is on your

startup disk and you will be able to perform Magic Routing again. (Actually, this problem occurs whenever any program makes a change to the System folder on your boot disk. If that folder is visible when the change occurs, the Finder will redraw the folder as a normal folder.)

New Clipboard

Another big change is that the Clipboard window (available via the Show Clipboard item in the Edit menu) can now play any standard sound sample (the kind used by the Sound control panel) that is in the Clipboard. For example, if you go to the Sound control panel, select the "Whoosh" sound, and then pick Copy from the Edit menu, the Whoosh sound will be copied to the Clipboard. If you then pick Show Clipboard from the Edit menu, the Clipboard window will appear and you will see a tiny speaker icon in it. If you click on the speaker, the Whoosh sound will be played!

Best of all, this isn't just something the Finder can do. This enhanced Clipboard window is now available to any application that wants to use it, via a new tool call, ShowClipboard. (However, older applications will have to be re-written to take advantage of this, so don't expect it to show up in something like AppleWorks GS.)

What Else?

There are lots of other little changes in the Finder, like new and improved help text, but most of those are simply to accommodate changes elsewhere in the IIGS system software. The last noticeable change I have to tell you about is a rather silly little cosmetic thing, that just happens to be really neat. In the Finder, we've always been able to select items by using the mouse to "draw" a box around the items we want. However, those items

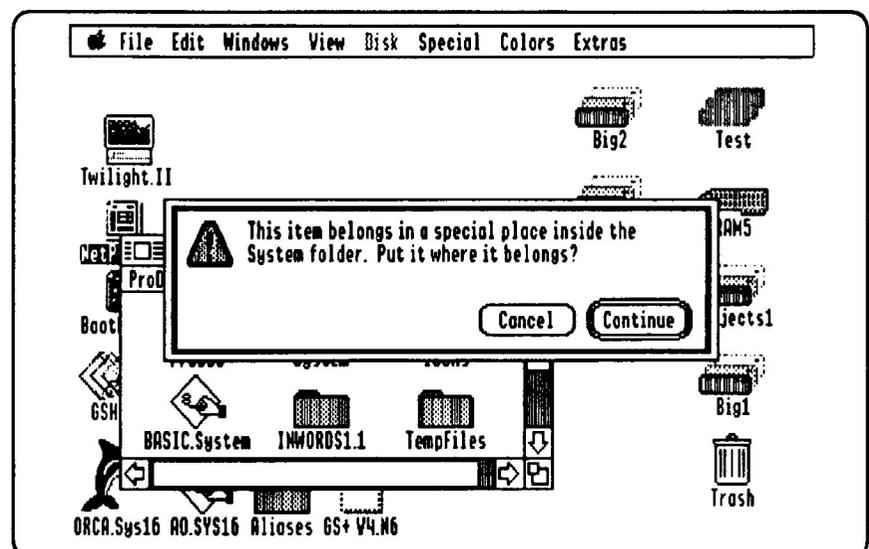
weren't actually selected until you let go of the mouse button. In the new Finder however, items are selected automatically *when the box encloses them!* This means that before you ever let go of the mouse, you can see exactly what you have selected. A tiny thing, but very, very handy.

Even More Control

When System 6 came out, Apple defined several new battery RAM parameters that would let you have even more control over your IIGS. However, they didn't have time to create the control panels to access these new parameters. So, we wrote the Extra Bits control panel (GS+V3.N6) to take care of them. But, with System Software v6.0.1 Apple has changed several old control panels to give you access to these same parameters. So, we changed Extra Bits too. For more information on the changes Apple made (and the changes we made to Extra Bits), see the "Extra Bits v1.0.1" article elsewhere in this issue.

The last control panel change to tell you about is actually not new at all—it's been there since System 6. But, Apple didn't say anything about it, and nobody seems to have noticed in the meantime. This is a bit of a pity, because it's actually very useful.

What it is is a "LaserWriter" option in the Direct Connect control panel. (This is the control panel that you use to select a direct connected printer to print on.) If you pick "LaserWriter" in this control panel, and you don't actually have a LaserWriter connected, printing will generate a PostScript® file. You can then take this file to another computer that is connected to a LaserWriter and download the file to the printer for super-sharp output. The other computer can be a



Macintosh (with the appropriate software, like Apple's LaserWriter Font Utility) or a IIGS running our own LASERbeam program (GS+ V4.N4).

The MS-DOS FST

All of these Finder changes are nice, but the one feature we've gotten the most questions about is the new MS-DOS File System Translator (FST) that comes with System 6.0.1.

Now, before you start screaming with rapture at the arrival of this new FST, you need to realize that it has quite a few limitations compared to the HFS (Macintosh) FST that we've had since System 6. (If you don't know what the heck an "FST" is, let alone what an "HFS FST" is, you need to check the GS+ Glossary on your GS+ Disk and read the articles "Understanding FSTs" in GS+ V3.N6, and "The Scavenger" in GS+ V4.N5.)

First and foremost, this FST is only usable if you have the proper *hardware!* The standard Apple 5.25- and 3.5-inch disk drives simply *will not read MS-DOS diskettes!* To read 5.25-inch, 360K MS-DOS diskettes, you will need to have an Applied Engineering PC-Transporter and an Applied Engineering 5.25-inch TransDrive. If you want to read high density, 3.5-inch MS-DOS disks (1.44MB), you *must* have an Apple II SuperDrive controller card, *and* you *must* have an Apple SuperDrive or a SuperDrive compatible (like the Applied Engineering High Density, 3.5-inch drive). You can also read 720K MS-DOS disks using this hardware configuration. For a complete look at the hardware you need to read different types of MS-DOS disks, see the chart "MS-DOS Disks, and the Drives That Love Them."

Second, you must realize that the MS-DOS FST is a *read-only* FST. "Read-only" means that you can read files from an MS-DOS disk, and you can copy those files to your other disks, but you *can not* write files to an MS-DOS disk, and you *can not* format disks for the MS-DOS operating system.

Beyond that however, the MS-DOS FST seems to work flawlessly. I've been able to easily copy files off of both 720K and 1.44MB diskettes that Noreen has brought in from her real job. While the FST does do a good job of translating file types for use by the IIGS (files that end in ".TXT", ".BAT", and ".ME" [as in "Read.Me"]) all show up as plain text files), most files on your MS-DOS disks will probably show up as type "Unknown." So, you'll have to use a utility like our own NoDOS (GS+ V4.N4) to change the types of your files to something you can use more easily. (For more information on why you would want to do this, see "The Scavenger" in GS+ V4.N5.)

Still, there are a few other things that this FST can not do. First of all, it can not read some OS/2 disks. This is because OS/2 has the capability of using yet another file system, which is totally alien to MS-DOS.

Another type of disk the MS-DOS FST can't read is Atari ST disks. Why am I mentioning this? Well, it's because the format used on the Atari ST and MS-DOS are almost identical (My wife's old Atari ST can read MS-DOS disks and almost all of the PCs we've tried can read ST disks). However, there *are* differences between the two formats, and this wasn't intended to be an Atari ST FST. (Still, I was kind of hoping this would work, because I wrote a few programs for

Noreen's ST and I wanted to bring them over to the IIGS without having to crank up the ST again. Oh well . . .)

Actually, some of my problems may stem from the fact that I'm using the Applied Engineering HD 3.5-inch Drive (a SuperDrive compatible), and not a genuine Apple SuperDrive. I have heard that these drives have some very obscure incompatibilities with the Apple II SuperDrive controller, but the only problem I've confirmed is the inability to use this drive to write out 1.44MB disks (of *any* format) using our Replicator program (GS+ V4.N2). Of course, this could be a Replicator bug, but we just aren't sure at this point. (We contacted Applied Engineering about it, but they weren't sure either.)

ProDOS 8—Easier Than Ever!

If you do lots of work with 8-bit programs (like AppleWorks Classic), one new feature of System Software v6.0.1 that you'll love is that you can hold down the "8" key when you reboot and you'll be taken immediately to AppleSoft! Or, if you wish, you can replace **Basic.System** with your favorite 8-bit program and boot directly into that. To get back to GS/OS, you simply quit from your 8-bit program, and use the program selector that is built in to ProDOS 8 (which is similar to "Bird's Better Bye"), to select and run the ProDOS file on your boot drive.

Vulcan Friendly

If you have a Vulcan internal hard drive, you may remember having some trouble installing System 6 on your system. This was due to the fact that the Vulcan drive would behave strangely if your boot disk didn't have the special Vulcan driver installed. Since the System 6 Install disk *didn't*, lots of folks reported problems installing System 6 on their Vulcan drives. In System 6.0.1, Apple has gone out of their way to fix this problem so that you wouldn't have any trouble installing the new operating system on your Vulcan. They did this by changing GS/OS itself to work around the Vulcan's problem—talk about service above and beyond the call of duty!

Disappointments

On several occasions, we were told (and we have passed this information along to you through the pages of GS+ Magazine) that the main reason System 6.0.1 was taking so long to finish was that the Apple II EtherNet card was still in development, and that the number one priority for System 6.0.1 was support for the EtherNet card. Unfortunately, support for the EtherNet card seems to have been pulled from System 6.0.1 at the last

MS-DOS Disks, and the Drives That Love Them

5.25-inch Formats

360K
1.2MB

Drive To Use

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<No drives are available to read this format>

3.5-inch Formats

720K

Drive To Use

Apple 3.5 Drive^o
Apple SuperDrive†
Applied Engineering HD 3.5-inch Drive†
Applied Engineering 3.5-inch TransDrive^o
Apple SuperDrive†
Applied Engineering HD 3.5-inch Drive†

^o Requires PC Transporter

† Requires Apple II SuperDrive Controller Card

minute. And, even worse, there is no news of when, or even if, the Apple II EtherNet card will ever be released. (Personally, I'm just glad that they finally decided to release System 6.0.1, regardless of the status of the EtherNet card.)

How To Get It

System 6.0.1 is great. Unfortunately, getting a copy may not be as easy as you like. Usually, whenever Apple releases new System Software for the Apple II, they try to distribute it to all of their licensees (like us) as soon as possible, so that we can get it to you as soon as possible. This time around however, things are happening a bit differently. As I write this, Resource Central is the *only* authorized distributor of System Software v6.0.1. No one else has gotten the "go-ahead" from Apple Software Licensing to distribute it. Until we *do*, we simply can't distribute it to any of our subscribers. However, if you send us your five disks (see "How To Get System 6" elsewhere in this issue for more information), we will hold them until we get permission to distribute System 6.0.1. When we do, we'll ship out your disks as soon as possible.

If you are a programmer, you are probably also interested in getting information on using all of the new Toolbox calls in System 6.0.1. As with System 6, the ByteWorks is the official source for the

You Need a Hard Disk!

By now, everyone should know that if you want to get the most out of System 6.0.1 (and your IIGS), you must have at least 2MB of RAM and a hard disk! In case you don't know that, I'll say it again: To get the most out of System 6.0.1 and your IIGS, you should have at least 2MB of RAM and a hard disk!

Even if you have a bare-bones IIGS system, you can upgrade to this configuration easily and inexpensively. Just by glancing at the advertisements in our last issue, you can get a 4MB RAM card and a 85MB hard disk (with controller card) for less than \$550. Considering that I paid over \$1,000 a few years ago for my 60MB hard drive (and nothing else!), I'd say that's a pretty good deal!

For more information on how to expand your IIGS, check out "The Basic IIGS" in GS+ V4.N2.

information you need to write programs that take advantage of System 6.0.1. The new *Programmer's Reference for System 6.0.1* is the official reference for all these new calls and it should be available soon for \$10. (The ByteWorks will also offer updates for all of their compiler products so that they can take advantage of System 6.0.1. For more information, see "What's New" elsewhere in this issue.) If you are a registered owner of any ORCA product, you should have gotten an update notice by now, if you haven't, give the Byte Works a call and request some more information.

The End?

If you liked System 6, you will love System 6.0.1. Once again, the guys in the Apple II Continuation Engineering Group have done a fantastic job. (Let's just hope that this isn't the *last* great job they do for the IIGS!) Of course, there's *much* more in System 6.0.1 than I've discussed here, but it's mostly of interest to programmers. If all you want to do is use the new operating system, the information I've given you here will make a great starting point. GS+

Pegasoft's Pixel PaRty Summer

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J	D	E	O	G	E	E	E	L	D	Bard's Tale	Line	Tone
O	S	R	A	Z	A	S	R	Y	R	Best	Love	Tool
Y	I	O	A	P	T	O	N	E	A	DuelTris	Mazer	User
S	R	M	T	H	W	L	S	N	O	EgoEd	Money	World
T	T	O	D	H	I	U	A	O	B	Hard (disk)	More	
I	L	U	T	N	G	T	L	M	Y	Joystick	Mouse	
C	E	S	E	S	U	I	O	W	E	Keyboard	Resolution	
K	U	E	A	E	V	O	L	O	K	Leap	Room	
Y	D	L	E	A	R	N	S	S	L	Learn	Sound	

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Get Questing!

Ah, Kansas City! The magical land of "Ahs." Home of the Royals, a plethora of "rib joints," and the annual A2-Central Summer Conference, better known as KansasFest. Each year, Apple II developers of all sizes, shapes, shades, and funny accents come together to share their ideas, visit with old friends, make new friends, and have some fun.

This year however, there were a few differences. First, this year's show was much shorter: there were no "colleges," and the conference itself was only two days long. (A third, "free form" day was included to give folks a chance to hack on programs and party.) This past December, as you probably know, Apple discontinued the IIGS, and all the attendees knew that there is the very real possibility that this year's show will be the last. Another change from previous years was that there was no official representative from Apple Computer Inc. (Matt Deatherage was there, but he paid his own way, and he made it clear that he was there not to represent Apple, but to see his friends.)

Perhaps the biggest difference, however, was that, this year, there was no Apple Central EXPO following KansasFest. This was a big disappointment for me, personally, because the EXPO has always been a great way for us to meet our subscribers, and it's been fairly good for us financially too. Not having the EXPO also seems to have resulted in a decreased KansasFest attendance. In the past, several developers have told me that they used the proceeds from the EXPO to cover the expense of KansasFest, and apparently, without the EXPO, some of them couldn't afford to come this year. (And, in a fairly ironic twist, I've been told that there *will* be an Apple Central EXPO next year, but, as noted earlier, there may *not* be another KansasFest.)

KansasFest Eve

The night before the show started, something interesting happened: a group of GENie sysops (who shall remain nameless) got together and shaved their heads. (Actually, this is something that Joe and I had planned to do while at the show, but after we heard that it had already been done, we decided against it.) Before the shaven headed sysops showed up, rumors were flying as to who was getting shaved, who was doing the shaving, etc., but when they finally showed up, everyone was very surprised with how it all turned out. In fact, it

seemed to be quite a good look for all of the folks involved, and very few jokes were made about them during the show. [Editors Note: No, this paragraph did *not* start out in "Rumors, Wishes & Blatant Lies."]

Day 1

The next morning, the show started off with a rather "fishy" awards ceremony. Uncle DOS (Tom Weishaar) gave awards to all those that had attended all five KansasFests. The awards themselves were various fish-shaped bits of promotional materials left over from Resource Central's publication, *Fishhead's Children*, which recently, um, went under. Come to think of it, the entire conference had a fishy undercurrent. Boxes of free *Fishhead's Children* pencils, sailor's caps, and a fish net at the registration desk. I only hope I can handle the eventual end of *GS+* Magazine with as much grace. (Ah, I can see it now, "Will trade tie-dyed T-Shirt for food.")

After the awards, Tom turned the microphone over to Mike Westerfield of the Byte Works, Inc. Mike gave a very good speech on how to get started writing and selling Apple II software. Even though our market is getting smaller and smaller, Mike actually managed to cheer up several people (at least Joe and myself) about the future of the Apple II market.

Avatar Update

After Mike's speech, Bill Heineman got up and gave us an update on the Avatar project. He confirmed the rumors that the Avatar's main financial backer had pulled out, leaving them with a partially finished product, and no capital to finish it with. However, the Avatar does live on. In the next few months, the Avatar team hopes to bring to market a Super Nintendo peripheral that will contain the Avatar Toolbox (which is a "clean room" reproduction of the IIGS Toolbox), and will let Super Nintendo owners run some IIGS software! While this sounds like a very neat product, the conference attendees I spoke with expressed some doubt as to whether or not there was a market for such a device. Time will tell I suppose.

After that, we had lunch! Now, two years ago, I complained about the lunch that was served, and last year they asked us to help plan the lunch menu (to keep me from complaining, I suppose). This year, we had no influence on the lunch menu. Fortunately, our "help" wasn't really

needed. Lunch was very good on both days of the show.

The Sessions

After lunch the conference sessions began. In past years, there have been three or even four sessions going at once. This year there were only two sessions at a time. While this did make it easier to choose which sessions to attend, it was a bit disappointing. (I suppose Joe and I are partially to blame, we didn't offer to run any sessions ourselves this year.)

Even with fewer sessions to choose from, there was something for everyone. Among the sessions were talks on data compression, AppleSoft programming, sound programming techniques, telecommunications, designing an adventure game, the introduction of the (until recently) top-secret "AppleWorks 4.0" patch (better known as Quadriga), and Object Oriented Programming.

However, my favorite session was Mike Westerfield's presentation of the 3D-Logo that the ByteWorks is developing for the IIGS. It will be available as both a stand-alone product and as an "add-in" language for HyperStudio. For those of you that aren't familiar with Logo, it is a simple, yet extremely powerful, programming language that just about anyone can use. Mike has enhanced it so that you can create 3D movies on your IIGS! Yes, you have to wear the funny little red and blue glasses to get the full effect, but the results are amazing. I could be wrong, but I think that this is going to be an amazingly big product for the Byte Works, and the IIGS. (Of course, you can expect a review here in *GS+* Magazine when it becomes available.)

After the sessions were over, we all gathered in the cafeteria at the Avilla college (which is where most everyone stays during KansasFest), to roast the man that brought us all together: Tom Weishaar. It was my honor to serve as Master of Ceremonies as Dennis Doms, Dean Esmay, HangTime (he has no other name), Roger Wagner, and Matt Deatherage (with a vocal assist from the lovely A2.Goddess, Tara Dillinger), all took their turns taking shots at Tom. Of course, Tom had his chance to refute, rebutt, and hit back after the others were finished. It was an excellent, and hilarious time, with minimal bloodshed. Unfortunately, I don't think that we'll be selling a tape of this year's event—the reason being that the camera we used (and

which I bought specifically for taping the roast) ate a portion of the tape and rendered it fairly useless.

Fun & Games

After the roast, Joe and I began wandering around the halls of Avilla, looking for no one in particular. Oddly enough, we found him: Roger Wagner. At this point, we learned a dark and terrible secret: Roger likes to play parlor games, and, god help us, we like them too! It started out innocently enough, with Sally Dwyer of Resource Central coaxing Roger and me into doing our best ballerina impersonations, but it ended up with about ten of us sitting on the floor playing a game called "Murder." In this game, one person is a murderer. If the murderer winks at you, you must pretend to die in a horrible fashion. If someone sees the murderer winking, they can accuse them of being the murderer. If they accuse the correct person, the murderer must die, if they accuse the wrong person, the accuser must die. Sadly, I was forced to kill Matt Deatherage at one point in the game. (A variation of this game, called "Killer" involves consuming vast amounts of beer.)

But hey, if you think that sounds like fun, you haven't heard anything yet.

After moping the blood off the floor, everyone went their separate ways. So, I headed up to the sixth floor of the Ridgway dormitory to see what was going on. (Note that "Ridgway" is pronounced "Ridgeway"—there has never been an "e" in the name.) Much to my surprise, there was a crowd standing around watching (and I swear I am not making this up) Roger Wagner bend over to pick up a grocery sack in his teeth. Apparently I had stumbled onto another of Roger's (literally) twisted parlor games, called "Bite the Bag." (Oddly enough, this one also has a variant involving large quantities of beer. Hmmm.) The objective of this sick little game (invented

by plastic surgeons no doubt) is to bend over and pick up a grocery bag in your teeth. The catch is that you can only have one "appendage" touching the ground when you get the bag in your teeth. As if that weren't evil enough, after everyone has had a go at the bag, you increase the difficulty level by ripping a couple of inches of paper off the top of the bag—and then everyone goes again. The strategy is in two parts:

- 1) Avoid the wet spots on the bag.
- 2) Don't smash your face on the floor.

Believe it or not, this contest went on for *hours*. I myself played for a little while, but I eventually gave up and turned the contest over to the more, er, gifted contestants. In specific, Randy Brandt acquitted himself very well and he was heavily bet upon by Bryan "Zak" Pieterzak. Zak would not play himself, no doubt due to some injury he sustained while doing some sort of physical activity at some point in his life.

By the end of the evening, the contest was down to the bottom of the bag, and only a few brave souls were left in the contest. However, even that proved to be no challenge for the brave bag biters. So, having no bag left to take away, the winner was decided by timing how long it took each contestant to get the remains of the bag off the floor. The winner, with an amazing time of only *seven* seconds was Paul Zaleski. Behind him by a mere second, was our own Technical Editor, Joe Wankerl. Sadly, Roger, who apparently started the whole mess, did not win. (Roger did manage to pick up the bag remnants in *five* seconds, but an instant replay showed that he had two appendages on the ground at the moment of lift.)

After the final round, several people still weren't satisfied with the evening's entertainment, and began trying to pick up dimes in the same manner. When it was found that teeth wouldn't work, one

bright lad solved the problem by slamming his head down onto the dime so that it would stick when he lifted his head back up. At this point, I decided to call it a night.

Day 2

The second day of the show brought more sessions (many of which I lumped into the earlier discussion of the sessions) and, lunch. Again, lunch was good, but the entertainment was even better. At my request, Matt Deatherage was the host of this year's lunchtime skit, "The Deatherage Group." This was a parody of the PBS television show, "The McLaughlin Group" featuring a panel of Apple II pundits that were hand-picked by Matt. The panel consisted of myself, Bill Heineman, Andy McFadden, and Tom Weishaar. Among the topics discussed were, Yellow Journalism, Vaporware, the Avatar, Apple II developers jumping ship, Joe Kohn (sub topic: What's the deal with this guy?), and KansasFest itself. The commentary was fast and furious:

Bill Heineman: . . . I love KansasFest. Where else can I make a complete fool of myself in front of my friends?

Matt Deatherage: Everywhere!

Now *that's* entertainment!

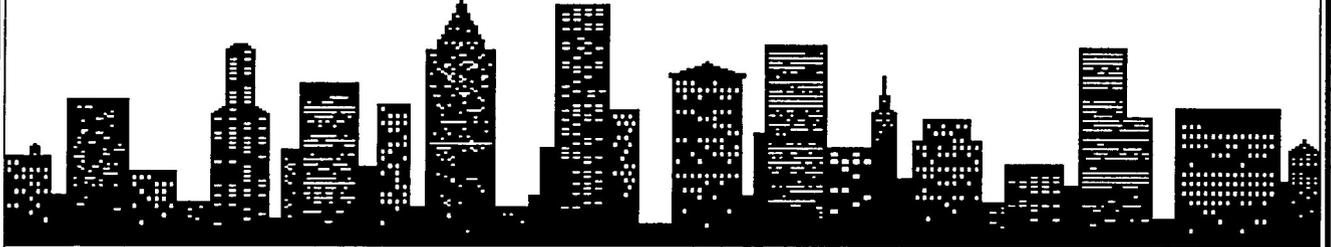
Farewell?

As we left the show late Friday afternoon (I had to return early to attend my ten-year High School reunion), Joe and I couldn't help but wonder if this will be the last KansasFest. Subsequent conversations with Tom haven't told me for certain if this was the last KansasFest (Tom told me never to ask him that question the week after the show), but we certainly hope not. Even though, as I said during one of my turns on The Deatherage Group, there were ". . . fewer people, fewer sessions, [at the] same price as last year . . .", KansasFest is a hell of a lot of *fun*. And it would be a shame if this were the last one. GS+

Top 10 Things To Do At the 1993 KansasFest

- 10) Play Bite the Bag.
- 9) Try to drive while wearing official Byte Works 3-D glasses and 3-D underwear.
- 8) Try to guess Hangtime's real name. (Has anyone tried "Rumplestiltskin?")
- 7) Count all the different fish trinkets. (Should we call these "Fishhead's Orphans?")
- 6) Check your rubber raft . . . *just in case*.
- 5) Doodle on the pad of the person next to you.
- 4) Count the PowerBooks.
- 3) Do yet *another* imitation of "Beavis and Butt-head."
- 2) Get rich selling 8mm video tapes to Roger Wagner.
- 1) Try not to stare at the heads of the bald guys while talking to them.

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AutoSave, a new desk accessory to save your work automatically after a specified time period, first appeared in *GS+ V3.N2* (the *first* yellow issue—and you know when you have a yellow issue, you have to see a doctor) and was a fairly clever idea for its time. Times have changed, however, and a new version of AutoSave is ready for you to try! But first, let me tell you how to install AutoSave, and let's have a little history lesson to bring everyone up to speed on the origin of AutoSave.

Installing AutoSave

To install AutoSave, use the Installer program on your *GS+* Disk. If you need help using the Installer, see the "How to Use Your *GS+* Disk" in this issue. After you install AutoSave, you must reboot for it to be available. AutoSave requires System 6 or later.

The Good Ole Daze

AutoSave v1.0 was written by Dave Farber and all it did was send Command-S whenever it was time to save. AutoSave v1.0 didn't always work, however, due to the fact that Command-S doesn't always save in every application (for example, in GraphicWriter III, Command-s [note the lowercase "s"] saves the document, and in some cases, such as the Finder, Command-S doesn't do anything).

The New Version

When we were searching for ideas for programs to put in this issue of *GS+* Magazine, one of the more appealing thoughts was that of upgrading AutoSave to remove some of its limitations. I took on the job, completely rewriting the code for AutoSave from scratch—not a single line of code was used from the old version.

The differences between AutoSave v1.0 and AutoSave v2.0 are vast. First off, the time interval for which the save command is issued can now be any number from 1 minute to 999 minutes, while in the old AutoSave, you could only specify times of 1, 2, 5, 10, and 15 minutes. Also, in the new AutoSave, you can save after a predetermined number of keystrokes have been typed, so, for instance, after you've typed 2000 letters, the save command will be issued. You can also control whether you want to save on a time interval, keystroke interval, or both. One of the more flexible features put into AutoSave v2.0 is the ability to assign a save command code besides Command-S—you

can assign any command character you'd like. The differences continue, but I'll discuss them later.

AutoSave Controls

AutoSave v2.0 knows how and when to save your documents by maintaining an application "profile." When you open the AutoSave new desk accessory, you will be presented with the AutoSave window. There are three parts to the window: the profile list, the profile settings area, and the active check box. The active check box turns AutoSave on and off. This is just a master switch so you can quickly deactivate AutoSave if the need arises. The profile list lets you see all the different profiles that you have defined. The profile settings area allows you to change the information contained in the selected profile. There are two types of profiles (but each contains the same information): the default profile and the defined profile. The default profile is used whenever there is no defined profile for an application. The default profile is named, oddly enough, "Default Profile" and it cannot be deleted from the profile list.

AutoSave Profiles

The information currently stored in a profile consists of: the number of minutes before saving, the number of keystrokes before saving, the save keystroke, and the save action. The number of minutes before saving and the number of keystrokes before saving can each be turned off. So, for example, if you wanted to save every 100 keystrokes and you didn't care how long it took to type them, you could just uncheck the number of minutes check box.

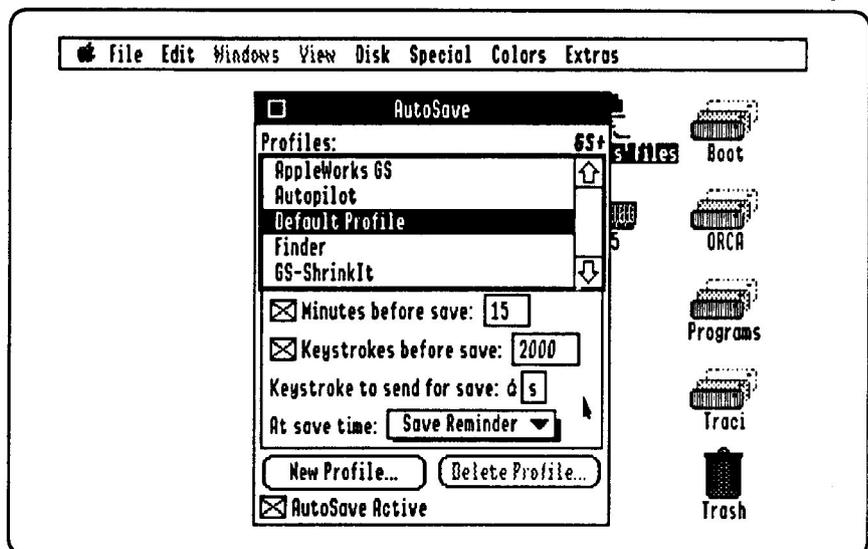
Save Time

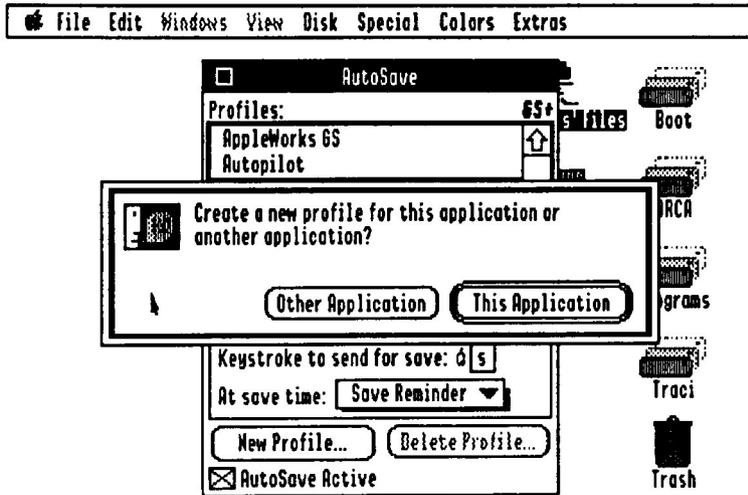
When AutoSave determines it's time to save your work (because either the time expired or you typed a sufficient number of keystrokes) then the save action is looked at to see what to do. If the action is "Save" then AutoSave simply issues the save keystroke. If the action is "Beep & Save" then AutoSave beeps the speaker and issues the save keystroke. If the action is "Save Dialog" then AutoSave will present you with a dialog asking you if you want to save your work or not. If you click on the "Save" button then the save keystroke is issued. If you click on the "Cancel" button then nothing else happens. If the action is "Save Reminder" then AutoSave will present you with a dialog telling you that it's time to save your work, but no save keystroke will be issued. Finally, if the action is "None" then AutoSave will not do anything.

Profile Strategies

There are a number of strategies for maintaining profiles—each one is based on a different save action for the default profile.

If you're like me, you don't particularly relish the idea of a strange program lurking in the background and mysteriously issuing save commands when they might not be relevant. What I do is I set my default profile to issue the save reminder dialog. This way, when I'm in an application which doesn't have a defined profile, I'll know that the time to save has expired and I can take any action necessary myself. If you're a bit braver than I am, you can set the save dialog as the save action and you can have AutoSave issue the save command for you





if you so desire. Now every application that doesn't have a defined profile for it will issue the save dialog every 15 (if you haven't changed the default) minutes or every 2000 (again, if you haven't changed the default) keystrokes. Sometimes this is not what you want. For example, saving in Autopilot or the Finder just doesn't make any sense at all, and seeing a dialog every so often is annoying. To remedy this, just create a profile for the application (click on the New Profile button). Then set the profile's save action to none. If you're what I like to call the "adventurous" type, you can set the save action to save (or beep and save), and then set some defined profiles for applications in which you don't want to save. And if you haven't guessed by now, the only other possibility left is the "paranoid" user setup where the default save action is none, and the defined profiles tell AutoSave which applications are legal to issue save commands in. Although there is nothing wrong with this, using it is

rather silly, especially when you have a save reminder dialog that is just as safe. But to each his own, that's what Diz always tries to make me say.

... And The Rest

Apart from all this theory of default and defined profiles there's got to be a way to define a new profile, right? Right! And the way you define a new profile is by clicking on the "New Profile" button. You will then be presented with a dialog asking you if you'd like to create a new profile for the current application or a different application. If you want a different application, you'll be presented with a Standard File dialog letting you choose the application of your choice to create a new profile for. You can then name your profile anything that you like and the profile will be added to the list. To change the profile, simply select it from the list and then change the values in the profile definition control section immediately below the list control.

To delete a defined profile (you cannot delete the default profile) simply select the profile in the list and click on the "Delete Profile" button. You will be asked to confirm the action, and then the profile will be removed from the profile list.

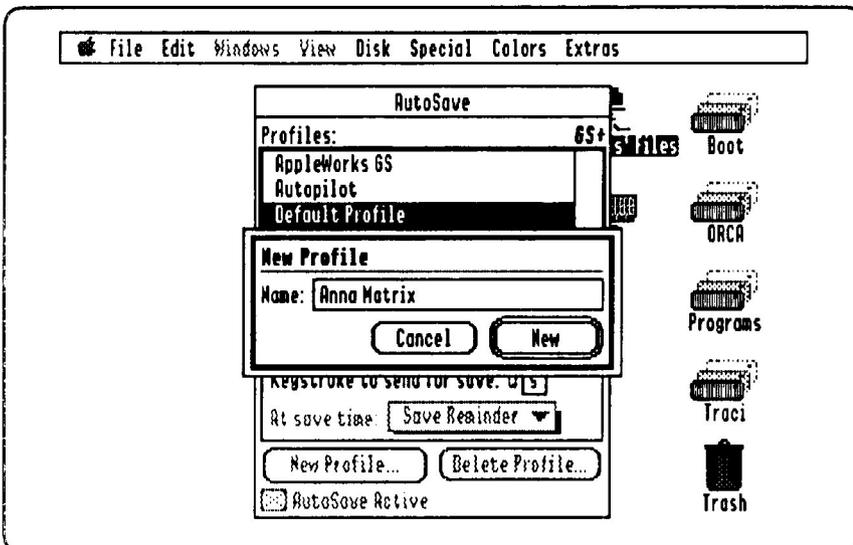
Odds And Ends

There are a few more details left to cover in AutoSave. First off is that AutoSave is smart in the way it knows when to save. AutoSave watches every keystroke you make, and if you ever issue the save keystroke defined in the current profile, AutoSave will recognize it and reset its save counters. This way if you've set AutoSave to save every 15 minutes and you manually save 14.9 minutes into working, AutoSave will see that you saved your work and it won't save it for you again 0.1 minutes later. AutoSave also never issues a save when there is no window in front, or if the frontmost window is an alert window.

Another nice feature of AutoSave is that when you open it, the profile for the current application will be selected in the profile list. Any changes that you make to the current profile will not take place until you close the AutoSave window. Also, when you close the AutoSave window (even if you don't make any changes to the current profile) the save counters are reset.

Happy Trails

AutoSave is a rather nifty program that I had a good time writing. Of course, as with all programs, there is the possibility that there are a few problems. If you run into a problem, please take the time and fill out a problem form located on your GS+ Disk and send it in. **GS+**



Finder Binder is a Finder extension that ends forever the cursing, weeping, etc. that accompanies the least liked dialog box the Finder presents: the one that says "An Application cannot be found for this document" (See Figure 1). We here at the GS+ offices got incredibly tired of that damnable dialog box, so I wrote Finder Binder to accomplish what everybody thought the Finder in System 6 would do to begin with.

Installing Finder Binder

To install the Finder Binder Finder extension, refer to "How To Use Your GS+ Disk" in this issue. Finder Binder can only be used with System 6.0 or later. If installed on an earlier System version, it won't hurt, but it won't do anything, either.

Finder Binder In Action

When you double-click on a file that has no association to an application, the Finder normally displays a dead-end dialog with one option: Cancel. With Finder Binder installed, instead of letting the Finder bring up the dead-end dialog, Finder Binder takes over and puts up a new dialog instead (See Figure 2). The Finder Binder dialog will ask you if you want to create an association between the "dangling" data file you've selected and an application of your choice. If you select the "Cancel" button, the dialog disappears and you're left in the Finder, just as you would have been if Finder Binder wasn't installed. The real magic, however, takes place when you click on the "Connect" button. If you select the "Connect" button, a Standard File dialog box will come up in order for you to select the application you want your "dangling" data file associated with.

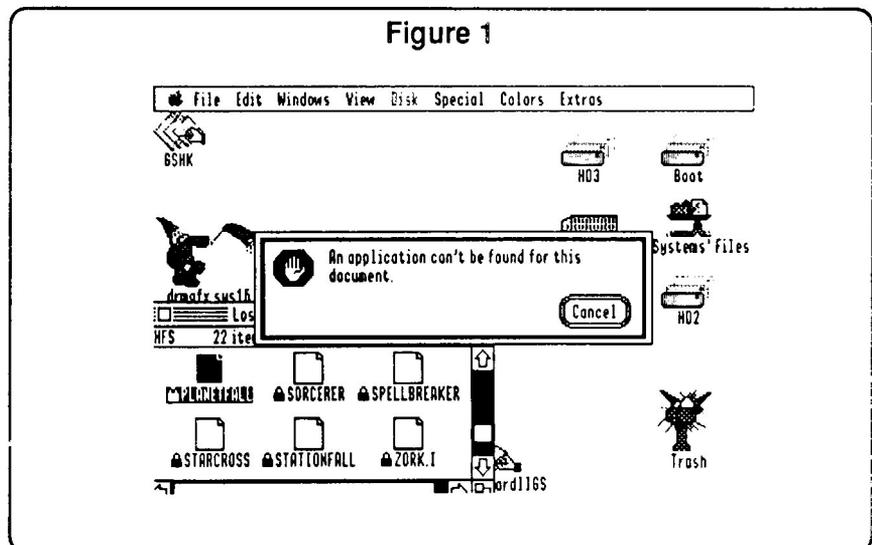
After selecting the application you want to connect to your dangling data files to, a second dialog will appear (See Figure 3). This dialog lets you decide how you would like to have your files connected. There are three types of connections that can be made. The first type of connection is a one-time-only connection. You select this connection by clicking on the "Launch without making a connection" radio button. What this means is that the application you selected will be launched and the data file you initially wanted to open will be opened by the application. However, since this is a one-time-only deal, the next time you try to open the data file from the Finder, you'll get the Finder Binder dialog again. The second type of connection is a connection by

name. You select this connection by clicking on the "Connect to this file only" radio button. As before, the application you selected will be launched and the data file you initially wanted to open will be opened by the application. However, the connection between the data file and the application will be remembered so the next time you open the data file from the Finder, the application you chose will be launched—no muss, no fuss. The connection is only made with the file that you selected, though. The connection is made by matching the file's name and type. The third type of connection is a connection by type. You select this connection by clicking on the "Make connections with all files of this type" radio button. A repetitive theme continues: the application you selected will be launched and the data file you initially wanted to open will be opened by the application. However, the connection between the data file's type and the application will be remembered. Note that this kind of connection is by type only, not name and type as is made when connecting to one file only. The next time you open a data file of the same type as the data file you initially opened, the application you chose will be launched.

How does Finder Binder force the Finder to remember the connections between data files and applications, you ask? The same way this sort of thing's been done since 1986—with an icon file. Finder Binder creates a file called Binder.Icons and places it in the Icons folder of your startup device. This is a normal, everyday icon file (i.e. an "old style" icon file) that can be edited manually if you so desire by such programs as IconEd or DlcEd. When

you make a connection, the icon for the connected file is whatever the Finder currently had on record for that file.

I guess an example of how to use Finder Binder is in order. So, let's say that you recently purchased the Lost Treasures Of Infocom package (see the review in this issue) and you want to play the Planetfall adventure. You're in the Finder and you double-click on the Planetfall data file. Oops, the Finder doesn't know what to do! No custom icons are provided with the Lost Treasures package. Without Finder Binder, you'd be stuck. You'd have to find the interpreter application, launch it, and then open the Planetfall adventure file via a Standard File dialog. That's the kind of thing that the Finder was supposed to circumvent! With Finder Binder installed, however, you're in for a treat. Instead of the dead-end dialog, the Finder Binder dialog will appear. You can then click on the "Connect" button, use the Standard File dialog to select the adventure interpreter application, and then choose the "Make connections with all files of this type" connection option. Finally, you click on the "Launch" button to launch the interpreter and begin playing Planetfall. Finder Binder will copy over the icon for an Infocom game file into the Binder.Icons file with the application information you've specified—in this case, that the application to launch is the Infocom game interpreter and that the application should be launched for every Infocom game file. Now, the next time you're in the Finder and you want to play Planetfall, all you have to do is double-click on the Planetfall data file. The connection is remembered, and the Infocom game interpreter will



automatically be launched and you'll be playing Planetfall again. If you wanted to, instead, play Stationfall, simply double-clicking on the Stationfall data file will launch the interpreter because you made the connection with all Infocom data file types.

Icons Icons Everywhere

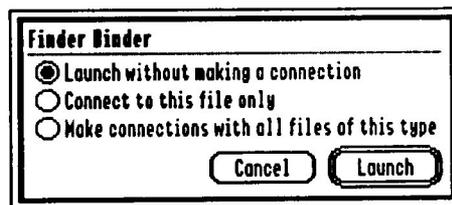
Since Finder Binder creates an old-style Finder icons file, you can use this to your advantage whenever you need to create some new icons. Simply have Finder Binder connect the icons up to the application of your choice, then use an icon editor to edit the icons. You don't have to worry about knowing the file types or auxiliary types or anything like that. So, going back to the Lost Treasures Of Infocom example, you can launch your favorite icon editor and change the icon that is associated with Infocom adventure files.

That about covers the bases on how to use Finder Binder, and a basic rundown of how it works. If you encounter any problems, as always, please fill out a problem form and return it to us here at *GS+* Magazine so I can fix it. *GS+*

Figure 2



Figure 3



Errata

Last issue, in our Cool Cursor Contest update, we mentioned that we had lost the name of one of the people that had entered the original Cool Cursor Contest. Well, "John Doe" contacted us and told us that his name is in fact Dave Tribby of Sunnyvale, California. Thanks for being so patient with us Dave!

Speaking of the Cool Cursor Contest, so far all the cursor entries we've received have no names! There is a (big) oversight in the Anna Matrix manual—it doesn't say how to name a cursor. With a little experimenting with the supplied cursors, however, it shouldn't have taken much to figure out how to do it. When you open up a Cool Cursor document, at the bottom of the window there is a LineEdit box (just below the cursor frames). Simply type the name of your cursor into this box. Cool Cursor relies on this name, *not* on the file name of the cursor, to name the cursor.

Speaking of Cool Cursors, it has been discovered that a frame in the 320-mode version of the Animated Watch cursor was corrupted! This corrupted frame can cause your system to crash in some 320-mode applications. So, we have included a fixed version on this issue's disk. Simply use the Installer to install the new version on your system. (Note: If you bought the *GS+ V4.N5* disk separately, we have corrected this problem on the *back issue* disk. So, if you bought the *GS+ V4.N5* disk after July 12th, 1993, you should already have the fixed cursor.)

As if that weren't enough Cool Cursor problems, we have also discovered a conflict between Cool Cursor and Your Money Matters. The problem is that every time Your Money Matters turns on the wait cursor, it displays an error dialog. This is actually a Cool Cursor problem, but it isn't dangerous (just annoying), and only a few people have reported it thus far. If you are having this problem, give us a call here at *GS+* Magazine, and we'll tell you how to get a fix for it. (We will publish this new version of Cool Cursor [along with all of our Cool Cursor Contest winners] in the next issue of *GS+* Magazine.)

And, speaking of the Cool Cursor Contest (again), we neglected to mention the deadline for entries. (Sheesh!) The deadline is September 17th, 1993, so hurry!

In last issue's review of the Apple Desktop Bus Mouse II, the reviewer's name was accidentally left out of the review. The reviewer was our own publisher guy, Steven W. Disbrow.

If you find an error in *GS+* Magazine, let us know! Just contact us via one of the methods on the title page.

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Catch the .WAV: A Guide to Scavenging Sound Files

By Bill Moore

IIGS owners have always had computer envy to some degree. Seeing newer, faster machines that can do all sorts of wonderful things has really stuck in the craw of some IIGS owners (like me). Some just whine about the inequity of the universe, some buy these newer and faster machines (which are usually considered obsolete by the time they're out of the box), and some get off their duff and show what our wonderful little machine can do to keep up with the latest and greatest technology if given half a chance. One area where IIGS owners can rightfully feel a little smug is in the area of sound. The IIGS is still one of the best computers right out of the box for working with sound. Add a board like Econ's SoundMeister, or the digitizing board from Roger Wagner Publishing's HyperStudio package, and one can digitize to his or her heart's content. But what do you do when you want to get sounds from a friend or co-worker who uses one of those heathen computers? Or, you find a sound on America Online (AOL) or GENie you really want that is for the Mac or Windows? Is there any hope?

Hope Springs Eternal . . .

After being locked away with a Mac SE/30 (thanks to Chris Crumley), a 386/33 PC Clone (thanks to my Mom), and my trusty IIGS, I can truthfully say that yes, there is. If you know how to do it, (and after reading this, you will hopefully know how), you can move sounds to your IIGS from any major format for the Macintosh or the IBM PC (including Windows .WAV files.) How, you ask? Read on. Before I go further, let me say that your IIGS will have to run System 6. And yes, that means a hard drive and 2MB of RAM, minimum. I suppose you can do it with less memory or no hard disk, but it would be a very frustrating task. System 6 is *required* because of the HFS FST. If you're lucky enough to have (or at least have access to) another kind of machine, I recommend a Mac with at least a 68030 running System 7.1. If you are working with MS-DOS, try to get a machine with at least a 80386 that is capable of running Windows 3.1.

If you have a IIGS with a modem and access to an online service such as AOL or GENie, then you can raid the Mac and PC libraries on these services to your heart's content. Be advised though: you're going to need a IIGS utility to open archives from these machines. You can

only use PC files that are either not archived, or are packed with PKZip (these files will have the extension ".ZIP"). AOL and GENie have programs in their Apple II libraries to open .ZIP files. For the Mac, most files are archived with StuffIt (extension ".SIT") GS-ShrinkIt v1.1 will open most StuffIt 1.5.1 archives. This does *not* include some files archived with America Online StuffIt. If you use GS-ShrinkIt to open a StuffIt file and it says "StuffIt from America Online," and all files within the archive are dimmed, then you'll need access to a Mac with the AOL software to extract these files. This is hit-and-miss; I've downloaded files from AOL that GS-ShrinkIt opened just fine, while it simply wouldn't open some others.

The IIGS is still one of the best computers right out of the box for working with sound. Add a board like Econ's SoundMeister, or the digitizing board from Roger Wagner Publishing's HyperStudio package, and one can digitize to his or her heart's content. But what do you do when you want to get sounds from a friend or co-worker who uses a Mac or PC?

(A special note to those who have bought or are thinking about buying the AudioClips packages published by Sound Source Unlimited for the Mac or PC for use on a IIGS: you will have to use either a Mac or PC in order to access these files. The Mac packages are archived with Compact Pro, which GS-ShrinkIt *will not open*. PC packages are archived with something called Sonarc, which is *not a PKZip file*. If you only have access to a IIGS, *don't waste your money*. Sound Source is considering converting these for the IIGS, but until they do, you can't use their products unless you can decompress the files on either a Mac or a PC.)

When you decide to go hunting online in your quest for sound files, in libraries other than Apple II ones, remember that on AOL, the PC and Mac libraries keep sound files in their own library. Check on AOL, in the PC or Mac libraries for

directions, or with your favorite online service.

I have to say (and it pains me to say it) that the easiest way (at this point) to move sounds to your IIGS is to use a Mac as a middleman, particularly when converting sounds from the PC. Unless, that is, you have a floptical drive or a SuperDrive, and System 6.0.1 with its read-only MS-DOS FST.

And the best program I tried for the Mac was, bar none, a program called Sound Mover 1.8c (by Riccardo Ettore) which I downloaded from America Online. This shareware program, which works much like the Mac program Font/DA mover, makes it incredibly easy to change the format of any Mac sound and to move a sound from another platform (like the IIGS or a PC) to the Mac. If it weren't for Sound Mover, I'd still be scratching my head wondering how to convert sounds for the IIGS. I think so highly of this program, I'm going to send in the shareware fee—and I don't even own a Mac!

Mac to IIGS

In order to move and convert sounds from the Macintosh to the IIGS, you're going to need the proper tools. For the IIGS, I give my highest recommendation to the application DigitalSession from ECON. Another program that scores high marks with me for doing this stuff is the Sound Shop application included in the HyperStudio package. If you don't have either of these programs, there are some shareware and public domain offerings which can work almost as well. I would recommend AudioZap by Ian Schmidt and rSounder by Paul Benson. Between them, these programs will give you most of the important features we're going to need. If you have it though, use DigitalSession. Also, get the freeware offering MacSoundGrabber (MSG) by Seven Hills Software. Although it has a very annoying limitation (it only works with sounds that are 64K or smaller), it works very well. On the Mac side, don't even bother unless you get Sound Mover. No program I tried made this task any easier than Sound Mover. Also, you might need the Macintosh program, Apple File Exchange (AFE), though this has largely become unnecessary since System 6 came out with its HFS FST. Still, it would be good to have around—particularly when you try to

move PC sounds (see below). Check in the original disks that your current Mac System Software came on. AFE should be there.

The first thing you need to know is what the format of the Macintosh sound is. A type of sound that is growing in popularity on the Mac is the Sound Resource File (with a Macintosh filetype of "sfil"). This type of file appears in the Mac Finder as a document with a little speaker inside of it, and you can double-click on the file from the Macintosh Finder to play the sound. The AudioClips packages sold by Sound Source Unlimited use this sound file format, and it is growing in popularity. Although this filetype commonly stores only one sound, it is more properly referred to as a sound suitcase. Any number of resources (individual sounds) can be stored inside one file, but the Mac Finder will only play the first resource from the file if it is double-clicked. (For what its worth, the new sound resource file [rSoundSample] format for the IIGS works in this manner, but no program I'm aware of except the System 6 Sound control panel uses this feature.) MacSoundGrabber for the IIGS will recognize sound files of this type with no modification, but MSG has an annoying limitation—it will only work with these files if the individual sounds inside the file are 64K or smaller. If the sounds you want to convert to the IIGS are in this format, you can use MSG if, as I said, the individual sound resources do not exceed 64K in size. If they do, then you'll have to convert them (using Sound Mover) to something that's a little more palatable to the IIGS—an FSSD file.

FSSD-what?

FSSD files are akin to sounds stored in a BIN file on the IIGS. It's a generic data file format, mostly used by sound files. This was the most popular Mac sound format until the System 7 sound suitcase file came into being. The Mac Finder shows an FSSD file as just a plain document, and it will not play if double-clicked upon. The nice thing about FSSD files is, they will convert flawlessly to the IIGS, regardless of size. In fact, you can load Sound Shop on the IIGS, tell it to open a file, and load an FSSD file straight off a Mac disk! It will tell you it doesn't recognize the file as a sound file, but just click on the option "Load it anyway" and it will load just fine. This is the road I took to convert sounds from the AudioClips package I bought into sound resource files for my IIGS. I used MSG on anything smaller than 64K, and converted anything bigger than 64K to a FSSD file using Sound Mover, then took

the files over to the IIGS and opened them with Sound Shop. Sometimes when converting sounds this way, you'll have to manually edit the beginning of the sound to strip away the header information, which usually manifests itself as a clicking or buzzing noise at the beginning of the file.

Other Mac Formats

There are many other ways to store sound on the Macintosh. Up until a couple of years ago, (basically until Macs came with built-in sound input), there were hardly any standards at all. People who wrote sound applications saved work in their own formats, creating a haphazard situation that was like, to quote my favorite author, P.J. O'Rourke, "monkeys at a salad bar." Macintosh sounds had filetypes like: snd1, snd2, ASND, SMSD, GSND, and DEWF, among others. Sound Mover will recognize all these formats and more, since you can have it try to open anything—even an application—to extract sounds out of! HyperCard stacks, converted Windows sound files, anything! All you have to do is hold down the option key while clicking on the Open button in Sound Mover, and Sound Mover will try to fetch sounds out of whatever file you tell it to.

A Word About HyperCard . . .

For what's it's worth, Mac HyperCard stacks with sounds in them are recognized by MacSoundGrabber just fine, so long as you remember about MSG's 64K limit. I'm told another way to move sounds from the Mac to the IIGS is to place the sounds in a HyperCard stack, then use HyperMover to convert the stack to HyperCard IIGS. The sounds can then be extracted from the HyperCard IIGS stack for whatever use. I'm not too crazy about this concept, mainly because you have to go to the trouble of placing the sounds in a HyperCard stack, then use HyperMover, which I am told is a *huge* pain in the rear, then get the sounds out using HyperCard IIGS, which isn't owned by everyone who has a IIGS. Of course, you can download MSG for free if you don't have HyperCard IIGS, and get far better (not to mention easier) results. If you're going to move big sounds out of a HyperCard stack to the IIGS, use Sound Mover to open the stack, and save out the individual sounds as FSSD files (see above).

Windows to IIGS

Now we move over to the MS-DOS side of the street on our search for sounds for the IIGS. This is both simpler and more complex, in some ways. On the simple side, Windows .WAV files appear to be just plain data files, so converting them once they are on a ProDOS disk is

simplicity itself. The complex part is getting a .WAV file on a ProDOS disk. The three basic options are to either transfer the file via modem (including getting a file off a BBS or online service), use a Mac with Apple File Exchange to move files from an MS-DOS disk to a ProDOS disk, or use the MS-DOS FST included in System 6.0.1 in concert with a SuperDrive to move files from an MS-DOS 3.5-inch disk. (For more MS-DOS configurations, see "System 6.0.1—For Users" elsewhere in this issue.) I've transferred .WAV files to my IIGS successfully using all three methods. Another way is to use AFE to move files to the Mac, convert them to a Mac format, then move the files to the IIGS and convert them from the Macintosh format. This is rather redundant unless you want the sounds for use on a Mac.

Other PC Formats

About the only other major sound file format besides Windows .WAV files in the MS-DOS world is used with the Sound Blaster card. These files (which usually have filenames ending with ".VOC") are also available from the libraries of AOL and GEnie. Sadly, my deadline forced me to finish this article before I was able to play with any Sound Blaster files to see if they'll work on a IIGS. However, with Windows .WAV files becoming the standard, I don't see this as a problem. Besides, if they don't work, there are PC programs available to convert a Sound Blaster file into a Windows .WAV file, and those *will* work on a IIGS.

Examples

Now, let's put some of this theory into action. As a special bonus, this issue's *GS+* Disk includes two sounds: one from the Mac, one from the PC. In the examples that follow, I'll walk you through, step by step, how to convert these sounds into the IIGS sound resource file format. And, just so you can be sure you got them right, we've also included the same sounds in sound resource files. (To hear them, simply use the Installer on your *GS+* Disk to install the sounds on your boot disk, and then use the Sound control panel to play them.)

A Mac Example

First, we'll convert our Macintosh sound—our own "Bob" Ribaric doing his patented pig imitation. We recorded this sound on the Macintosh LC here in the office. This file is simplicity itself to convert, since it's a Macintosh sound resource file, and it's smaller than 64K.

All you have to do is run MacSoundGrabber on it, and *volia!*

Instant IIGS sound resource file! That's all there is to it!

A .WAV Example

The second file, "Oh.Drat" started out as a Windows .WAV file that I downloaded from America Online. It's a recording of the little Martian from the Warner Bros. cartoons of the fifties and sixties. It makes a perfect startup sound—and here's how it's done.

From the Finder, use something like our own NoDOS (last seen in GS+ V4.N4) to change the filetype from unknown to a binary file (file type \$06 or "BIN") so that rSounder or Sound Shop will be able to open it. Then, use rSounder, Sound Shop, or DigitalSession to open the file, and save it back out as a sound resource file. An application that will actually let you edit the sound file, like Sound Shop or DigitalSession, is recommended, because you're going to need to delete approximately the first forty bytes of any .WAV files you convert. If you don't, there will be an annoying clicking sound at the beginning of the file. (These forty bytes contain header information that tells Microsoft Windows that this is really a .WAV file, and sets things like the playback rate. It's not information you'll need on the IIGS.) Once you get the first forty bytes cleared, it's simply a matter of setting the name of the sound, and saving the file.

So That's It?!

Yep. Trust me, it's easier than it sounds (pun intended). The hard part is getting all the tools you need to actually do the conversions. Although having a Mac and/or a PC next to your IIGS is not always required to convert the sound files, it can certainly make things easier. An example is converting a Mac resource file bigger than 64K. But, for 90% of these conversions, a IIGS is all you'll need.

And, if you run into problems while converting sounds, you can always get help online. In fact, much of what I did for this article was suggested to me by folks online, such as the sysops of the Apple II areas on AOL, along with Dean Esmay (A2.DEAN on GENie), HangTime (A2.HANGTIME on GENie), and the others who run the Apple II forum on GENie. I'm also available for any sound questions you may have. Just E-Mail me at BilMo on AOL (preferred), BilMo@aol.com via InterNet, or BILL.MOORE on GENie. CompuServe users can reach me thru the CIS Internet gateway. Or if all else fails, write to me here at GS+ Magazine, and Diz will crack the whip and see that your question gets answered. GS+

Product Information

America Online

\$9.95/month (includes five hours of connect time)
\$3.50/hour
8619 Westwood Center Drive
Vienna, VA 22182-2285
(800) 827-6364

AudioClips

Prices vary
Sound Source Unlimited
2985 E. Hillcrest Dr., Suite A
Westlake Village, CA 91362-9784
(805) 494-9996

Finder-Sounder

Freeware IIGS utility
Mike Fleming
Jupiter Systems
P.O. Box 1396
Barrington, IL 60010
AOL: MikeF32

GENie

\$8.95/month (includes four hours of non-prime connect time)
\$3.00/hour (non-prime)
401 N. Washington St.
P.O. Box 6403
Rockville, MD 20849-6403
(800) 638-9636

HyperMover

Retail price: \$15
Requires HyperCard IIGS and HyperCard for the Mac
Resource Central
P.O. Box 11250
Overland Park, KS 66207
(913) 469-6502

HyperStudio (includes Sound Shop)

Typical mail-order price: \$99
Roger Wagner Publishing
1050 Pioneer Way, Suite P
El Cajon, CA 92020
(619) 442-0522

MacSoundGrabber

IIGS freeware
Seven Hills Software
2310 Oxford Road
Tallahassee, FL 32304-3930
(904) 575-0566
AppleLink, AOL, GENie: SevenHills

rSounder v2.0

IIGS shareware: \$5
Paul Benson
305 Lindenhurst Dr., Apt. 1087
Lexington, KY 40509
GENie: P.BENSON1

SoundMeister (includes DigitalSession)

Retail price: \$89.95
DigitalSession
Retail price: \$49.95
ECON Technologies, Inc.
99 N. Central Ave. Suite B
Oviedo, FL 32765
(407) 365-4209
AOL: Econ

Sound Mover v1.8c

Macintosh shareware: \$25
Riccardo Ettore
67, rue de la limite
1970 W-Oppem
Belgium

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EGOed lite v1.0.1: Working with TypeSet

By Steven W. Disbrow &
Josef W. Wankerl

I've been told that for every customer that asks for something, there are between ten and twenty more that want the same thing—they just never bother to tell you. Apparently this is true, because even though only a few people asked for it, we've gotten a tremendous response to EGOed lite (GS+ V4.N4)! (If you are a new reader, and you are wondering just what EGOed lite is, see the "What is EGOed lite?" sidebar.)

New Features

Even though we didn't expect the *volume* of response we got, we did expect the *kinds* of responses we've gotten. Almost all of them go like this: "EGOed lite is cool, but could you add . . ." Basically, people were asking for their favorite features from the old EGOed! (New readers note: EGOed was the much-more powerful predecessor to EGOed lite. As it got more and more powerful, more and more people began to ask for a stripped down version, which is what EGOed lite is. The last version of EGOed [version 1.9] was published in GS+ V4.N3, which is still available as a back issue. See the "Back Issue Information" department elsewhere in this issue for more information.)

However, EGOed lite is *not* going to become the old EGOed (that would defeat the purpose of having a *lite* version, wouldn't it?), so this new version does not, in fact, contain any of the features that folks have asked for. What it does include is the ability to work together with WestCode's new TypeSet program (which Joe and I just happen to have written—for more information on TypeSet, see "What's New" elsewhere in this issue) to give you a "What You See Is What You Get" (WYSIWYG for short, it's pronounced "Wizzy-Wig") font menu inside EGOed lite! EGOed lite v1.0.1 also gives you complete access to the font set capabilities of TypeSet and only displays in its Font menu those fonts that are in the current set. In other words, EGOed lite will work with TypeSet just like an application does—transparently. (See screen shot.)

The only other change in this version of EGOed lite is that it now lets every other program in your system have a shot at opening files in the Finder before it tries to open a file. This means that, if you have another editor that you prefer to use,

you should be able to keep both it and EGOed lite installed, and your other editor will have the first chance to open any files that you double-click on in the Finder.

(Warning: the rest of this article is fairly technical in content. If you aren't a programmer, or you just aren't interested in how all this works, you can skip the remainder of this article and go ahead and install the new EGOed lite. And don't forget to read the EGOed.lite.Docs, which are on your GS+ Disk. You should also refer to your TypeSet documentation for all the information you need on how to use TypeSet.)

Why WYSIWYG?

To answer this question, we have to back up a bit to discuss Pointless v2.0 (see review in GS+ V4.N2). Among the many neat new features in Pointless v2.0 is the ability to display your TrueType and bit-mapped fonts in different styles in the Font menu. For example, you could have your TrueType fonts show up in **boldface** and your bit-mapped fonts show up in *italic*. This makes it very easy to tell which fonts are TrueTypes and which are bit-mapped. When people began playing with this neat feature of Pointless, we began to get lots of calls and letters asking us why these styles did not show up correctly in the EGOed (and later, EGOed lite) Font menu.

What Is EGOed lite?

EGOed lite is a New Desk Accessory (NDA) text editor. When you install EGOed lite on your startup disk, you can use it to edit and print ASCII text, Teach, AppleWorks Classic and AppleWorks GS word processor files from inside any desktop program that properly supports NDAs. To use EGOed lite, you must install it on a IIGS System Software v6.0 (or later) startup disk with 38K of free space. For more information on installing and using EGOed lite, see "How to Use Your GS+ Disk."

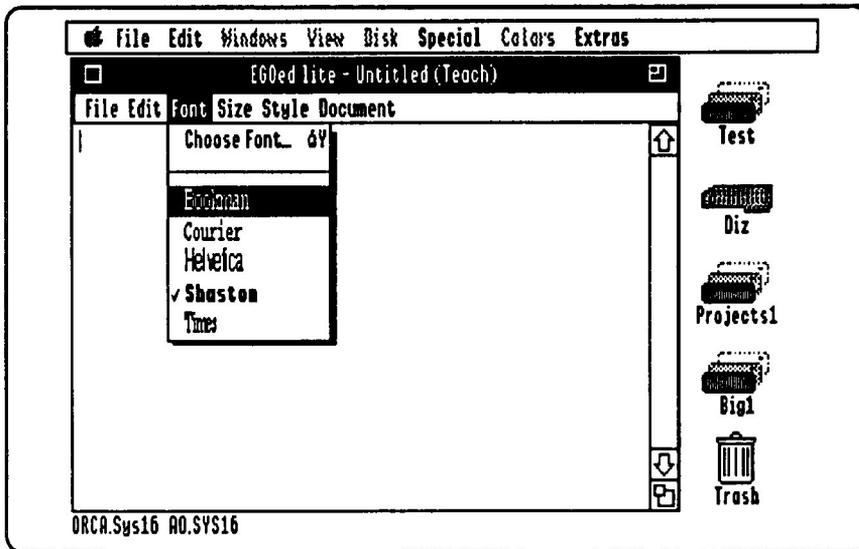
The reason is because this feature of Pointless only works with programs that use a specific Toolbox call (FixFontMenu for those of you that are wondering) to build their Font menus. Unfortunately, New Desk Accessories (NDAs), like EGOed lite, *can not* and *should not* use this call to build a Font menu. So, EGOed lite has to build its own Font menu in such a way that Pointless never has a chance to add the styles you told it to.

Which is where TypeSet comes in. One of the things WestCode wanted TypeSet to do was to provide a WYSIWYG Font menu in any application that has a Font menu. That was easy enough, but Joe and I knew from past experience that as soon as folks got TypeSet, they would start asking why that WYSIWYG Font menu didn't show up in EGOed lite. So, we gave TypeSet the ability to provide *any* NDA with a WYSIWYG font menu. However, this capability only works under System 6.0 or later, and it only works for New Desk Accessories that have been specifically written to take advantage of it. This means that, as of right now, EGOed lite is the only NDA text editor that takes full advantage of TypeSet and Pointless. Other editors (like Big Edit Thing and ShadowWrite, [although, come to think of it, ShadowWrite doesn't even *have* a font menu]) will have to be rewritten to take advantage of the new features that TypeSet offers. (Even old versions of EGOed and EGOed lite won't work!) This shouldn't be any problem though, the TypeSet package includes all the information programmers need to change their programs, and, as always, we are including complete source code to EGOed lite on your GS+ Disk, so you can see how to do it yourself.

WYSIWYG

EGOed lite and TypeSet work all their magic by using the Inter-Process Communication (IPC) facilities in System 6. All EGOed lite has to do is check to see if TypeSet is installed (again, by using IPC), and, if it is, install a request handler to communicate with TypeSet. Basically, it works something like this:

1) When the EGOed lite DAINit procedure is called, EGOed lite checks to see if TypeSet is installed. If it is, EGOed lite installs a request handler to communicate further with TypeSet.



2) Before EGOed lite builds its Font menu, it asks TypeSet what styles the user has specified (via Pointless) to apply to the TrueType and bit-mapped fonts in the Font menu. EGOed lite remembers these styles and uses them later when it is adding individual fonts to the Font menu. (See Figure 1 for a brief listing of all the requests that TypeSet accepts.)

3) For every font installed in the system, EGOed lite asks TypeSet if the font is in the currently selected font set. If it is, EGOed lite adds it to the Font menu. If it isn't, EGOed lite ignores the font and leaves it out of the menu. (However, the font will still be available through the Choose Font dialog.)

4) When the Font menu is built and installed in the EGOed lite menu bar,

EGOed lite tells TypeSet that it should draw this menu as a WYSIWYG Font menu.

After all of this is finished, TypeSet begins to work behind the scenes, automatically drawing the EGOed lite Font menu in WYSIWYG fashion when necessary.

Changing Font Sets

The only thing left to describe is what happens when the user switches font sets in TypeSet. When this happens, TypeSet sends out a request (to anyone that happens to be listening), that says, "Hey, the current font set has just changed—rebuild your Font menus." (See Figure 2 for a description of this request.) When EGOed lite gets this message, it simply rebuilds all of its Font

menus using the same process as described above. (EGOed lite can have as many windows open as available memory will allow, and each window will have its own Font menu.)

Is That All?

Well, not quite. The only other thing to note is that when you are through with your Font menu, you *must* get rid of it using the DisposeMenu tool call. TypeSet patches this call and when it sees that a menu that was added by your program is being disposed of, it automatically removes it from its internal list of WYSIWYG menus.

Beyond that however, it is quite easy to write software that communicates with TypeSet. And, believe it or not, NDA text editors aren't the only types of software that might want to take advantage of what TypeSet has to offer. For example, if you are working on a program that might need to get information from Pointless (perhaps a stand-alone word processor), TypeSet will give you a quick and easy way to do it, without having to bug WestCode about the internal workings of Pointless.

Check It Out

As usual, we've included complete source code for EGOed lite on your GS+ Disk. The source files you need to look at are Requests.CC, NDAFont.CC and TypeSet.H. We've also included (thanks to our friends at WestCode) the header files and technical information that comes on the TypeSet disk. These files contain everything you'll need to know to write "TypeSet aware" software. GS+

Figure 1 - Requests That TypeSet Accepts

Name	What It Does
tsAreYouThere	Lets you determine if TypeSet is active
tsIsTrueType	This lets you determine if a font is a TrueType font or a bit-mapped font
tsIsInSet	This lets you determine if a font is in the current font set
tsGetTTStyle	This returns the style that the user has asked Pointless to apply to TrueType fonts
tsGetBMStyle	This returns the style that the user has asked Pointless to apply to bit-mapped fonts
tsAddFontMenu	This tells TypeSet to draw a particular Font menu in WYSIWYG fashion. (Note that there is no "tsDeleteFontMenu" request. If you use DisposeMenu to get rid of your Font menu, TypeSet will know when it has been removed.)

Note: all of these requests are described in much more detail in the file, TypeSetRequests, which can be found on your original TypeSet disk and on on this issue's GS+ Disk.

Figure 2 - Requests That TypeSet Broadcasts

Name	What It Does
tsFontsChanged	TypeSet broadcasts this request whenever the fonts in the current set have changed (i.e. when fonts are added to or deleted from the current set), or when the user changes to a different set.

Rumors, Wishes & Blatant Lies

By Prof. G. S. Gumby

Domino's Falling

In a letter dated June 21, 1993, Resource Central announced the demise of its new publication, *Fishhead's Children*. Apparently, for every \$100 they spent promoting it, they took in only \$10. As if that weren't sad enough, it seems that one of the purposes of *Fishhead's Children* was to help pay the bills for Resource Central's flagship publication, *A2-Central*. So, along with the end of *Fishhead's Children*, Resource Central also announced the end of the paper version of *A2-Central*. Fortunately, Resource Central is *not* pulling the plug on any of its disk-based publications (*A2-Central on Disk*, *Studio City*, *Script-Central*, and *TimeOut-Central* will all continue publication). In fact, Resource Central is cranking up two new disk-based publications, but they are both for the Macintosh. One is *Macrocasm*, which is similar in concept to *A2-Central on Disk*, and the other is a Macintosh version of *Studio City* which is for use with the Macintosh version of HyperStudio.

Alliance Calls It Quits

Two years after it began operations, the Alliance International Inc. (AII) is calling it quits. Why? According to their final newsletter (which, ironically, is the best looking one to date), they simply didn't receive enough support from Apple II owners. In the past two years membership in the AII reached only 415 members. While this may sound like a lot of people, there are over 5 million Apple II's out there, and 415 is hardly a

large percentage of that number—and certainly not enough to be taken seriously by the media or Apple stockholders.

Still, we appreciate the AII and what it tried to do. Thanks for trying guys!

C. V. Tech Balls Out

In a rather surprising move, long time Apple II developer C. V. Technologies has sold manufacturing and distribution rights for their Apple II products to Sequential Systems. (Apparently C. V. Tech is going to be focusing its attention on the MS-DOS market.) A call to Sequential Systems confirmed this. We also found out that Sequential Systems will be providing repairs and support for current owners of C. V. Tech products. More importantly, Sequential Systems will be working on upgrades for most, if not all C. V. Tech products. For more information, Sequential Systems can be contacted at:

Sequential Systems
1200 Diamond Circle
Lafayette, CO 80026
Sales: (800) 759-4549
Service: (800) 999-1717

Other Product News

Among the background noise KansasFest, I was able to make out the tentative release dates for a couple of products that have been in the works for a while. ECON Technologies new SoundMeister Pro sound board should be available sometime in September. Apparently, ECON has been swamped with orders for

the board, and they are very anxious to get it out

Also, the fabled TurboRez graphics card, one of the most anxiously awaited products in IIGS history, may finally be hitting the streets by the end of this year.

"Quadriga," the much rumored "AppleWorks 4.0" super-patch should be out by now. (The latest issue of *II Alive* has a multi-page write up on it, so be sure to check that out.)

And, in the "unbelievable" category, there was much speculation about the possibility of a PC Transporter type product based on the Intel 486 chip.

Big Red Rumor

While at the show, I got a chance to talk at length with Mike Howard and John Wrenholt of Big Red Computer Club. They are great guys, and they had some great news. Namely, Big Red has several new IIGS projects in the works (most of which I am forbidden to talk about). They also gave me some news (which they said I could print) about one of their current hot titles: Shanghai II. Thanks in part to our review in *GS+ V4.N5*, Big Red is working on an update to Shanghai II that will be a lot faster, and will also include a tile set editor! (However, this will *not* include a layout editor.)

Finally, I got some really neat tips for the Lost Treasures of Infocom, but you'll have to read this issue's review of it to find out about those.

Ask Mr. 8-Ball

Believe it or not, "Ask Mr. 8-Ball" continues to be an amazingly popular part of this column. So, here we go again!

Gumby: We've reported in the last several issues that Sound Source Unlimited is working on IIGS versions of their AudioClips packages. Rumor has it that the packages could be done and shipping by now, but a certain Apple II vendor is pressing for exclusive distribution rights. Is it true that these negotiations are holding up development?

8-Ball: As I see it, yes.

Got a rumor, wish or blatant lie? Send them to:

GS+ Rumors
P. O. Box 15366
Chattanooga, TN 37415-0366

The Ties That Bind: Flood Edition

I love KansasFest! Not only do we get to take a week off to schmooze with Apple II big wigs, but it also gives me lots of stuff to fill up this column with. Case in point: these reports on the ties of Roger Wagner. As long time readers will know, Roger is the publisher of that most fabulously popular Apple IIGS program—HyperStudio. But, more importantly than that, he's a snappy dresser. So, as a public service to our readers (many of whom might not even know how to tie a tie), we present these reports on the neckware of the best-dressed man in the Apple II world. (Note: As always, these are *real* neck ties that require skill and dexterity [or a wife], to properly tie. These are *not* sissy-boy clip-on's!)

Day 1: The Seven Dwarves. Oddly, Snow White was nowhere to be seen, and I'm not sure that Grumpy was on the tie either. Where they were and what they might be doing together was the topic of much speculation.

Day 2: California Dreaming. This tie featured a collage of the many sights and sounds that make California the destination of choice for most illegal immigrants. And, as Roger was quick to point out, this tie also contained a hidden tribute to Big Red Computer Club.

Day 3: No tie! As reported elsewhere, we had to leave the show a day early, but we have had two different sources report that Roger "let his hair down" on the third day and did not wear a tie. We also heard that he didn't do a single HyperStudio demonstration the whole day! Check your Bible friends, this is one of the signs of the Apocalypse!

How to Use Your GS+ Disk

The first thing you need to do is **make a backup copy of your GS+ Disk with the Finder!!!** Do *not* make your backup on your hard disk! Instead, copy the GS+ Disk to another 3.5-inch disk (this is *very* important). Next, put the original in a safe place. If you are having a problem making a backup copy, give us a call at (615) 843-3988. If your disk is damaged, let us know, and we'll get a new one to you as soon as possible.

Installing The Software

To install the software on this issue's GS+ Disk, start up your computer using System Software v6.0 or later. (Note that all of the programs on this issue's disk *require* System 6!) Next, place your *backup* copy of the GS+ Disk in a drive. (You *did* make a backup didn't you?) Now run the Installer program that is on your backup GS+ Disk. (From the Finder, just double-click on the Installer icon.) *It is extremely important that you use the Installer that is on your backup GS+ Disk! Do not use any other copy of the Installer!*

When the Installer window appears, select the item you want to install from the list on the left-hand side of the window, and the disk you want to install it on from the list on the right-hand side of the window. Then click on the Install button. For more information on using the Installer, refer to your IIGS owner's manual.

Before you attempt to use your backup GS+ Disk, please take a few minutes to read the **a.Read.Me** file for any last minute corrections or information. If you do not already have our EGOed (or EGOed lite) text editor installed in your system, you can use the Teach application supplied with System Software v6.0 to read this file.

Installing EGOed lite

The following is a detailed example of how to install EGOed lite. The other programs are installed in a similar manner.

- Start up your IIGS with System Software v6.0 or later—the version of EGOed lite that is on this GS+ Disk *requires* System 6! (Your GS+ Disk is *not* a startup disk, so don't try starting your computer with it.)
- Insert your backup copy of the GS+ Disk into a drive and run the Installer program that is on your backup GS+ Disk. It is *very, very* important that you run the Installer that is on your backup

GS+ Disk and *not* some other copy of the Installer.

- When the Installer finishes loading, click on the Disk button on the right-hand side of the Installer window until your startup disk appears. (If you only have one 3.5-inch disk drive, you will have to remove the backup GS+ Disk from the drive and replace it with your startup disk. You should also refer to the "Making Room" section below for hints on how to free up room on your boot disk.)

Please Remember . . .

The contents of the GS+ Disk are not public domain or shareware! We depend on your honesty to stay in business. Please do not give away copies of the GS+ Disk or any of the programs on it. If you do, we will not be able to stay in business. It really is that simple!

- On the left-hand side of the Installer window, you will see a list of the items on the backup GS+ Disk. One of the items in this list should be "EGOed lite." (If EGOed lite is *not* in this list, quit the Installer and begin again. Be sure that you are running the copy of the Installer that is on your backup GS+ Disk!) Once you see the EGOed lite item, click the mouse on it so that it becomes highlighted.
- Click the mouse on the Install button in the middle of the Installer window. The Installer will then install EGOed lite on your startup disk. If you only have one 3.5-inch disk drive, you may have to switch disks several times. Just insert each disk as the Installer asks for it.
- When the Installer has finished, click on the Quit button in the middle of the Installer window. This should cause your IIGS to restart.
- When your IIGS finishes restarting, pull down the Apple menu and select EGOed lite (note that you have to be in a

desktop program like the Finder to have access to the Apple menu).

- When it finishes loading, notice that EGOed lite has its own menu bar. Select Open from the *EGOed lite* File menu and then put your GS+ Disk in a drive. You should see a list of the files and folders on the GS+ Disk.
- Open the Documentation folder on your backup GS+ Disk and then open the file EGOed.lite.Docs. This file contains complete documentation on how to use EGOed lite. *Please take a few minutes to read this documentation.*

Making Room

If you do not have a hard drive, you will probably have to remove some files from your startup disk to make room for the New Desk Accessories, control panels, and other system files on your GS+ Disk.

Towards that end, we have prepared the following list of "expendable" files that you can "safely" remove from your System Software v6.0 startup disk to free up some space. (We've put quotes around "expendable" and "safely" because almost *all* of the files in the IIGS System Software have some sort of use! The files listed here are the ones that are the "least" useful for a specified hardware setup.)

Be sure that you *never* delete *any* files from your original System Software boot disk! Always work on a backup copy!

System Software v6.0

If you use the System 6 :Install disk to create a minimal, 800K, System 6 boot disk, that disk will have 26K of free space on it when the installation is finished.

It must be noted that *all* of the files on this disk are *very* important and the files that you can *safely* remove depend, for the most part, on your hardware setup. So, please read these instructions carefully before removing *any* files.

The first two files you can delete depend on what you will be doing with your IIGS. If you will not be running AppleSoft BASIC programs, you can remove the file **BASIC.System** (11K) from the root directory of the disk. If you will not be running ProDOS 8 software, you can remove ***:System:P8** (18K).

If you do not care what time it is, you can delete the following file:

***:System:CDevs:Time** (11K)

After that, the files that you can safely remove depend on your *hardware setup*.

If you have a ROM 01 IIGS, you may delete the file:

*:System:System.Setup:TS3 (41K)

If you have a ROM 03 IIGS, you may delete the following file:

*:System:System.Setup:TS2 (37K)

If you do *not* have a 5.25-inch drive, you may delete the following 8K file:

*:System:Drivers:AppleDisk5.25

If you do *not* have a printer, you may delete the following file:

*:System:CDevs:Printer (5K)

Finally, if you have deleted all control panels, and you won't be installing any control panels from the *GS+* Disk, you can also delete the 19K file:

*:System:Desk.Accs:ControlPanel

Removing some or all of these files will give you ample room (up to 139K on a ROM 01 IIGS and up to 135K on a ROM 03 IIGS) on your startup disk to install EGOed lite or any of the other system utilities from your backup *GS+* Disk.

Having Problems?

If you are having a problem with one of the programs on your GS+ Disk, we want to help! But we can't help if we don't know about it!

If your GS+ Disk is defective, let us know and we will send you a replacement. You can call us at (615) 843-3988 (Monday through Friday between 9 a.m. and 6 p.m. Eastern Time), to request a replacement disk.

If you are having a problem using one of our programs, please fill out the problem form that is on your GS+ Disk and send it to "GS+ Problems" at the address shown below.

Note: You will *not* be able to print from EGOed lite or any other desktop program when using an 800K, System 6.0 boot disk. (There isn't enough room for all of the required drivers and control panels.)

If you want to save even *more* space, you might want to consider using Autopilot (from *GS+* V4.N1) as a replacement program launcher. With Autopilot installed on the minimal System 6 boot disk, initial free space goes up from 26K to 163K! You can then use Autopilot to autolaunch the Finder from a second 3.5-inch disk drive and still have plenty of room on your boot disk for lots of system extensions. For more information on Autopilot, refer to the "Autopilot v2.0" article in *GS+* V4.N1 or give us a call.

Self-Extracting Archive

We use *GS-ShrinkIt* v1.1 to compress the *source code* and related files on the *GS+* Disk into a *self-extracting archive*. To extract the files from the archive, simply double-click on the *GSP.V4.N6.SEA* program on your backup *GS+* Disk. *You do not need to have a copy GS-ShrinkIt in order to use any of the programs or other materials on this GS+ Disk!* However, you will gain better control over

IMPORTANT!

**Use scissors or a knife to open disk bag!
Do not attempt to pull bag away from magazine!**

the files you wish to extract if you have GS-ShrinkIt v1.1. If you do not have GS-ShrinkIt v1.1 and you would like a copy, check with your local user group or give us a call here at **GS+ Magazine** and we will try and help you locate a copy.

What's On The Disk

The programs on this disk *require* System Software v6.0 unless explicitly stated that System Software v5.0.4 or later is required. There are nine items in the root directory of this issue's disk. They are:

a. Read.Me

A lot can happen from the time we send this magazine to the printer and the time we get ready to mail them out. If anything does happen, we will put everything we can find in this file. Please try to read this file before using the **GS+** Disk. This is a plain text file.

Documentation

This folder contains the glossary as well as the EGOed lite documentation files. The glossary is a plain text file containing all of the terms defined in the past installments of our "Glossary" department. The EGOed lite documentation is a Teach file which can be read using Teach, EGOed lite, or any other TextEdit-based text editor.

GSP.V4.N6.SEA

This is a self-extracting archive (SEA)

containing the source code and related files for all the programs contained on this **GS+** Disk. The archive also contains the Miscellaneous Library. Technical information, such as the Miscellaneous Library documentation and technical notes are supplied in the archive as well.

To extract the files from the archive, simply double-click on this file from the Finder. Note that if you try to extract *all* of the files from this archive at one time, they will *not* fit on an 800K disk!

Icons

This folder contains Finder icons used by the various programs on the **GS+** Disk.

Installer

This is the Apple IIGS Installer. Run it to install the other programs on this issue's disk. For more information on using the Installer, refer to your IIGS owner's manual.

Original.Sounds

This folder contains the Macintosh and PC sound files described in the "Catch The .WAV" article in this issue.

Programs

This folder contains AutoSave, the fixed Animated Watch cursor for Cool Cursor v2.0, EGOed lite, Extra Bits, Finder Binder, the two sound resource files as

described in the "Catch The .WAV" article in this issue, and the two Twilight II blankers. Use the Installer provided on your backup **GS+** Disk to automate the installation of these files.

Scripts

This folder contains all of the scripts that are used by the Installer to install the files from this **GS+** Disk.

Talk.To.GSplus

This folder contains the **GS+** Magazine feedback form, problem form, and writer's guide.

The feedback form is a plain ASCII text file. Fill it out, and send it to us to let us know what you thought of this issue of **GS+** Magazine and what you want to see in future issues of **GS+** Magazine.

If you have a problem with one of our programs, *please* fill out the problem form and send it to us! This a Teach file, you may use EGOed lite or the Teach application to view it.

The writer's guide is a Teach file that explains what you need to know to write. for **GS+** Magazine—you may use EGOed lite or the Teach application to view it. **GS+**

How to Get System 6

Everyone should have a copy of System 6. Fortunately, we have a license to distribute it to our magazine-and-disk subscribers as a part of their subscription. Unfortunately, we can't afford to mail all five of the disks that System 6 takes up to every magazine-and-disk subscriber. However, we still want to make it easy for you to get System 6. So, if you are a subscriber to **GS+** Magazine with the companion **GS+** Disk (sorry, but we can *not* distribute System 6 to our magazine-only subscribers), send us the following items and we will send you System 6:

1) Five (5) *blank and formatted*, 3.5-inch diskettes to our P. O. Box address (which is shown on the back of your magazine). We are asking for "blank and formatted" disks because formatting takes time that we don't have, and it's a great way to tell if a disk is good before you send it to us. *If you send us a bad disk, we aren't going to replace it.*

2) A *self-addressed* return disk mailer with enough postage on it to mail the five disks back to you. (Foreign

subscribers without access to United States postage may include International Postal Coupons instead. See your local post office to obtain these.) *If you don't provide a postage-paid, self-addressed return mailer, your disks will be considered "gifts" and will be used for backups.*

3) That's all. Don't send any money. We don't want any money for this.

How Else Can You Get System 6?

If you are a magazine-only subscriber, here are some other ways to get System 6.

Your Apple dealer. Bug them until they get it in for you. The retail price is \$39, but that includes manuals. The part number is #A0077LL/A. For the name of your local Apple dealer, call (800) 538-9696.

Your user group. Bug them until they get it in. Take your own disks and they should only charge you a small copying fee. Some user groups may have it already copied for you and available for a

nominal charge. (Note that some user groups make these services available only to their members. Of course, you do plan on joining, don't you?) If you need to know where your local user group is, call the Apple User Group Connection at (800) 538-9696 extension 500.

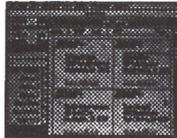
Resource Central. You won't have to bug them, they have it in stock, and in no less than three different "flavors." For just the disks (item number DA-006), the price is \$24. For the complete end-user package, including manuals, the price is \$39 (item number DA-0013). Finally, if you want the *ultimate* System 6 bundle, you can get the official System 6 Golden Master CD-ROM for only \$99 (item number DA-0029). Take your pick, and then give Resource Central a call at (913) 469-6502. (Resource Central also has System 6.0.1!)

And, of course, if you have a modem, you can download it from your favorite online service. The total download time is about 5 hours. **GS+**

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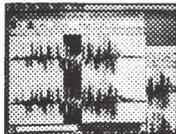
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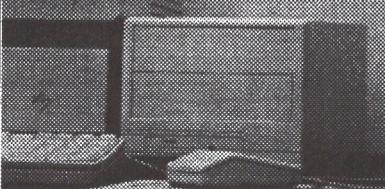


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It's Here!... X-Drive!



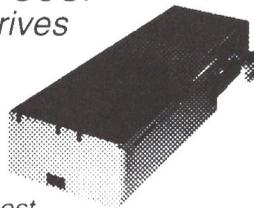
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Reviews

Castle Metacus

By Jason L. Smart

Shareware price: \$10

Download time (at 2400 bps):

Approximately 7 minutes

Requires System Software v5.0.4 or later and 1.25MB of RAM. Installation on a hard disk requires approximately 144K of space.

Traveling Faire Software

1158 Panoramic Dr.

Martinez, CA 94553

Reviewed by Michelle Bell

The fate of the world rests upon your shoulders. You must regain the axis of power. To do this you must find and assemble the "starkey." Unfortunately, it is in pieces and hidden throughout the Castle of the Wizard Metacus. The castle itself is guarded by ogres, green demons, force fields, brick walls, and traps. It is up to you to gracefully guide yourself through the unknown perils to regain the Power.

Castle Metacus is a game that has been around for a while. It was the success that the creator, Jason Smart, had with Castle Metacus that convinced him to continue to create great games like *Explorer!* and *GameMaker* (which we reviewed in *GS+* V3.N4). But Castle Metacus is a good game and best of all, it's a good shareware game. And we all know how difficult that is to find. In this game, the screens are composed of small square icons. They may represent a brick wall, a lava pit, a fountain, a locked door, or a

handful of other things. You, as either a wizard, archer, warrior, or thief, must travel throughout the castle, gathering gold, keys, magical powers and pretty shiny things, and, of course, the starkey fragments. Metacus himself is on hand to give you help, but he will demand a price for his help (which is easy for him to do—he has the green demons on his side!).

The game itself is controlled from the keypad. You can move, pick things up (like treasure and keys), be healed, talk to Metacus, go up and down stairs, and use your powers. And if you don't remember exactly what it takes to do all of this, just touch "?" on your keyboard to review the list of available commands. The screen shows the room you are currently in, be it the throne room or the kitchen, and it also shows you your hit points (how much damage you can take before you "die"), your remaining zaps, how much gold, keys, starkey fragments, and any special powers you currently possess.

While the game itself may at first seem like child's play—it took me only about 25-30 minutes to solve—you must first discover what order you can do things in, how to get through the brick walls, how to deactivate the force fields, what exactly will heal you and what will give you your zap capability back, along with finding the hidden staircase that will help you to solve your dilemma (no I'm not going to tell you where it is, just suffice to say, not everything is what it appears to be).

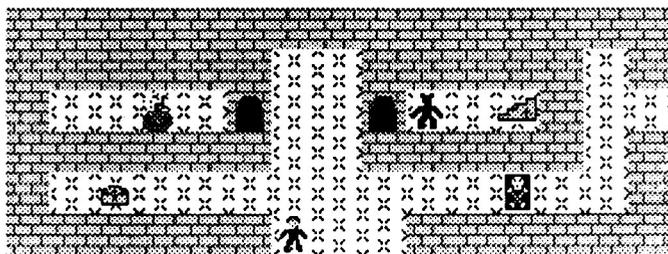
If at first you don't succeed at this game, don't worry. When you die, Castle

Metacus resurrects you at the the exact spot you died, with all of your money, spells and worldly possessions still in your control! In fact, after you die, you regain all of your hit and zap points. Talk about life after death!

Are you an expert adventure game map maker? You are? Well it won't help you much in Castle Metacus because it shuffles the rooms around so that each game is different. So knowing that the kitchen is next to the library in *this* game won't help you in the next time, when it's by the throne room instead. Just remember that there is a purpose for almost everything in the game, but it's up to you to find out what it is. And don't forget, by destroying some of those nasty ogres (although they hold a strange resemblance to a certain mouse with big ears) you can uncover hidden treasure chests.

While Castle Metacus seems like a great game, complete with nice graphics, a decent plot (which more than can be said for a lot of the movies currently out), it's not all roses and starkeys. I think the game might be nicer with some sound, as it is there is absolutely none. And it has that annoying habit of not allowing you to access any of your New Desk Accessories.

Other than that it is a really good game. Especially for shareware. You won't find this one in *Bob's Download Dogs*, so what are you waiting for: the axis of power awaits you! **GS+**



First floor of Northwest tower

HP:80 Z:1
\$0 D/1

Keys:0
Fragments:0
? - for HELP

HardPressed

By Andy McFadden

Retail price: \$69
Typical mail-order price: \$42

Not copy protected
Requires one 3.5-inch disk drive, 1.25MB RAM, System Software v6.0 or later. A hard drive and an accelerator are recommended.

WestCode Software, Inc.
15050 Avenue of Science, Suite 112
San Diego, CA 92128
(619) 487-9200

Reviewed by Steven W. Disbrow

HardPressed is a control panel and INTT combination that allows you to compress (i.e. reduce the size of) selected files on your disks. After the files are compressed, you can access them just like you always have from inside your regular applications. When an application needs to work with a compressed file, HardPressed steps in "behind the scenes" and automatically expands the file for the application. As far as you and your IIGS are concerned, the files are the same as always—except they take up less space on disk. (Note: Those of you looking for a head-to-head comparison with AutoArk, be patient, it's at the end of the review.)

Making It Happen

Of course, HardPressed doesn't just start compressing everything in sight. You have to tell it exactly which files you want compressed. You can do this in one of two ways: via a Finder extension, or via the HardPressed control panel.

The Finder Extension

To use the Finder extension, you simply use the Finder to select the files and/or folders you want to compress and then select Compress from the Finder's Extras menu. HardPressed goes through the files, compressing each one. If, for some reason, you decide you no longer want the files to be compressed, simply select them again, and select the Expand item from the Finder's Extras menu. If you want to know how much space you have saved on a particular set of files, select the files yet again, and select the Compression Info item from the Finder's Extras menu. HardPressed will scan the selected files and tell you how much total space they would normally occupy, along with the total size after compression, the average compression percentage for all of the files, and the total number of bytes saved.

The Control Panel

While the Finder extensions give you a

way to compress and expand files manually, the HardPressed control panel gives you a whole other level of control that is pretty darn cool. Using the control panel, you can mark specific folders or disks for automatic compression. Then, whenever you create a new file in (or copy a file into) one of these marked locations, HardPressed will automatically compress the file as it is written to disk! And, better still, when you copy files out of these locations to another disk (perhaps you want to copy a file for a friend that does not have HardPressed), HardPressed will automatically expand the file before it is written to the destination. This automatic compression (and expansion) is an amazingly cool feature—but it does have a few quirks.

First of all, when you initially mark a folder or disk, HardPressed does *not* immediately compress the items inside it. To compress those items, you will have to either use the Compress item in the Finder's Extras menu, or you will have to do something to cause those items to be written back to disk (i.e. if it were a folder full of text files, you would have to load them all into an editor and save them back on top of themselves). If it weren't for the Compress item in the Extras menu, this would be a tedious process at best.

Second, automatic compression only works inside the folders you mark for it. If you move a file outside of a marked location to an unmarked folder on the same disk, it will only remain compressed until you do something that causes it to be written back to disk. (Moving a file from one folder to another on the same disk, does not actually cause the file to be copied. It merely changes the pathname of the file.) At that point, HardPressed will see that the file is not being written back to a marked folder and it won't be recompressed. This is also

the case with files that you compress individually by using the Compress item in the Extras menu. If you compress an item in this fashion (and it is not inside a folder that is marked for automatic compression), it will only remain compressed until you do something that causes the file to be written back to disk.

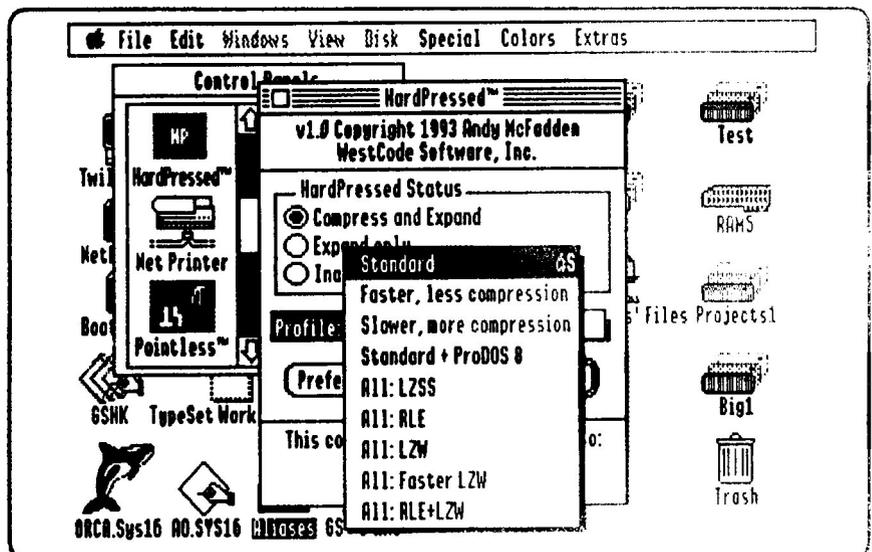
Put it all together and it means that it can be rather awkward to "fine-tune" the files you want automatically compressed. If, for example, you have a folder with ten items in it, and you only want nine of them to be automatically compressed, you'll have to create a new folder for the items, mark that folder with the HardPressed control panel, move the items into it, and then manually compress the items using the Compress item in the Extras menu. After that, the items *will* be compressed and expanded automatically, but it takes quite a few steps to get there.

Is It Worth All That?

Yes. It is. Once you get the hang of how HardPressed actually works, you'll be amazed at how quickly it compresses and expands most of your files. Of course, the price you pay for this speed is that the amount of compression is not always as great as you might like. Which brings us to another facet of HardPressed: the preferences and "profiles" you can use to fine-tune the performance of HardPressed.

Preferences

The HardPressed preferences are fairly straightforward. With them, you can set aside up to 1MB of RAM which HardPressed can use to speed up compression and expansion (this is known as a "cache" of RAM for those of you that really want to know). You can also tell HardPressed whether or not to verify the files that it writes out. This takes a bit of time, but it is an invaluable option if you



are the paranoid type. The other preferences you can set allow you to specify the key equivalents you want to use with the items in the Extras menu (Compress, Expand, and Compression Info), and whether or not these items will work on locked files. Finally, HardPressed allows you to specify a folder to hold the temporary files that it creates. (As files are compressed and expanded, their contents are copied into and out of this folder.) This is a nice touch, and it can be very handy if your hard disks are all stuffed to the gills. You can simply tell HardPressed to keep its temporary files on, say, a RAM disk, and you don't have to worry about running out of disk space while HardPressed does its thing.

Profiles

While all of your compressed files may look alike to you, HardPressed has a variety of different compression methods that it uses to shrink those files. For a given type of file (i.e. an application, or a particular type of data file) one method may not give you as much compression as another. So, HardPressed needs some way to determine which methods should be used for each type of file. To do that, HardPressed uses *profiles* that tell it which methods should be used for certain types of files. Each HardPressed profile gives you a different overall balance of speed versus compression efficiency. The Standard profile, for example, is right in the middle—it's pretty darn fast, and it compresses things pretty darn well. Other profiles can give you more compression (with less speed), or more speed (with less compression), and a few other combinations. Some of the profiles are included specifically for the "one-time" compression of files (like applications), that, once they are compressed, won't have to be compressed again.

As you might expect, since HardPressed is a IIGS control panel, it won't work inside your ProDOS 8 applications (like AppleWorks Classic). Because of this, it's not a good idea to compress any data files that 8-bit applications might need to use. So, most of the profiles included with HardPressed ignore ProDOS 8 applications and their data files. However, if you rarely use ProDOS 8, there are a few profiles included to let you compress these files.

Which brings up another interesting thing about the way HardPressed works. In some profiles, notably the "Faster, less compression" profile, HardPressed doesn't even bother to try compressing some types of files. For example, with the Standard profile selected, HardPressed will use RLE encoding to compress GS/OS (S16) files. However, with the "Faster, less

compression" profile, no compression is done *at all* on this type of file. This is faster, but you get a *lot* less compression.

And, unfortunately, there does not seem to be any way to build your own profiles for HardPressed to use. While the profiles that are included seem to do the job, this makes it difficult to *really* fine tune the way different files are compressed.

Three More Things

It's almost time to talk about how HardPressed compares to AutoArk, but I need to mention three other things first.

First of all, HardPressed seems to have a real problem with saving files to an AppleShare file server. While the files themselves are never damaged, I constantly get the message that "This file's header appears to be damaged." This is extremely annoying, and it makes HardPressed of limited value to those of us (all five or ten of us) that actually work on a network. However, WestCode has informed me that this problem will be fixed in the next version of HardPressed.

Second (and this isn't really a bug), it would be nice if there were a Finder extension that would let you mark items for automatic compression. Using the control panel is not too much trouble, but being able to do it from the Extras menu would be *much* more convenient.

Finally, I have to talk about the HardPressed documentation. In a word, it's fabulous. The manual itself is 88 pages in length, and it includes a wealth of information. It not only tells you how to use HardPressed, it also tells you a great deal about *how* HardPressed works. Among the highlights of the manual are a Question and Answer section, a section on applications that might not work properly with HardPressed (ProSel-16 is the worst culprit), an index, and a very neat appendix that details the different compression methods used along with how the different profiles use those methods.

And, in addition to the printed documentation, the HardPressed disk contains a wealth of information itself. A "Read.Me" file tells you about any last minute changes or problems you need to know about, and the rest of the material is for technically-oriented users and programmers that might want to know how HardPressed works, or that might want to write new compression modules for HardPressed. All in all, the documentation is excellent at every level.

And now, it's time for what you've all been waiting for! Our ...

Comparison With AutoArk v1.0.2

First of all, if you haven't read my review of AutoArk in GS+ V4.N2, you might want to do that before going on. It's OK. I'll wait for you. (Don't have GS+ V4.N2? We have lots of them left! See "Back Issue Information" elsewhere in this issue for how to order.)

When I started to put this comparison together, I was of the opinion that, basically, these are very similar products. After testing both of them, I'd say that, basically, they *are* very similar products, they just do the same things differently.

Since they are so similar, I was pretty certain that they could not both be installed at the same time. Much to my surprise, I was wrong. Having both AutoArk and HardPressed installed at the same time doesn't seem to cause any problems at all. (As you might imagine, this made testing much easier!)

Speed

Originally, this section of the comparison was going to have all sorts of charts and tables showing the minute differences in speed between the two products. However, as my testing progressed, it became obvious that that much detail wasn't going to be necessary. In a nutshell, HardPressed is a lot faster than AutoArk.

However, this statement is less meaningful when you consider overall performance. In their default configurations, HardPressed blows the doors off of AutoArk, *but* you get better compression with AutoArk.

Yet, this too can be improved in HardPressed's favor: by increasing the cache size, HardPressed can be sped up quite a bit, and you can choose a profile that gives you even better compression. AutoArk can be sped up as well, by turning off most of its safety features (verification, etc.), but it will still lag behind HardPressed.

And, if you play with it long enough, you can even configure HardPressed to give you better speed *and* compression than AutoArk on many types of files.

Other Comparisons

While speed is very important, there are a lot of other things to consider when comparing these products. I have a page of things that I felt were important, so in no particular order, here they are.

First and foremost, neither package includes an application to uncompress files with. This can be very important if for some reason you have to boot without AutoArk or HardPressed installed. If they

aren't installed, you can't get at the files they have compressed! A separate application would allow you to get at these files without having to have AutoArk or HardPressed installed.

Neither program can expand the other's files. This is not very surprising, but it is very disappointing.

As mentioned earlier, HardPressed will automatically expand files when you copy them to another disk. AutoArk does not.

AutoArk can password protect your files by encrypting them as well as compressing them. HardPressed can't. However, the HardPressed technical documentation hints that this capability may be added in the future.

HardPressed includes instructions on which files you can compress in your System folder. In fact, HardPressed ships with a set of pre-compressed system files that you can install on an 800K boot disk for use with HardPressed! (It's necessary to do this if you want to use HardPressed without a hard disk.) Common sense tells me that AutoArk could do the same thing, but it doesn't go out of its way to tell you about it.

When you tell AutoArk to compress a file, it remembers that file and automatically re-compresses it (if necessary) whenever you return to the Finder. Of course, if you don't use the Finder, this is pretty useless. However, if you *do* use the Finder, it is much easier to get the hang of than the concept of "marked folders." You simply compress the file and AutoArk does the rest, regardless of where the file is. (As mentioned in the original AutoArk review, ECON plans to change this so that you can have AutoArk re-compress files at times other than when you return to the Finder. At this point however, it only happens in the Finder.)

HardPressed contains a *lot* of technical information that will delight power-users and programmers. AutoArk does not.

AutoArk makes it much easier to fine-tune the compression methods that will be used for the different types of files in your system. HardPressed's profile system doesn't give you quite as much control, but since it's generally faster anyway, you probably won't care.

When you get compression information on files, AutoArk gives you information on each file individually. HardPressed, on the other hand, computes information for all of the selected files. Which is

better is simply a matter of preference. (But, it's a pity that neither program offers you both options.)

HardPressed allows you to specify the location for the temporary files it creates. AutoArk does not. It creates them in the same folder as the original file. If you are running low on disk space, this can cause problems. However, you can also tell AutoArk not to create temporary files, but to compress and expand files in the same space as the original file.

HardPressed allows you to change the size of its RAM cache. This can speed things up considerably. AutoArk can't do this.

Bugs, Problems, etc.

Of course, each program has some problems that might affect your decision as to which one to get.

Under Finder v6.0.1 for example, you can't launch an application that was compressed with AutoArk. This is not a problem under the System 6 Finder, and ECON has told me that it is really a Finder quirk. But, it is annoying and they plan on working around it in the next release of AutoArk.

HardPressed has a problem when you use it to compress GraphicWriter III files. However, WestCode has released a patch for HardPressed that will fix this. You can download the patch from any of the major online services, and it will be fixed in the next version of HardPressed.

If you use the Finder's Icon Info menu item to get information on a file compressed with AutoArk, any comment attached to the file won't show up on the comment card. Even worse, you can attach a comment to the compressed file, which might be bad (I haven't tried it). HardPressed does not have this problem.

When getting compression information on individual files compressed with HardPressed, sometimes the numbers that you get might seem a little off. However, it's nothing I can reproduce with any consistency, and getting info on more than one file seems to work every time.

Recommendations

So what should you buy? Both of these are, in my experience, excellent products from companies that are firmly committed to the IIGS. Frankly, it hasn't been easy to make a decision in this comparison. Still, I think I can make the following recommendations.

First, lets consider AutoArk. If you already own AutoArk, and you are happy

with its speed, I'd advise you to stick with it. Furthermore, if you own UniverseMaster (also from ECON, see review in *GS+* V4.N2), I would strongly advise you to get AutoArk. The reason is that UniverseMaster and AutoArk both use the same file format, and AutoArk can read the files you backed up with UniverseMaster just as if they had been compressed with AutoArk! This is a very neat and useful feature (not to mention a very clever way to promote both products). Another point in AutoArk's favor is that if you need to encrypt files, it can do it for you. Also, I personally prefer AutoArk's method of automatically re-compressing files (regardless of where they are) to HardPressed's use of marking certain folders for automatic compression.

Speaking of HardPressed, as I said earlier, it clearly is the faster of the two products. So, if that's your main criteria, HardPressed is definitely the way to go. You should also go with HardPressed if you don't have a hard disk and are running your IIGS off of a floppy drive.

The bottom line is that, if you don't already have AutoArk or UniverseMaster, I would probably recommend HardPressed. The increased speed is one reason, but the deciding factor for me would be the documentation. While AutoArk's documentation is very good, HardPressed's is much more extensive and is probably better suited to beginners.

As for *me*, I don't think that I'll personally be switching to HardPressed from AutoArk. The main reason is because of the problem HardPressed has with AppleShare. But, another consideration is that I use UniverseMaster for my backups, and that I already have a *lot* of files compressed with AutoArk.

Of course, since both programs seem to be able to co-exist on the same boot disk, I could simply use them both at the same time. Which, if you have the money to spend, might not be a bad idea. *GS+*

Additional Product Information

AutoArk
By D. Proni

Retail/mail-order price: \$38/\$28
Requires one 3.5-inch disk drive, 1MB RAM, System 6 or later, a hard disk is recommended

ECON Technologies
P. O. Box 195356
Winter Springs, FL 32719
(407) 365-4209

The Lost Treasures of Infocom
IIGS Version by Mike Howard & John Wrenholt

Retail price: \$59.95

Not copy protected
Requires System Software v5.0.4 or later,
1.25MB of RAM, and one 3.5-inch drive.
Installation on a hard disk requires
approximately 2.5MB of disk space.

Distributed by:
Big Red Computer Club
423 Norfolk Ave
Norfolk, NE 68701
(402) 379-4680

Reviewed by Robert A. Ribaric

YES!

Okay, are you like me—did you love those old Infocom text adventures as a kid? Do you want to show *your* kids these classic games? Maybe you've secretly been wanting updated versions for your IIGS. Well, they're here—with a vengeance! Some of you might be aware that this collection has been available for a while on other systems. The guys from Big Red have once again come to the rescue by translating *nineteen* of these "treasures" to the IIGS format. No matter where you played them before, or even if you've never played them—you now have the opportunity to experience the worlds of Infocom on your favorite machine!

Listen To This

We've got Zork, Zork II, Zork III, Beyond

Zork, Enchanter, Sorcerer, Spellbreaker, Deadline, Witness, Suspect, Lurking Horror, Ballyhoo, Infidel, Moonmist, Planetfall, Stationfall, Suspended, Starcross, and the Hitchhiker's Guide To The Galaxy! That's a whole lot of gaming. These titles should bring back memories for many of you. If these names *don't* ring a bell, perhaps I should tell you a little about Infocom and "Interactive Fiction."

Interactive Fiction—what a great concept. It all started with a game called "Adventure," that took you to a place called Colossal Cave. However, Adventure was a very simplistic game that didn't give you much of a feeling of "being there." Then, along came Zork. Inspired by Adventure and Dungeons & Dragons, Dave Lebling and Marc Blank created Zork on the mainframe at the campus of the Massachusetts Institute of Technology. Unlike Adventure, though, Zork had a much "deeper" feel to it, and you could communicate with the game using complete sentences (as opposed to the two-word, "noun-verb" combinations that Adventure used). The game was a huge success, and it led to the creation of Infocom and Interactive Fiction.

Consider this—reading a good novel is great, but don't you wish you could be *inside* it? Normally, you're just watching a story happen to the characters. With Interactive Fiction, *you* are the main character! Everything is first person, so you decide what happens. The computer shows you the story simply by putting

text on the monitor—there are no fancy graphics. (Actually, there are graphics, but you have to supply them with your own imagination.) After that, you tell the computer what you want to do by typing it in. Instead of two word commands like in earlier games, you can put in whole sentences. The computer then tells you the results of your actions—and that can be just about anything! With a little imagination, you can actually feel as if you are there.

No matter what kind of story you enjoy, this package has a game for you. Maybe you like science-fiction? You can play Planetfall, and its sequel, Stationfall. Starcross and Suspended are also included. Fantasy? We've got Enchanter and its sequels Sorcerer and Spellbreaker. Who can forget Zorks I, II, III, and Beyond Zork? If you like a good horror or mystery, try Deadline, The Witness, Suspect, The Lurking Horror, Ballyhoo, or Moonmist. Just want a good old-fashioned action-adventure? Infidel is for you. And finally, for a comedy, try the Hitchhiker's Guide to the Galaxy.

What You Get

If you feel cheated when you don't get anything but a disk and a skimpy piece of paper with your software purchases, check this out. The manual contains 269 pages of background information for the games. You get complete reprints of all of the original documentation for each and every game. And that includes all of the humorous illustrations that made Infocom manuals such fun to just read.



Not enough stuff? Well, a 344-page hint book is also included in case you get stuck. Best of all, complete maps are there to keep you moving. Instructions for your IIGS system are also included to help you with installation and getting started. The back of the box is beautifully decorated with the original game covers—which is cool if you are a nostalgia buff.

The only thing missing in this package are the “goodies” that Infocom games were famous for. For example, the original Hitchhikers’s Guide to the Galaxy came with a “Don’t Panic” button, a pair of peril-sensitive sunglasses, and some pocket fluff. The Lost Treasures of Infocom doesn’t include any of that. However, I don’t think they would have been able to fit all of the stuff from nineteen games into one box.

How To Go About It

If you’ve never played any of these games, you should read all of the instructions about using Interactive Fiction, as well as the background information for the title

you choose to play. If you know how to play, but haven’t gone through a particular game—just check out that information and get started. More than likely, you will remember playing most of these, but always getting stuck. Maybe you got so frustrated that your old copy of Suspended is still gathering dust behind your desk! Well, that’s where the maps and hints come in. The hint book is arranged so you only see what you need. You can play until you hit a dead end and then check the tips for that part. Bogus hints are also mixed in to help keep you honest. If you just want to cruise on through a game, the maps are invaluable. Just remember though, for maximum enjoyment, you will probably want to try it on your own Use the maps and hints only if you get completely stuck.

I’ve never been in this situation myself, but Joe tells me these games are great for weekends when you have nothing to do. You could literally spend days to weeks on one game. If you want to play them all without cheating, allow yourself several months. It’s also really fun to go

back into the ones you remember playing before. The authors have listed things to do to get humorous responses from the computer that you might have missed the first time around. These suggestions are in the hint book. Just do whatever your heart desires!

So Many Choices

As if having nineteen games to choose from wasn’t choice enough, two different “interpreter” programs are provided to play these games. The first of these interpreters is called the “standard interpreter.” When you use this interpreter, the text of the game is shown in a window on the IIGS desktop. Since it’s a standard IIGS window, the text can be scrolled back so you can read it over again. About 8K of text can be stored in this buffer, and when you save the game, the text in the buffer is saved along with it. Therefore, when you come back later, you can review what’s going on. Different fonts can be used for the text, as well. This allows you to give the game a more appropriate “feel.” Wouldn’t a futuristic font give Starcross an appropriate look? What about using a Halloween-style font with The Lurking Horror?

Scavenging Infocom Games From Other Computers

By Steven W. Disbrow

Once you know that, basically, all you need to run an Infocom game is the correct interpreter, a really cool option becomes available. Namely, once you have the Lost Treasures of Infocom for your IIGS, you can buy the Lost Treasures of Infocom, Volume II, for the *Macintosh*, use the HFS FST to copy the appropriate data files over to your hard drive, change their file types and auxiliary types, and play them!

In fact, you should be able to buy an Infocom game for *any* computer and, if you can get the game data file over to your IIGS, play it with the interpreters included in the Lost Treasures of Infocom. For example, our associate editor Noreen Disbrow has a copy of Hollywood Hijinx (which is not included in the Lost Treasures of Infocom) that she bought about five years ago for her Atari ST. As mentioned in this issue’s “System 6.0.1—For Users” article, the disk formats used by the ST and MS-DOS are very similar. Unfortunately, they aren’t similar enough for the new IIGS MS-DOS FST to read. So, we formatted an MS-DOS disk on our Macintosh (you could use a real PC if you want), and, using Bob’s Atari ST (which, in fact, used to be Noreen’s), copied the STORY.DAT file from the Hollywood Hijinx disk to the MS-DOS disk. (The ST will read and write the MS-DOS disk just fine.) Then, I brought the MS-DOS disk back to the office, popped it in the SuperDrive attached to one of our IIGS’s and copied the data file over to the hard drive. I renamed the file “Hollywood”, and then used NoDOS to change the file type to \$F5 (this is the file type that is used by the game data files that come with the Lost Treasures of Infocom on the IIGS). The next step, figuring out the auxiliary type, was trial and error. However, most of the games that came with the Lost Treasures of Infocom had an auxiliary type of \$00008003, so that was what I used for Hollywood Hijinx. Then I started up the standard interpreter and loaded Hollywood Hijinx. Surprise! It worked perfectly!

Of course, this is kind of the round-about way to go. A simpler method would have been just to have Bob send me the file via modem. Or, I could have just bought the Lost Treasures of Infocom Volume II for the Macintosh and taken the file from there. (Which brings up a good point—this isn’t a license to steal Infocom games! Make sure you buy the game you want to bring over to the IIGS! And, just in case you can’t get it to work, make sure you buy it from a place with a good return policy!)

Also, it must be noted that this *will not* work on the later Infocom games that featured graphics. So don’t even try it with those games. [A special thanks to Mike Howard and John Wrenholt of Big Red Computer Club for letting me in on this little trick!]

Unfortunately, there are a couple of small problems with this interpreter. First of all, you can’t switch games with it. In other words, if you are playing Moonmist, and decide to stop and play Zork I, you have to quit back to the Finder and then re-launch the Lost Treasures of Infocom and load Zork I. Second, this interpreter can’t be used on all the games in the package. (More on this below.) So, to play certain games, you have to use the second interpreter.

The second interpreter is called the “advanced interpreter” and it will work with all of the games in the Lost Treasures of Infocom. Using this interpreter is more like playing the games on your old 80-column Apple II text screen. But, while there is no window (and no scroll-back buffer), there is still a standard menu bar that lets you get to your New Desk Accessories. Also, you can select black text on white or white on black. And, while you can’t switch fonts with this interpreter, you can switch games without having to quit.

So, what exactly is an “interpreter,” and why are there two of them? Well, you see, each of these games is not really a “game” at all, they are just big data files. The interpreter is needed to, well, interpret these data files (as well as interpreting the commands you type) and present you with the information that’s in it. Over the

years, Infocom wanted to make improvements in their newer games and they had to update the interpreters for those games accordingly. So, each game requires a specific version of the interpreter. You can tell which interpreter version is required for a particular game by looking at the auxiliary file type (using a utility such as our own NoDOS from GS+ V4.N4) of the game data file. The last digit of the auxiliary file type tells you the interpreter that is needed. For example, if the number is \$00008003, the game requires interpreter version three.

The standard interpreter will let you play games requiring interpreter versions one through three. The advanced interpreter will play games requiring interpreter versions one through five (which are the most advanced Infocom games). Why not just include the advanced interpreter and forget about the standard one? I guess Big Red wanted to give us a choice.

Which Game Did I Choose?

Now, I'd have really loved to go through all nineteen of these adventures. However, I'm not sure Steve would have paid me for the extra months it would

have taken. I had to pick just one to completely finish. I just read about, and wandered through the rest of them. Remember how I said that there was something for everyone? Well, I've always had a secret love for ancient Egyptian culture. You know—pyramids, sphinxes, King Tut, and the like. It just so happens that Infidel has just such a premise. Your character is an underachieving archaeologist-type with something to prove to the world. You are given a map and a relic found in the 1920s to help you on your quest. Apparently, thousands of years of shifting sand dunes have completely buried a Pharaoh's tomb. You are to locate and explore this lost pyramid, but your crew has deserted you. It is up to you to survive long enough to retrieve the riches surely to be found there!

I must admit that I made good use of the maps and hints to finish Infidel so my review could go to the printer with the rest of the magazine. To give you an idea of what's involved here, it still took me several hours to navigate through everything—even with the extra help! I really liked the storyline and play, but be

careful with this one—the ending takes an ironic turn. That's the whole point though—you never know what's going to happen . . .

What? Problems?

I only found two problems with the Lost Treasures of Infocom. First of all Zork Zero is not included in the IIGS version. The reason is that it would have required yet a *third* interpreter and Big Red could not secure a license to create that one for the IIGS. However, if and when they do, all registered owners will receive Zork Zero for free.

Second, in some of the games, if you type a command that goes past the edge of the screen, the game might lock up, forcing a reboot. The way around this is simple: just don't type anything that goes past the edge of the screen!

My Conclusion?

It's no big secret—I loved The Lost Treasures of Infocom! This is the first piece of software I've reviewed where I didn't find something *really* bothersome. So, do yourself a big favor, buy and enjoy the Lost Treasures of Infocom! GS+

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Treasures From Heaven: Quest for the Hoard 2

By Ken Burch

Retail price: \$30.00

Not copy protected

Requires 1.25MB of RAM and System Software v6.0 or later. Installation on a hard disk requires approximately 750K of disk space.

Pegasoft

R.R.#1, Honsberger Avenue

Jordan Station, ON, Canada

LOR 1S0

Reviewed by Michelle Bell

Pit of Quilragstroplet

Once again you are that gutsy apprentice wizard that we left after rescuing all the treasure from the evil sorceress, Quilragstroplet. Unfortunately, you are a greedy little apprentice and you just had to go back for one last look . . . Now, she has snared you and thrown you into one of the deep pits. Since you have stolen all of her treasure from her, she has decided to give you her entire castle, brick by brick. You stand quite a good chance of being buried alive as she throws all of her castle belongings down upon your head. But wait, you remember two weak spells. One is a shield, but it can only hold two items at a time. The other is a disappearing spell, but it will only work on groups of three. And yet these are your only hope. You must catch the items and make them disappear, lest you be buried alive.

Details, Details

With a title like "Quest for the Hoard 2" you might think that this is more of the same, but they are completely different games. Which means if you loved the first one, you may not necessarily like number two. (See our review of the original Quest For the Hoard in *GS+* V4.N3.) The object of this game is to stack objects in groups of three (vertically, horizontally, or diagonally) and make them disappear. In this way you get points and advance levels. Hoard 2 has three difficulty levels: child's (very easy), easy, and hard. You can play the game using either the keyboard, keypad, or joystick. You can also set the music for stereo or monophonic playback, or you can turn it off completely. It even has a screen (which you can print out), that lists the high scores, and another one for your daily high scores. It comes with clear, and understandable (yea!!!) instructions that cover installation, game play, and even troubleshooting.

Hoard 2 has excellent graphics—just beautiful. (And, as usual, our screen shot probably won't do it justice.) The playing

screen shows you your score, the value of the group of objects you just cleared, the wave you are on, how many objects are left to be hurled down upon your pathetic head, and a graph that is suppose to show you how much you need to qualify for the next round.

And the sound is fantastic! Chris Fowler did a wonderful job with the original and borrowed tunes in the game. It definitely shows that a lot of work went into this game to make it a success.

To start the game, you chose a difficulty level from a main screen. There is even a teddy bear icon (except everyone here thinks that it looks more like a pig) that you can use to select the children's version. As you progress through the game, you must catch bricks, trees, computer equipment, Greek artifacts, and other surprises. In the beginning you have six empty columns in which to stack objects. As you progress, the speed of the falling objects may slow a little, yet your columns will begin with stuff already in them. You can pause the game and the screen blinks and changes colors (sort of a built-in screen saver).

Survey Says . . .

So what's the catch? Well, to me, the game itself was boring. The game gives you points for catching items on your shield, and for making a stack of three disappear. Yet you get more points for causing chain reactions of groups to disappear. Is it just me that finds this quite similar, to say, Klax? Now I've played similar chain reaction games, but it's a little difficult to make a chain reaction when your columns will only hold four objects—any more and you die. And remember you have to have to stack at least three items to make them vanish.

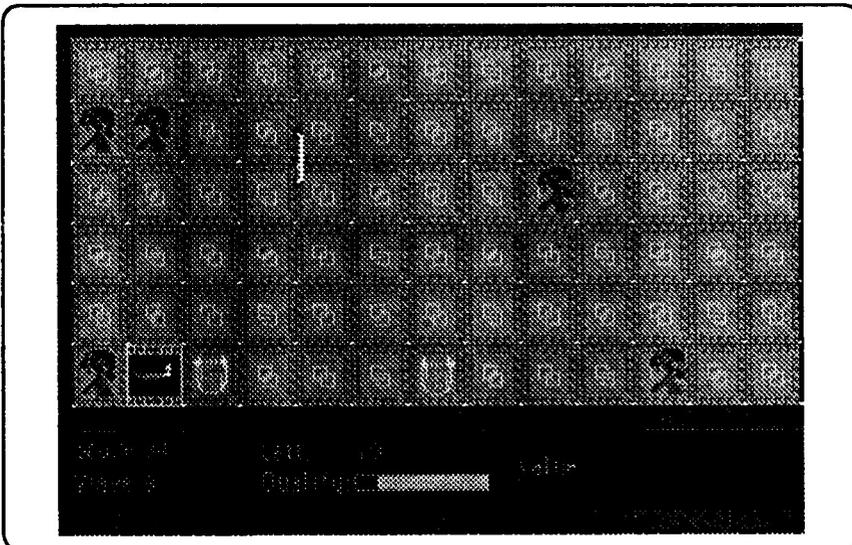
When you die in this game, make sure you die well. Don't die just one or two points away from advancing to the next wave, because Hoard 2 won't let you start out again at the same level you died on. Nope, it's all the way back to the beginning for you. Another annoying thing is that if you catch two items on your shield, you have to drop both of them at the same time. Their positions will shift as you catch them, but you must still drop them both. You do get a shield upgrade at 1000 points. Your points are determined by your ability to clear out objects and the number of points you get determines whether or not you will advance to the next wave. (Note: On most waves, you must make chain reactions in order to advance to the next wave.)

Of course, as with a lot of games, Hoard 2 won't let you get to your NDAs. And, if you try to use the control panel to turn the volume of the superb sound down a little, it dies with an unclaimed sound interrupt. So make sure that you set your volume to a low notch before you begin play. Another problem is that you can't abort a game in the middle. If you want to quit, you either have to reboot or die.

Should You Catch It?

It seems to me, that Hoard 2 was marketed on the success of Hoard the original. The graphics and sound are excellent, but, for me, the game was boring. But if you like Tetris/Klax-style stacking games, you may love Hoard 2. Otherwise, to be truthful, I'd pass.

Of course, there is one thing that still puzzles me, why on Earth would anyone consider an old sorceress' mundane possessions to be "treasures from heaven?" **GS+**



Your Money Matters
 Programmed by Steve Peterson

Retail price: \$99.95
 Typical mail-order price: \$79.95
 Not copy protected
 Requires 1.25MB of memory, one 3.5-inch disk drive, and System Software v5.0.4 or later, hard drive recommended

Software Solutions
 5516 Merritt Circle
 Edina, MN 55436
 (612) 929-8947

Reviewed by Mark Raney

If you're like me, one of your least favorite things to do in life is pay bills. Paying bills doesn't give you the same rush as actually spending real money on something that you can hold in your hands immediately after purchase. There must be a way to make paying bills more fun. This is where home finance packages like Your Money Matters come into play. At least you get the joy of spending some quality time with your computer while satisfying the bloodsucking creditors (excuse me if I get just a bit carried away here!) that take away your hard-earned cash!

Your Money Matters is a comprehensive home and small business financial package. It allows users to create a system to track income, expenses, assets, and liabilities. It includes features to allow users to forecast operating budgets, and reconcile checking accounts. As do most home accounting packages, Your Money Matters allows the user to print checks.

Your Money Matters is a desktop program that is supplied on four 3.5-inch disks, one of which is comprised solely of

freeware and shareware programs. One of the disks is a System 6 boot disk, but Your Money Matters will run under System Software v5.0.4. Another disk contains the actual Your Money Matters program, as well as several demo files. The last disk contains some other Your Money Matters utilities as well as more shareware programs.

Getting Set Up

The first task users have in setting up Your Money Matters for their own account is to create a new Your Money Matters personal data file. This is easily accomplished by selecting *New File* from the File menu. Next, users add a variety of account items, such as their checkbook, different credit cards, mortgage, various utilities, assets, income, and other expenses. Each of the previously mentioned types of account items is further grouped according to whether they are an asset, liability, or some type of income or expense. These account type groupings help the user to prepare reports based on the different account information.

After setting up the various accounts, the user is ready to enter some transactions. This is accomplished by selecting *Transactions* from the Windows menu. This opens up a spreadsheet-like window (see screen shot) that has columns for the account name, account type, transaction date, tax information, and amount, as well as other data. To add a transaction, the user must select *Insert Records* from the Edit menu. The user is then prompted to enter information about the new transaction. By selecting *Recurring* from the Windows menu, users can create recurring transactions, such as mortgage payments, that can be entered each month by simply typing the first few characters of the payee field.

Your Money Matters also allows users to budget specific dollar amounts for various account types. Selecting *Acct Budget* from the Windows menu allows the user to specify a certain amount of money to an account. This data is then used when preparing various report types to show how well the user is sticking to budget projections.

Using the Entered Data

After entering a month's financial transactions, specific records can be displayed using Your Money Matters' *Match Records* function. Displayed in a scrollable list are selection criteria, that when selected are entered into record match criterion fields. After choosing the selection criteria, pressing the *Select Records* button causes only those records that match the search criteria to be displayed. Your Money Matters can also do multiple field sorts in either ascending or descending order to display certain types of records in a particular order.

Once accounts are set up, it is easy to display a month by month running total of an individual account. It will reflect any transactions entered in the user's ongoing monthly transaction list. Your Money Matters also allows any account to be budgeted by entering budgeted dollar amounts using *Acct Budget* in the Windows menu. The month by month running totals track how actual expenditures compare to budgeted amounts.

Monthly account balancing with Your Money Matters is similar to balancing a regular checkbook account. The *Balance Acct* window only deals with one account type at a time. Clicking on the "Cleared" field toggles the transaction between uncleared and cleared. The account balance in the upper right hand corner of the window then changes to reflect the cleared transaction. Balancing an account in Your Money Matters is easy and intuitive. If the accounts don't balance correctly, selecting *Balance Help* from the Windows menu provides an account summary that outlines the account's activities and even allows for adjusting the account's balance, should that be necessary.

Another feature of Your Money Matters is the ability to track investments. Selecting *Acct Invest* from the Windows menu allows the user to enter the name of the investment, purchase date and value, current value, and rate of return.

One of Your Money Matters' cooler features is the ability to set up user-defined tax identifiers. Users may set up

Base Acct	Type	Ref No	Date	Paid To	Distr Acct	Tax I	C	Amount	Memo
340/394	Visa Gc Check		03/16	Walgreens	Split	-	C	\$14.99	Car Oil And
	Visa Gc Check		03/16	Walgreens	Split	-	C	\$11.70	Pop/Ice Cri
	Visa Gc Check		04/09	Minnesota Fab	Split	-	C	\$53.39	Draperly Ant
	Visa Gc Check		04/09	Spiegel	Personal Li	-	C	\$19.46	Linda Top
	Visa Gc Check		04/14	Wiebolts	Split	-	C	\$306.26	Dave Suits
	Visa Gc Check		04/30	McDades	Split	-	C	\$71.84	
	Visa Gc Check		05/03	Call Apple	Personal Oc	-	C	\$112.50	Symbol Sim
	Visa Gc Check		05/05	Visa	Repairs/Im	-	C	\$6.30	
	Visa Gc Check		05/07	Pfund And Cli	Split	-	C	\$29.36	
	Visa Gc Check		05/07	Poppin Fresh	Restaurant	-	C	\$13.70	
	Visa Gc Check		05/20	Gantos	Gifts Durse	-	C	\$25.25	Linda Top
	Visa Gc Check		05/21	Baileys	Restaurant	-	C	\$20.60	
	Visa Gc Check		05/22	Red Cross Sho	Personal Li	-	C	\$73.46	Linda Shoes
	Visa Gc Check		05/26	Florsheim Sho	Personal Oc	-	C	\$42.05	Dave Shoes

identifiers for such things as medical expenses, child care expenses, real estate interest, and any other type—up to 245 different categories. Year-to-date tax information can be viewed at any time. This feature of Your Money Matters should make April 15 be a slightly less dreaded day of the year!

Your Money Matters easily allows users to set up and print reports on based on various criteria. Users can create any of the following reports: transactions, recurring transactions, accounts, investments, account addresses, account monthly, payee addresses, account type, transaction type, Tax ID, and of course checks. Further, Your Money Matters is capable of preparing graphs of current accounts, cash flow and net worth. While Your Money Matters' reporting features are robust and well implemented, the check writing capabilities leave much to be desired. Selecting checks for printing is cumbersome and less than intuitive. Selecting checks for printing requires use of a database-like selection process. The manual suggests setting the check number to zero and then using a specific selection criterion outlined in a diagram. Your Money Matters does allow for printing on personal checks from the user's own checkbook, but my experience showed that this actually took longer and more effort than simply penning the check manually. Your Money Matters also supports continuous tractor feed checks, but I experienced less than perfect results using these *expensive* checks.

Concerns

One feature I found particularly irritating about Your Money Matters was the way its window's scroll bars worked. In most IGS programs, clicking on a scroll arrow and holding down the mouse button

causes the data in the window to scroll smoothly and *continuously*. Not so with Your Money Matters! For instance, in the transaction window, clicking on a scroll arrow and holding down the mouse button causes the data to scroll a single transaction only. You have to keep continually clicking to scroll the information. Your Money Matters does allow for keyboard navigation through window listings, but that is no substitute for following standard IGS interface guidelines.

Also, some menus include different menu items when certain windows are active. For instance, when the Account window is active, three new menu items are added to the Windows menu. Traditionally, IGS program menus contain all menu items and those not available during a given operation are dimmed. It is confusing to look for a menu item described in the manual, only to find it is not included in the appropriate menu. This aspect of Your Money Matters is a *major* problem for me!

Your Money Matters also seems not to support the standard IGS clipboard. You cannot select and copy a portion of a Your Money Matters report or transaction window for pasting into a word processing document or even EGOed. This is a real shortcoming for those that may wish to include Your Money Matters financial data in other written reports.

Your Money Matters also does *interesting* things with color. Other utility's menus (like TransProg III, Kangaroo, or even EGOed's open file dialogs) become very ugly and almost unreadable when used with Your Money Matters. It also alters the colors of the user's chosen desktop pattern.

During the course of working with Your Money Matters in testing it for this review and running my family budget, I encountered several crashes. They occurred randomly and unpredictably. This is *not a good thing* to happen when finances are at risk.

The Your Money Matters' manual at first glance appears to be hefty and comprehensive. It runs over 150 pages, is indexed, and includes a tutorial and a reference section. Unfortunately, when looking for further information in the reference section on an item described in the tutorial, users will discover that many areas are simply cut and pasted between the two areas. I found the manual to be of little help in exploring Your Money Matters.

One last complaint; Your Money Matters also does not support multiple fonts, as a IGS program should, so printing October checks using the "Halloween" or "PostCrypt" TrueType fonts is not possible.

Bringing it All Together . . .

So, should you purchase Your Money Matters? Probably not. If you simply want a program to balance your checkbook and print checks, Your Money Matters is not for you. It includes many more features than you'll need and as mentioned earlier, printing checks is not what Your Money Matters does best. A friend who recently bought Your Money Matters has returned to Quicken for his family financial chores after only a month of using Your Money Matters. Even though I ran my family budget with Your Money Matters for two months, I don't see myself switching over to Your Money Matters from Quicken either. Users who run a small or home business that needs to track expenses, deductions and assets may find Your Money Matters to be a suitable package, but the learning curve will be extensive. While it is important for a comprehensive financial package to include many features, they shouldn't get in the way of simple day-to-day operation of the program.

Your Money Matters is a huge undertaking for a IGS program. I can tell that Steve Peterson has a strong background in finance as Your Money Matters is oozing with financial features. Unfortunately, the multitude of features in Your Money Matters just overpowers what I want out of a home finance package. No program's features, including Your Money Matters, should get in the way of doing simple procedures that the program was designed for. *GS+*

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Zip Drive

Price: 20MB - \$299
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5601 West Slauson Avenue, Suite #283
Culver City, CA 90230
(310) 568-2002

Reviewed by Gregory Zimmerman

Introduction

The Zip Drive is a small hard drive attached to an expansion card that fits into a slot in your IIGS. There are no connectors, power cords, or cables of any kind to hook up.

The Facts

The Zip Drive is really a Conner 2.5-inch IDE (IBM type) drive that is so small, that it will fit on a card which can be inserted into any slot (except slot 3) inside your IIGS. (The drive mechanism itself is so small, that it will also fit inside a Macintosh PowerBook, and in fact, these types of drives are the same type used inside PowerBooks.)

Zip sells the drive in two storage sizes: 20MB and 40MB (the 40MB model is the one reviewed here). The drive can only be purchased directly from Zip, by calling the number at the top of this review. They do not sell the drive through dealers or other third party vendors.

How Does It Work?

Installation takes under a minute if you've got any experience at installing things inside your IIGS. While the drive will work in almost any slot, it overrides the slot function. So practically, slot 7 or slot 6 will be best for most people. Of course, in slot 6, you won't be able to use your 5.25-inch drives, and in slot 7, you may have a small problem using AppleShare on a ROM 1 IIGS, but finding a good place to put it is no different than with any other card. To install it, you *turn off your computer* (this is *very* important), take off the cover, touch the power supply (to discharge any static electricity that may have built up in your body), remove the drive from the bag it comes in, and put it in the slot of your choice. Next, put the cover back on, restart your computer, and set the slot setting in the control panel for the slot the drive now occupies to "Your Card." If you want the IIGS to start-up using the drive as the start-up device, make sure the Startup Slot setting is the same as the slot in which the drive is installed.

The width of the card is a little excessive, but it fits with no problem in slot 7 in my computer, between an Apple High-Speed SCSI card in slot 6, and a 4MB RAM card on the other side. Just make sure nothing is "touching" before you close up the computer. (If the components of one card are touching another card, you can insert a piece of paper between the cards to ensure that they don't short each other out. As always, be sure to do this with your computer turned *off!*)

The drive comes with System Software v6.0 installed, as well as about 10MB (your amount may vary) of shareware and freeware software.

There is no manual to speak of. A photocopied white sheet explains in an easy to understand way how to pop the thing in and get going, and there is a small little booklet (two or three photocopied pages stapled together) which is labeled "Instruction Manual." However, this is basically a waste of time to look at.

Instructions for operating the drive are contained in a HyperStudio stack tutorial on the drive (the HyperStudio run-time module is included). This may present a problem because if you can't get the thing installed in the first place, it will be very difficult to get to these instructions. But, installation is simple, the one-page flow chart of printed instructions is easy to follow, and you can always call Zip if you need help!

Zip has unlimited and very good tech support, but it is not toll-free. The drive comes with a one-year warranty from Zip, which basically gives you the right to a repair or replacement (their option) if the drive fails through no fault of yours. You ship it to them, they fix it or replace it, and ship it back to you.

The Good and the Bad

The drive appears to be very well constructed. There are not zillions of little chips all over the place (more chips means more power consumption and more heat), and the card is very solid, especially when considering that it is holding a hard drive!

The drive mechanism itself draws very little power, and appears to generate very little heat when compared to some of the things you may have inside your IIGS. For this reason, the drive does not have or need its own cooling fan, which is the source of most of the noise in the external drives I have tested, and which certainly contributes to the power usage in these drives as well.

Because this is an internal drive, it takes up no space on your desktop. It also has no separate power cords to use up electric sockets (you have any spare sockets want to lend me?), and it has no cables or chips which you have to plug into other cards or into the motherboard.

It's small, clean looking, quiet, efficient to the point of being unnoticeable (and also in the way it does not strain your equipment), and it is fast. Did I say fast? Just a minute, there's one more thing we need to talk about first.

The Zip Drive comes with its own drivers to help it operate faster. The drive works fine without the special drivers installed, it just goes a lot slower. Zip includes several drivers for you to choose from, the main difference being a feature wherein the drive is put to "sleep" after a certain amount of inactive time passes. For example, if you pick the driver "PowerDown4", the drive will "go to sleep" after about two minutes of not being used.

In other words, if the IIGS does not access the drive for over two minutes, the drive powers itself down! This saves power and reduces heat build-up. Once again, this is similar to the features found in PowerBook and other laptop computers which need to save energy, especially because they are operating on batteries when the user is "on the road." With the Zip Drive, the user has the option of picking a driver which adjusts the time of inactivity required until "sleep," or the user may pick a driver which does not allow the drive to power down except when the computer is turned off. This is a good feature, the only headache being that once the drive has powered down, it takes five or six seconds to get going again after the computer needs to access the drive. One point to mention; your work is not lost or destroyed just because the drive goes to sleep. It'll still be there when it powers back up.

Getting back up to speed (so to speak), I know that one of the reasons that many people purchase hard drives is to speed things up, so I ran a few tests of the drive to see how quickly it performs in everyday use.

For the first timing tests on the drive, I used the old freeware standby, DiskTimer GS v2.0, by Joe Jaworski. This software performs four basic tests on the drive to give a comprehensive look at how fast it performs. The results of those tests, as well as the comparative results from tests contained in past drive reviews, are detailed in Figure 1.

Briefly, the Read test shows how fast the drive transfers sequential data. Multi-block read does 16 sequential 2000 block reads. Seek measures the time it takes the head of the drive to seek across 10MB of data, and the Adapter reading is a repeated read of a single block.

The readings show that the Zip Drive is somewhat slow in Multi-block reads and Seeks, but it has by far the fastest Read time of any of the drives that I've reviewed for *GS+* Magazine. In real life, this translates into pretty fast performance rivaling the faster drives I've reviewed.

For example, I ran several comparison tests between the Zip Drive and my old standby TMS Pro 105 (Quantum mechanism).

To duplicate a 3.4MB folder containing 232 items, with a 7MHz TransWarp GS, the Zip Drive did it in 2:10, while the TMS Pro took 2:35. Re-booting the IIGS with the same described folder being the System folder, the Zip took 30 seconds, the TMS Pro took 35.

Cold starting the IIGS (with the same 3.4MB System folder) produced times which were close to identical for each drive, however that was ignoring the fact that the TMS Pro has to be turned on five to ten seconds before the IIGS (when hooked up to an Apple High-Speed SCSI card). So practically, the Zip Drive was somewhat faster in this test.

The last test I ran was to verify hard drive partitions on each drive with the TransWarp GS turned on. In this test, the

TMS Pro verified approximately half a megabyte per second (a 30MB partition took just under one minute) and the Zip Drive averaged only .26 megabytes per second (a 20MB partition took almost a minute and a half). In this test, the TMS Pro was much faster.

Price & Other Dull Stuff

It appears that the Zip Drive is priced competitively with other drives advertised in the IIGS market. Keep in mind that when you look at most external drives, you have to add the cost of a SCSI card and cable to the price you see in the ad. With the Zip Drive, no additional card or cable is required.

However, if you do shop around intelligently, you will find that there are some really good values in bigger external drives, and that you can get in the area of 100MB of storage in a hard drive, with a card, and a cable, for close to the price of this 40MB internal drive. Of course, you don't get all the other benefits that an internal has over an external. But with a SCSI-based external, you do get a drive that you can "take with you" to another system if you ever decide to (God forbid), sell your IIGS. In the end, only you can decide if the combination of price, performance, and features justifies the purchase of the Zip Drive, or any drive.

Also, in today's world of ever-growing programs, files, clip art, fonts, and other items, you have to consider whether or not 40MB of storage is adequate for your needs, both now and in the future. A couple of years ago, I remember when the Applied Ingenuity (remember them?) and

Applied Engineering (remember them either?) 40MB internal drives were selling like hot cakes on a Sunday morning at a ski resort. [Editor's Note: I'm not familiar with this analogy, but it made me hungry, so I left it in.] But for many people, 40MB is simply not enough storage anymore. For others, 40MB is entirely adequate and always will be.

Would I Buy It?

Truth is, I don't need to buy it, because I have no intention of returning this review drive that Zip sent me! (Just kidding Steve!)

I like the Zip Drive. It works just as well in everyday use as my other hard drives, it takes up no space on my desk (a major plus), uses no socket for power (a *real* major plus), and it can't be heard over the fan of the external drive or the System Saver IIGS which I use. It also can't be heard over the chatter of my four kids, which is more than I can say for the System Saver IIGS! It compares favorably in speed with the Quantum-based externals containing the bigger mechanisms, it has the added benefit of very easy installation, and (satisfying one of my major requirements for a recommendation) it does exactly what Zip says it will do.

The Zip Drive has some real benefits over the external drives, and over some of the internal drives that replace your power supply. If this drive can meet your storage needs, and the benefits of an internal drive appeal to you, then I would recommend the Zip Drive to you as a high quality product. **GS+**

Figure 1 DiskTimer GS v2.0 Results

	<u>Read</u>	<u>Multi-block Read</u>	<u>Seek</u>	<u>Adapter</u>
Zip Drive 40MB	15	62	65	9
Pegasus 100i (1)	31	23	19	21
Shadow 105MB (2)	36	26	22	21
TMS 105 Pro (3)	33	24	21	20
Tulin Half Shell (4)	36	24	68	22

All drives except the Zip Drive were attached to an Apple High-Speed SCSI card (the Zip Drive is *not* a SCSI drive, and it is attached to its controller card). All readings were taken on an unaccelerated IIGS.

See reviews in: (1) *GS+* V3.N5, (2) *GS+* V3.N4, (3) *GS+* V3.N1, (4) *GS+* V3.N3.

Extra Bits v1.0.1

By Josef W. Wankler

When Apple designed System Software v6.0, they threw in a lot of new features, some requiring parameters that are remembered in the battery backed-up RAM. Unfortunately, Apple didn't have time to design Control Panels for all of these battery RAM parameters. So I decided to do something about it and wrote the Extra Bits control panel, which appeared in *GS+* Magazine V3.N6. When Apple designed System Software v6.0.1, they modified some existing control panels to include ways to change some of these same battery RAM parameters that Extra Bits was designed to handle. However, they *still* don't have a way for changing the WaitUntil scaling (see below for more information on this). So, I've revised Extra Bits so that you can change the WaitUntil scaling under System Software v6.0.1, but none of the other controls will appear. If you are using System 6.0.1, you should use the Apple-supplied control panels to change these parameters. Under System Software v6.0 however, Extra Bits works exactly the same as before, except that the names of the various parameters you can change have been changed slightly to reflect the names that Apple has given them in System Software v6.0.1.

To use Extra Bits, use the Installer to install Extra Bits on your System 6 boot disk (Extra Bits will not work without System 6 or later), reboot, and choose Extra Bits from the Control Panels NDA. The Extra Bits window will appear and (depending on your System Software and IIGS ROM version) you can change the following parameters:

WaitUntil Scaling

System 6 is very tolerant of accelerated systems. This is important because on an accelerated system, actions can happen faster than a human can take them in. Important events, such as the scrolling of a scroll bar, the highlighting of a control, or the blinking of a menu item, are purposefully slow so that you can actually see them happen. The WaitUntil tool call is what is used to slow the system down for these actions. You can scale WaitUntil's wait time to suit your needs. The default WaitUntil scale is 255 (a value of 0 is the same as 255). If you want to slow things down, use a number between 2 and 254 for the scale. If you want to eliminate the delay caused by WaitUntil and make things go as fast as possible, use a value of one (1).

Of course, you may be wondering why you should fiddle with this WaitUntil

scaling at all. What exactly does it affect that might make your system more responsive? Well, among other things, the WaitUntil scaling affects the speed of the following operations: control highlighting, menu scrolling, menu blinking, scroll bar scrolling, text scrolling, and whooshing rectangles. These are minor things, but if they *all* get, your overall system speed gets faster too.

Smoother Mouse Cursor

If you have an accelerator or video overlay card in your IIGS, you may notice that your cursor flickers when you move it. Checking the "Smoother Mouse Cursor" check box tells QuickDraw II to not use scanline interrupts to refresh the cursor. In English, this means that your cursor will not flicker anymore. (Note: This parameter only appears with System 6 and was called "Smooth Mouse Pointer Tracking" in Extra Bits v1.0. In System 6.0.1 the control for this parameter is found in the Monitor control panel.)

Show startup icons

When you boot your computer, you'll most likely see a bunch of icons march across the bottom of your screen as system extensions make their presence known. If this annoys you, you can uncheck the "Show startup icons" check box. Your system extensions will still install themselves, you just won't see their icons when you boot your computer. (Note: This parameter only appears with System 6 and was called "Show Icons On Boot" in Extra Bits v1.0. In System 6.0.1 the control for this parameter is in the SetStart control panel.)

Enable programmer CDAs

On ROM 03 computers, there is a battery RAM bit that, when set, will install two Classic Desk Accessories (CDAs) in your system when you boot. These CDAs are called "Visit Monitor," and "Memory Peeker," and are used mostly by programmers to debug software. To get these CDAs to install automatically, you can check the "Enable programmer CDAs" check box. (It's interesting to note that

this bit has been around even before System 6.) If you have a ROM 01 computer under System Software v6.0, you will not see the "Enable programmer CDAs" check box since it does not work on ROM 01 machines. However, if you are running System Software v6.0.1 on a ROM 01 machine, you will be able to access the "Enable programmer CDAs" check box from the SetStart control panel. (Note: This parameter only appears with System 6 and was called "Install Debug CDAs On Boot" in Extra Bits v1.0. In System 6.0.1 the control for this parameter is found in the SetStart control panel.)

Source Code Trickery

Extra Bits is probably the most straightforward control panel that *GS+* Magazine has ever published. The value for WaitUntil scaling is taken from battery RAM parameter \$60. The "Install debug CDAs on boot" check box is set from battery RAM parameter \$59. If the high bit of parameter \$59 is set, the debug CDAs will be installed. This is documented in the Apple IIGS Technical Note #26 (close to the bottom of the tech note), which is provided on your *GS+* disk. The two main check box controls are set from bits in the battery RAM parameter number \$5F. The bits in that parameter byte defined are as shown in Figure 1.

Extra Bits doesn't have a check box for the "alphabetize desk accessories" bit because it is handled by the General control panel that comes with System 6.

Extra Bits may seem trivial, but it is a good example of how to program a control panel, and it shows you how to check the version of the System Software, and the ROM version of the IIGS your program is running on. Best of all, you can actually get a tiny bit more speed out of your system by setting the WaitUntil scaling to one. If you find a problem with Extra Bits v1.0.1, please send in the problem form on your *GS+* Disk to let us know about it. GS+

Figure 1

Bits	Meaning
0	Alphabetize desk accessories (0 = do not alphabetize, 1 = alphabetize). This is set via the General control panel.
1	ShowBootInfo shows icon (0 = ShowBootInfo shows icons, 1 = ShowBootInfo does not show icons). This is set via the SetStart control panel.
2	Refresh cursor with scanline interrupts (0 = refresh with scanline, 1 = refresh without scanline). This is set via the Monitor control panel.
3-5	Reserved - should be set to 0
6-7	Byte initialized (10 if byte is valid, any other combination if byte is invalid)

Secrets of Writing Twilight II Screen Blankers

By Josef W. Wankel

Ahhhhh, Twilight II. The name conjures up images of bombs bursting in air, worms squirming around, and a trip through the universe at high velocity. If you're content to have Twilight II conjure up those images alone, then hey, that's OK with me. But if you're the type who wants a little bit louder stereo (perhaps one that goes to eleven?) and you don't mind getting your hands a bit dirty, then you probably will want to write your very own Twilight II screen blanker modules.

Getting Started

Writing a Twilight II screen blanker module isn't very difficult if you have an idea for what the blanker will do. The hardest part is actually thinking up the far-out effect you want to create. Once you've got the idea for the blanker, all you have to do is code your effect and throw it into a blanker shell—everything else will be taken care of by the shell. Of course, if you want your blanker module to be configurable, you'll do a bit more work, but not much. I've included the source code for two Twilight II blankers on your GS+ Disk—one, called Messages, compiled with ORCA/C v2.0 and the other, called Shapes, compiled with ORCA/Pascal v2.0. You can use these two blankers, minus the actual code to perform the blanking effect, as your own blanker shell. I've made it easy for you to rip the effect guts out of the blankers, just look for the two "Cut Here" comment lines and rip everything out inbetween. Of course, you probably want to take a peek at some of the inbetween code to see if there are any goodies inside that you want to swipe.

It's a good idea to have an understanding of what the blanker shell is doing, and for that you need to read the Twilight II blanker module documentation, which is

provided on your GS+ Disk, courtesy of DigiSoft. You can find the file in the self-extracting archive in the **Twilight.II** folder. The file is called **tii.G2MF**, for Twilight II Generation 2 Module Format. The first generation module was for the original Twilight screen blanker—Twilight II employs a different mechanism for calling blankers which is much more versatile than the old version. While you should read the entire document, you really only need to understand a few key points: namely the **blank** message and the **rT2ModuleFlags** resource.

T2 Blanker Shell

While I'd love to go into detail on what messages are passed to your blanker, the Twilight II documentation does a more than adequate job of explaining every aspect of writing Twilight II blankers and to repeat that information would be silly. Instead, I'll be concentrating on concrete examples of how to write a blanker instead of providing generic information. To start off, you'll want to know a bit about the blanker shell. In the following explanations, I'll be referring to the C blanker shell from the Messages blanker. Fortunately, the Pascal blanker shell from the Shapes blanker is virtually identical to the C blanker shell.

The first thing that you should notice about the blanker shell is that it is in the form of a control panel. In fact, you can use the `#pragma cdev` with ORCA/C and the `{SCDev}` directive with ORCA/Pascal in order to assist in the development of your blanker module. Twilight II calls blanker modules similarly to the way that the Control Panels new desk accessory calls control panels. The messages passed are, of course, different. Figure 1 contains a

complete list of messages that are passed to blanker modules and a short explanation of each. For blanker modules, the important message is the **BlankT2** message which tells the module to actually start the screen blanker effect. The module then does its duty and keeps an eye on the "stop doing what you're doing" flag so it knows when it's time to quit. When you turn optimizations on, the ORCA compilers will do a loop invariant removal of the "stop doing what you're doing" flag, so you need to trick the compiler into keeping the test in there. For C, you just declare the pointer to the flag as `volatile`. For Pascal, you've got to be a bit nastier—I assign the pointer to the flag back to itself so the compiler thinks that the pointer has changed and it needs to be reevaluated.

That's all you need to know about how a blanker works. Not much, eh? Just do your effect until you see the stop flag is set to true by Twilight II. If you are going to support configuring your blanker, you'll have to start doing some work (but not too much). The first thing you'll do is create some controls as resources (although you don't have to, but resources are good and you should use them) and respond to the **MakeT2**, **SaveT2**, **LoadSetupT2**, **UnloadSetupT2**, **KillT2**, and **HitT2** messages. That may look like a lot to support, but each message only requires a little bit of code.

The first thing that you will do when you support setup is set the `fSetup` bit in your **rT2ModuleFlags** resource. This tells Twilight II that your blanker module can be configured and to include its name in the list of configurable blankers.

MakeT2

When your module is selected for configuration, the **MakeT2** message will be sent to your module telling you to create your setup controls. You'll need to make sure that any old configuration information is loaded at this time. Luckily, the blanker shell has a few routines to simplify loading and saving configuration information. For loading, you'll want to call the **LoadConfigResource** routine.

HitT2

Whenever one of your controls is hit, your module will be sent a **HitT2** message.

Figure 1 - Blanker Messages

Code	Name	Explanation
\$0000	MakeT2	This tells your module to create its setup controls
\$0001	SaveT2	This tells your module to save its setup information
\$0002	BlankT2	This tells your module to perform its blanking action
\$0003	LoadSetupT2	This tells your module to load its setup information for a BlankT2 message
\$0004	UnloadSetupT2	This tells your module to get rid of any setup information
\$0005	KillT2	This tells your module to clean up after a setup window
\$0006	HitT2	This tells your module that a setup control was hit

When you see the HitT2 message, you tell Twilight II whether the hit will activate the "Save" button. Use a bit of common sense here: obviously a hit on a static text control shouldn't activate the "Save" button state, but a hit on a check box control should.

SaveT2

Whenever the "Save" button is hit, the SaveT2 message is sent to your module telling you to save out your configuration. For saving, you'll want to call the SaveConfigResource routine.

KillT2

Finally, when your module's configuration window is dismissed, you'll receive the KillT2 message telling your module to clean up after itself. Normally you won't have to do anything when you see the KillT2 message unless you've allocated memory for the setup process.

Managing The Setup

Your blanker will now also receive the LoadSetupT2 and UnloadSetupT2 messages as well. When your blanker module starts up, the LoadSetupT2 message will be sent to it, telling it to load its setup information for a BlankT2 message. Before your module is removed from memory, it will receive a UnloadSetupT2 message telling it to remove all setup information from memory.

IPC

Twilight II installs a request handler into the system which lets your blanker, or even a program that's not a blanker, tell Twilight II to perform certain functions. Figure 2 contains a list of all the requests that Twilight II accepts. For the final word on the requests, you should read the `ipc.dox` file in the `Twilight.II` folder,

which is in the self-extracting archive on your GS+ Disk. There are a number of requests that Twilight II accepts, but only a handful are actually useful for a blanker module. The most useful requests a blanker module can make are the `t2StartupTools`, `t2ShutdownTools`, `t2ShareMemory`, `t2GetBuffers`, and `t2CalcFreqOffset` requests. The `t2StartupTools` request tells Twilight II to start up the Sound tool set and/or the SANE tool set. Conversely, the `t2ShutdownTools` request tells Twilight II to shut down the Sound tool set and/or the SANE tool set. Together, these two requests provide a painless way for blanker modules to ensure that it has the tool sets it needs started. The `t2ShareMemory` request is, perhaps, one of the most obscure calls a blanker can make. The `t2ShareMemory` request returns a pointer to a 16-byte buffer that is maintained even if your blanker is unloaded from memory. A good use for the shared memory buffer would be to maintain the last state of your blanker so you can resume from where your blanker left off the next time the screen blanks. The `t2GetBuffers` request returns pointers to the saved screen image. When it's time to blank the screen, Twilight II saves the current super hi-res screen image into a buffer and then calls a blanker to perform the screen blanking. If the blanker needs to use part of the screen image, it can grab it from the saved screen image buffer. The `t2CalcFreqOffset` request will convert a `relPitch` value from a `rSoundSample` resource to a `freqOffset` value suitable to pass to `FFStartSound`. This request makes it easy to play `rSoundSample` resources without calling the Sound control panel.

Sample Modules

The two sample modules that are provided are more than just shells, they're real honest-to-goodness working Twilight II screen blankers. And as such, they merit a bit of description. The first blanker, `Messages`, displays the contents of the message center. All named messages are displayed at blank time. There are two types of named messages in the message center: normal named messages and request procedure names. Normal named messages are displayed as white text on a black background while request procedure names are displayed as black text on a white background. You can configure the `Messages` blanker to tell it to not display one or the other types of messages, and you can also tell the blanker how many messages should be displayed on the screen at any one time. The second blanker, `Shapes`, just draws some random shapes at blank time. There are four different shapes that can be drawn: rectangles, round rectangles, ovals, and arcs. You can configure the `Shapes` blanker to tell it to not display one or more of the types of shapes.

The best way to learn how to write a blanker module is by example. So, for your learning enjoyment, I've included the source code to both of the blanker modules. The modules are commented in such a way that you should be able to browse through the code and get a good idea of what's going on just by reading the comments. So what are you waiting for? Break out your GS+ Disk and get at that source code! If you have any questions on how to write a screen blanker module for Twilight II, let me know and I'll do my best to get you an answer. GS+

Figure 2 - Twilight II Requests

<u>Code</u>	<u>Name</u>	<u>Explanation</u>
\$9000	t2TurnOn	This tells Twilight II to turn itself on
\$9001	t2TurnOff	This tells Twilight II to turn itself off
\$9002	t2BoxOverrideOff	This tells Twilight II to turn the blinking box on
\$9003	t2BoxOverrideOn	This tells Twilight II to turn the blinking box off
\$9004	t2GetInfo	This returns various Twilight II state information
\$9005	t2StartupTools	This tells Twilight II to start the Sound and/or SANE tool sets
\$9006	t2ShutdownTools	This tells Twilight II to shut down the Sound and/or SANE tool sets
\$9007	t2ShareMemory	This returns a pointer to a 16 byte general purpose buffer
\$9008	t2SetBlinkProc	This sets a custom blinking box procedure
\$9009	t2ForceBkgBlank	This tells Twilight II to blank the screen as soon as possible
\$900A	t2BkgBlankNow	This tells Twilight II to do a background blank immediately
\$900B	t2GetBuffers	This returns pointers to the saved screen image data
\$900C	t2CalcFreqOffset	This converts a <code>relPitch</code> value to a <code>freqOffset</code> value

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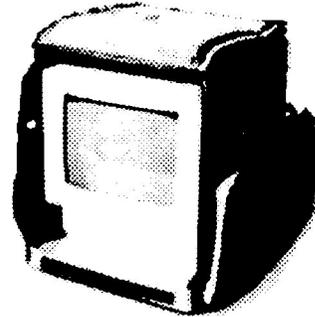
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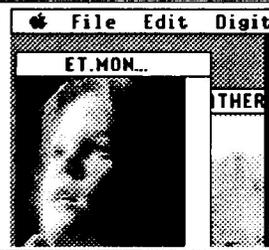


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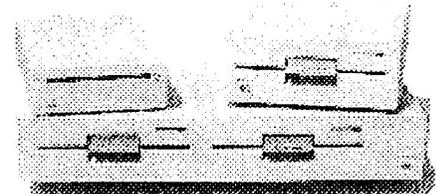
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News To Me

ECON Technologies has recently begun publishing a newsletter for users of its products, the *ECON News*. The first issue, dated June of 1993, contained the news that the SoundMeister card is finally shipping, information on the X-Drives (see "What's New" in *GS+* V4.N5), and a bunch of other ECON-related news. If you own one or more ECON products and you haven't gotten your copy of the *ECON News*, chances are that you never sent in your registration card (shame on you). If you *did* send in your cards, but didn't get a copy, or you just want to know more about it, contact ECON Technologies at:

ECON Technologies
99 N. Central Ave. Ste. B
Oviedo, FL 32765
(407) 365-4209

Bright Software Lowers Prices

Bright Software has lowered the price of Eureka! Symbolix (formerly GSymbolix, see review in *GS+* V4.N1) from \$140 to a mere \$70, including complete documentation!

According to the press release, this reduction is mainly the result of having the manuals printed here in the United States (formerly, the manuals were printed in Europe and the entire package shipped to the States). Whatever the reason, this is a great new price on a really cool program.

For those of you that don't know, Eureka! Symbolix is the one and only IIGS program that lets you solve and graph numeric and symbolic mathematical equations. Graphs can be displayed in either two or three dimensions, and can be saved to disk for use with page layout and graphics programs.

And, if you have The Manager, the latest version of Eureka! Symbolix will even solve equations in the background, so you can go on working with another program! (It also supports various math coprocessor cards to speed up calculations.)

For more information on Eureka! Symbolix, you can contact Bright Software at one of the following addresses:

Bright Software (USA)
P. O. Box 120
Exeter, ME 04435-0120
(207) 379-3181

Bright Software
P. O. Box 18
4153 Reinach 2
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Phone: +41 61 711 23 83

Sound Information

If you are into sound, you need to give the folks at Sound Management a call. They recently sent us their latest catalog of MIDI hardware and sound programs, along with a booklet called "A Guide To Computer Music." The catalog lists just about every IIGS music and sound program ever written, and the booklet includes an entire chapter specifically on making music with your IIGS. (Both the catalog and the booklet cover a large number of different computer platforms.)

They also sent us a flyer describing their "Apple IIGS MIDI Value Pack." For \$295 this package includes: MusicWriter GS Level II, the MasterTracks Jr. GS demo, an Instrument Designer, a 1x3 External MIDI Interface, two 6-foot MIDI cables, and the booklet "A Guide To Computer Music."

For more information, contact:

Sound Management
P. O. Box 3053
Peabody, MA 01961
(800) 548-4907

More 6.0.1 Stuff!

The Byte Works has announced that ORCA/C v2.0.1, ORCA/Pascal v2.0.1 and ORCA/M v2.0.1 are now available. These updates include minor bug fixes as well as the interface files needed to write programs that take advantage of System Software v6.0.1. These upgrades are a mere \$7 each.

The Byte Works has also announced a System 6.0.1 update to the *Programmer's Reference for System 6* as well as new versions of REZ and GSbug. However, the release of these items is pending their release by Apple Computer Inc. (This could happen at any time, so be sure to check the *a.Read.Me* file on your *GS+* Disk for any last-minute news on this.)

For more information on all of these products (and the other fine products from the Byte Works) contact:

The Byte Works Inc.
4700 Irving Blvd. NW, Suite 207
Albuquerque, NM 87114
(505) 898-8183

How Should I Do This?

OK, normally, I edit these press releases for space (and to weed through all of the, um, B. S. [not that there ever is any, heavens no!]), but since this one is for a product that we wrote, I don't exactly know how to go about doing that without getting *someone* mad at me. So, I'm just going to run the press release with minimal editing, along with some notes that will give you a "behind the scenes" look at TypeSet, and some other notes to clarify a few points (which will also probably get me in trouble too, oh well).

San Diego, California: WestCode Software, Inc. is pleased to announce TypeSet, a powerful three-part TrueType font management and productivity package for the Apple IIGS. TypeSet provides Apple IIGS users with several essential tools currently missing from their TrueType toolbox, including: a What-You-See-Is-What-You-Get (WYSIWYG) Font menu, font sets, and font reporting. [The WYSIWYG only applies to your TrueType fonts. Bit-mapped fonts still appear in the normal system font: Shaston. - Diz] WestCode spokesman Tony Gentile said, "If you're working with TrueType fonts on the Apple IIGS, you need TypeSet." [Just in case you think people make up quotes for these press releases (I always did), you should know that this is a real quote. Tony (who was the Project Manager for TypeSet), actually did say this. - Diz]

TypeSet is a IIGS New Desk Accessory (NDA) which easily installs on a startup disk. The first and most dramatic TypeSet feature is its ability to display TrueType fonts in their own typeface inside the Font menu of IIGS desktop software. Apple IIGS users will now be able to see what a TrueType font looks like before selecting it. This feature works automatically with most popular desktop applications, such as: AppleWorks GS, BeagleWrite GS, and Platinum Paint. Users may specify whether the font names appear in 10 or 12 pt.

TypeSet also provides users with another powerful feature: TrueType font management. This is accomplished by allowing users to define font sets composed of specific, user-selected TrueType fonts. Grouping these fonts into different sets allows the user to control the number of TrueType fonts in their Font menu, making font selection easier and reducing clutter. Users may define as many sets with as few or as

many TrueType fonts as desired in each set.

Finally, the last point in TypeSet's triad of features is its ability to generate reports. TypeSet allows users to generate reports in any of four layouts, including: All Characters, Keystroke Equivalents, Line Showings and Various Sizes. These reports are perfect for building a user's personal font catalog. [And, they have a 1-inch margin, which makes them perfect for putting in a three-ring binder. - Diz] The reports generated with TypeSet can be output to both the screen and printer. WestCode CEO Rob Renstrom said, "TypeSet continues WestCode's tradition of bringing state-of-the-art, Macintosh-like technology to the Apple IIGS."

TypeSet is the latest outstanding software product by the programming team of Steven Disbrow and Joe Wankler of EGO Systems, publishers of *GS+* Magazine and authors of the ever popular EGOed New Desk Accessory text editor. [Credit where it's due: the guys at WestCode

designed TypeSet based on feedback from Pointless users, Joe coded almost all of the WYSIWYG, and set management stuff (as well as doing the code for supporting version 1.1 of The Manager), and I did the NDA shell and reports. Thanks also goes to Dave Hecker at Seven Hills Software for helping us in ironing out problems between TypeSet and The Manager. And, of course, Alan Bird was invaluable in helping us figure out what we needed to do to communicate with Pointless. - Diz]

Founded in 1990, WestCode Software has earned a reputation for excellence through the success of their innovative InWords OCR program, as well as the award-winning Pointless TrueType interpreter program. With additional products forthcoming and a steadfast commitment to improving existing products, WestCode continues to fulfill its pledge to provide high-quality, low-priced software.

System requirements for TypeSet are an Apple IIGS with 1.25MB of RAM, IIGS

System Software v5.0.4 or later, and Pointless 2.0 or later.

TypeSet will be available in late July [well, maybe the middle of August - Diz], at a suggested retail price of \$49.95.

Contact:
WestCode Software, Inc.
15050 Avenue of Science, Suite 112
San Diego, CA 92128

Sales and Information: (619) 487-9200
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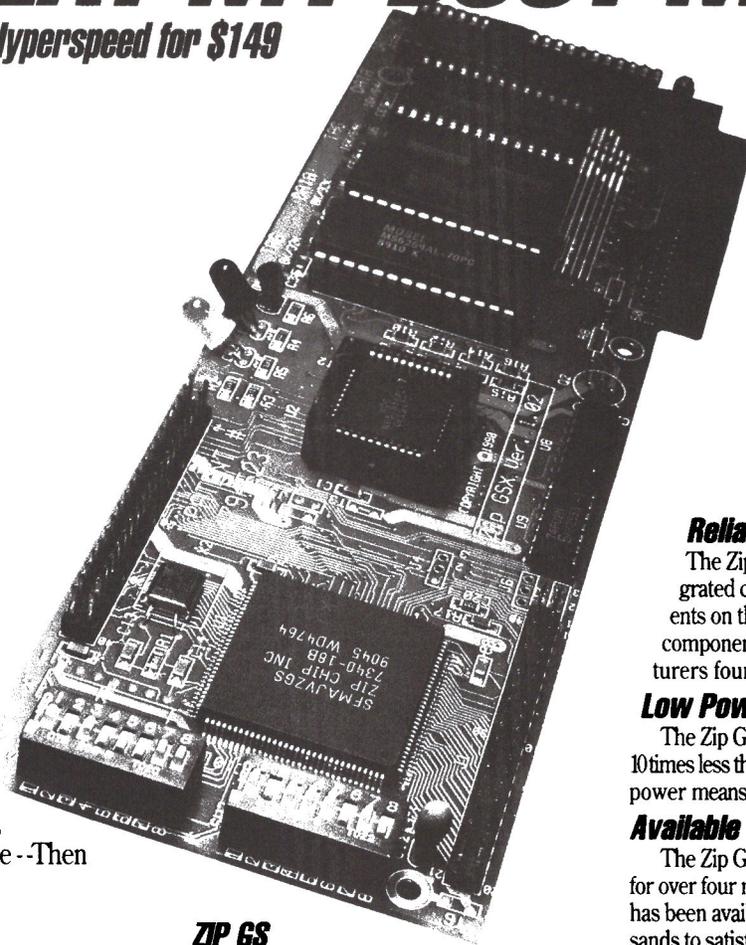
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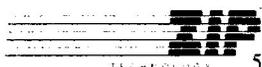
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- System Software 5.0 Compatibility Chart
- NoDOS - A file utility New Desk Accessory (ORCA/C)
- Graphics Galore - Drawing "how-to" with pictures on disk
- Reviews: Arkanoid II (new custom levels on disk), Crystal Quest, ORCA/C, Rocket Ranger, Silpheed, Test Drive II, TransWarp GS, Turbo Mouse ADB

May-Jun 1990 (V1.N5)

- AppleFest Report
- Beginner's Guide to System Disks - Part 1
- GS/OS prefixes - PreFixer CDev (ORCA/Pascal)
- Brush with Greatness - How your IIGS makes colors
- Reviews: CMS 45MB Removable Hard Drive, S&S-RAMCard, DataLink Express modem, Visionary GS digitizer, GraphicWriter III, ZapLink, McGee, Math Blaster Plus IIGS, The New Talking Stickybear Alphabet, ZipGS

Sep-Oct 1990 (V2.N1)

- Brush With Greatness - Making the most of your digitizer
- Interview with Brian Greenstone (programmer of Xenocide)
- PING - Video table tennis program (Merlin assembly)
- Shuffle - An INIT that shuffles desktop windows (ORCAM)
- Battery Brain - A CDev that saves BRAM parms (ORCA/C)
- Reviews: GS Sauce memory card, Salvation—Wings, World GeoGraph, Orange Cherry Talking Schoolhouse series, QIX, Solitaire Royale, InnerExpress

Jan-Feb 1991 (V2.N3)

- AppleFest/Long Beach '90 & Apple II Achievement Awards
- Interview with Jim Carson of Vitesse, Inc.
- Introduction to System Software v5.0.4
- RAM Namer - A CDev that allows you to rename RAM disks (ORCA/C)
- GS+ program updates: Battery Brain v1.1, EGOed v1.32c (written in ORCA/C), Teach Translator for GraphicWriter III v1.1
- Reviews: ZipGSX, LightningScan, Design Your Own Home, Print Shop Companion IIGS, Your IIGS Guide, Dragon Wars, 2088: The Cryllan Mission - Second Scenario, Space Ace, Sinbad & the Throne of the Falcon

Sep-Oct 1991 (V3.N1)

- Protecting Your Investment - A Guide to Surge Protection
- A Conversation with Roger Wagner - Part 2
- Working with the Toolbox - Part 4: QuickDraw II
- FGS - A desktop program that generates Fractals (ORCA/C)
- GS+ program updates: EGOed v1.36, Autopilot v1.1, NoDOS v1.6
- Reviews: two 100MB hard drives, Nite Owl Slide-On Battery, ORCA/Integer BASIC, ORCA Talking Tools, Storybook Weaver: World of Adventure, HyperBole, HoverBlade, Shareware: DeskTop Painter, SoundSmith, IIGS Classic: The Bard's Tale IIGS

Jan-Feb 1992 (V3.N3)

- How Printing Works - An article by Matt Deatherage
- Working with the Toolbox - Part 6: The Resource Manager
- Buying & Using Mac Hard Disks
- Cool Cursor - A Control Panel that replaces the old watch cursor with an animation (ORCAM, ORCA/C)
- Replicator - A desktop-based disk duplication program that works with any GS/OS device and file system (ORCA/Pascal, ORCA/C, ORCAM)
- GS+ program update: EGOed v1.4
- Reviews: MacLand 105MB Hard Drive, Tulin 120MD Hard Drive, SuperConvert, Signature GS, Learn to Program in C, 4 shareware reviews

Jul-Aug 1992 (V3.N6)

- KansasFest 1992
- Introduction to 3-D Graphics - Part 3: Speeding Things Up (demo program written in ORCA/C)
- Working with the Toolbox - Part 8: The Control Manager
- Understanding FSTs
- Using rBundles in Your Programs
- Quick Folder - A Finder Extension that allows you to open folders from the Finder's Extras menu (ORCA/C). **Requires System 6.**
- Extra Bits - A Control Panel that lets you change the new Battery RAM parameters that System 6 didn't provide a Control Panel for (ORCA/C). **Requires System 6.**
- GS+ program updates: EGOed v1.7 (**requires System 6**), Quick DA v2.0 (**requires System 6**), Replicator v1.3
- Reviews: ZipGS (10MHz CPU/64K Cache), Gate, Space Fox, Utility Launch & Utility Works

Sep-Oct 1992 (V4.N1)

- Apple EXPO East
- Open From Desktop - A Finder Extension that allows you to open any item on your desktop from the Finder's Extras menu (ORCA/C). **Requires System 6.**
- II Notes - A 20-page NDA notepad (ORCAM). **Requires System 6.**
- Miscellaneous Library - A collection of useful routines to use from any programming language that supports linking to standard libraries
- GS+ program updates (**require System 6**): Autopilot v2.0, Quick DA v2.1, EGOed v1.7.1
- Reviews: ContactsGS, GSymbolix, Kangaroo, ORCA/Debugger, UltraCat, Storybook Weaver: World of Make-Believe

Nov-Dec 1992 (V4.N2)

- Understanding Accelerators
- The Basic IIGS
- Working with the Toolbox - Part 9: The Menu Manager
- Font Reporter - A program that lets you display and print out any font in your system (ORCA/C). **Requires System 6.**
- Miscellaneous Library (updated)
- GS+ program updates: EGOed v1.8 (**requires System 6**), Replicator v1.3.1
- Reviews: AutoArk, 1990 GEM Apple II CD-ROM, IIGS System Transport Case, Out of This World, TrueType Font Collection, Universe Master
- Review updates: Desktop Enhancer v2.0, Pointless v2.0

Jan-Feb 1993 (V4.N3)

- The World at Your Fingertips
- Understanding the Desktop
- Batt Reporter - A program that generates plain English reports from battery RAM configuration files (ORCA/Pascal, ORCA/C). **Requires System 6.**
- Rainbow - A Finder extension that lets you change the colors of your device icons (ORCA/C). **Requires System 6.**
- Miscellaneous Library (updated)
- GS+ program updates (**all require System 6**): Battery Brain v2.0, Open From Desktop v1.0.1, Rebuild Desktop v1.1, EGOed v1.9
- Reviews: CV-Ram Memory Card, StyleWriter printer, ProSel-16, TransProg III v1.1, Ant Wars, FloorTiles, Quest for the Hoard

Mar-Apr 1993 (V4.N4)

- Beginner's Guide to Finder v6.0
- Working with the Toolbox - Part 10: LineEdit
- LASERbeam - A program that lets you download PostScript files to a PostScript printer (ORCA/Pascal, ORCAM). **Requires System 6.**
- Font Memories - A control panel that lets you keep your bit-mapped fonts on a disk other than your startup disk (ORCA/C, ORCAM). **Requires System 6.**
- EGOed lite - a smaller, faster version of the EGOed New Desk Accessory (ORCA/C). **Requires System 6.**
- Miscellaneous Library (updated)
- GS+ program updates (**require System 6**): Rainbow v1.0.1, NoDOS v1.8
- Reviews: Salvation—Deliverance, DreamGraphix, The Manager, *The Passport House Letter*, The Lost Tribe, DuelTris

May-Jun 1993 (V4.N5)

- The Scavenger - Using your IIGS with CD-ROMs from other computers
- Apple EXPO West Report
- Anna Matrix - a Cool Cursor Editor. **Requires System 6.**
- GS+ program update: Cool Cursor v2.0 (**requires System 6**), Miscellaneous Library
- Reviews: Apple Desktop Bus Mouse II, Baccarat, Key Fonts Pro CD-ROM, MAZER II: The Ghost of Mordaine, Pick 'n' Pile, Shanghai II: Dragon's Eye, Solarian GS, Twilight II, TypeWest Volume 1

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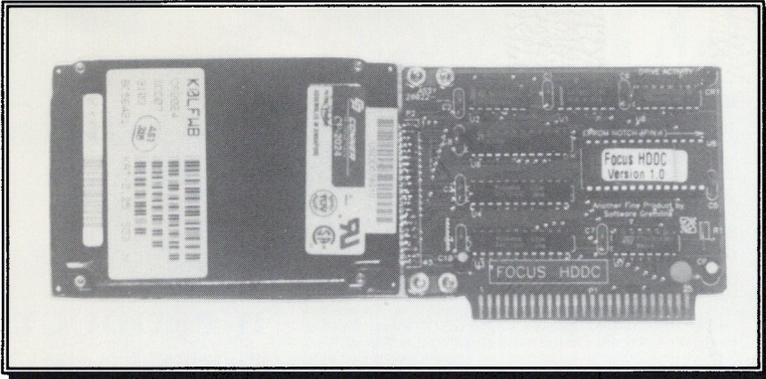
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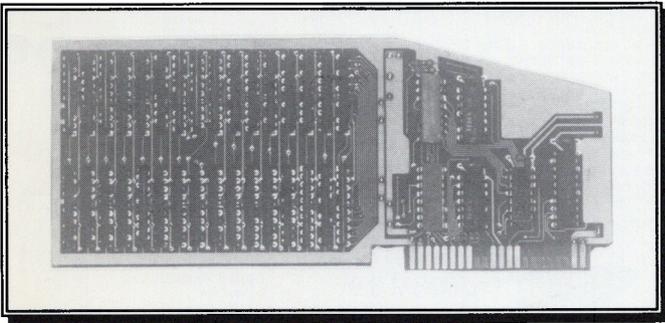
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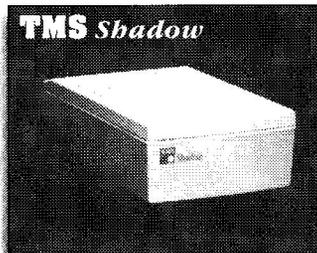
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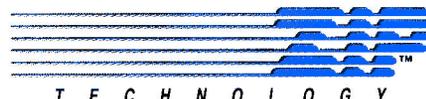
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