



March
April
1993

Volume 4
Number 4

The First Apple IIgs[®] Magazine + Disk Publication!



The Blizzard of '93

"Finally! A *good* excuse for publishing late!"

Features

Beginner's Guide to Finder v6.0
Working With The Toolbox Part 10

Programs

LASERbeam • Font Memories
EGOed *lite* • NoDOS v1.8 • Rainbow v1.0.1

Reviews

Salvation: Deliverance • DreamGrafix
The Manager • *The Passport House Letter*
The Lost Tribe • DuelTris

Writer's Block

By Steven W. Disbrow

Late, Later, Latest

I tell 'ya folks, I just can't win. No matter how hard we try, we just can't seem to get *GS+* Magazine back on schedule. This time however, we have a bona-fide act of God to blame. The big Blizzard of '93.

Like most folks that have lived here in Chattanooga, I dismissed the early warnings of the storm as just a pathetic attempt to sell groceries. In the past, every time they've predicted "snow," what we ended up with was rain. When Noreen went to the grocery store, I scolded her for being just another silly Yankee (she is you know), trying to scare all us dumb bumpkins into buying lots of milk and bread. And, as I worked late into the night of March 12th, it looked like I was right, and, for the first time in her life, she was wrong. The only thing that was accumulating outside was rain.

Upon awakening the next morning however, I learned once again that no matter what it takes, God simply will not let Noreen be wrong. Our electricity was off, and, unbelievably, there was thirteen inches of snow on our deck! This may seem a pittance to those of you in the north, but for this town, it was like an H-Bomb had been dropped. (Down here in Chattanooga, we close our schools for a week if we get an inch of snow.) Needless to say, the roads were impassable and the local officials were just a bit overwhelmed by it all. (The lead story on the news the night before was how the police of one of the local communities had procured a single snowmobile from a tourist visiting from Wisconsin. With this equipment, they felt that they could handle any "storm" that might show up.)

Worst of all, the winds were blowing (not gusting, *constantly* blowing) at speeds in excess of 50 miles an hour, and knocking down trees and power lines faster than they could be put back up. We spent most of that first day watching the trees in our yard sway back and forth, wondering which way they might fall, and which end of the house would be safest if one *did* fall. (Incidentally, this was much more entertaining than many of the shows that we usually watched on television.)

The next several days were spent engaged in various aspects of survival, and waiting for the snow to melt and the roads to clear. Fortunately, we had running water and an ample supply of firewood for our

fireplace (thanks Dad!). Meals were cooked in the fireplace in my genuine hand-hammered, cast-iron, Chinese Wok that I ordered off of late night tee-vee. We actually had it pretty good.

What we didn't have however, was electricity. For six whole days. Again, that probably doesn't sound bad, but you should try it sometime. Six days without electricity is not a lot of fun. Especially when you work with computers and your whole business is basically shut down.

So What?

Well, I don't mean to whine or anything, but the upshot of all this is that we are even further behind schedule than *ever* before. I just wanted to let you all know exactly what had happened. (And I think I'm still a bit peeved about the whole thing, so I just wanted to ramble on about it a bit to get it out of my system. Thanks for not turning the page.)

Other Stuff

Of course, the main reason we are so far behind schedule is *me*. As *GS+* Magazine has gotten bigger and there has been more work to do, I've had a devil of a time actually delegating tasks to others. After all, this is my *baby* here, and if anyone's gonna screw it up, I want it to be me.

However, I've been getting better at it. Bob's been with us for a few months now and he's almost got the inventory and order taking under control. So, I decided to hire yet another person to be *my* boss. A Production Manager if you will. Someone that will tell Joe and me when we should have finished the stuff we didn't want to do in the first place.

Her name is Michelle Bell (no Beatles jokes please), and as soon as she and I actually figure out how the previous 21 issues of this magazine were produced ("I

think they just sort of appeared, y'know what I mean?"), I'm sure she'll get us all whipped into shape. We have weekly production meetings, employee evaluations, etc. Why, it's positively corporate!

Son Of Other Stuff

And, as I mentioned last issue, we're beginning to start a couple of special projects that should turn into products real soon now. The first of these is a collaboration with a certain west coast software publisher . . . but I can't tell you who, and it would be *pointless* for you to try and guess who I'm talking about. (Actually, this product may be out by the time you read this magazine.)

Something I *can* tell you about though is our Hyper-Reprints of early issues of *GS+* Magazine. Unfortunately, the news isn't good. I haven't had a spare moment to work on them, so they won't be available for a while. But don't give up, I'll be back at work on them as soon as this magazine is out the door.

Beyond that, we have several stand-alone software products in the works. One of these will be . . . ah, you'll just have to wait and see!

No West Young Man

As you can probably guess from looking at the contents page, we don't have any information on the Apple Expo West in this issue. It took place too late in our new and improved production schedule for us to get any information about it in this issue. Look for a full report in our next issue, and be sure to check this issue's *GS+* Disk for anything that we might be able to sneak in at the last minute.

Return of the Son of Other Stuff

Just kidding! That's it for this issue. See you next time! *GS+*

Warning!

*This is our yearly "April Fools Issue." (Which, of course, is why you are getting it in May.) With the exception of our reviews, technical articles, and complaints about Apple Computer Inc. (i.e. the "stuff" pieces), anything and everything you read in this issue of *GS+* Magazine may have been intended as a joke. If you are involved in the IIGS industry at any level, there may even be a joke about you. If you can't take a joke, we would just like to take this opportunity to apologize now, and ask you to lighten up—it's just a computer for goodness sake. (If you are one of the three people wondering how this is different from any of our other issues, you should know that I love you very, very much.)*

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GS+

Magazine

March-April 1993
Volume 4, Number 4

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On The Cover

No, no, no! Those aren't the GS+ Magazine offices! That's the local Sam's wholesale warehouse after being crushed by tons of snow during the Blizzard of '93.

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GS+ Magazine is an independent publication, not affiliated in any way with Apple Computer, Inc.

Opinions expressed in this publication are those of the individual authors and do not necessarily represent those of GS+ Magazine or EGO Systems.

Subscription rates - Magazine only:
1/2 year (3 issues) - \$8
1 year (6 issues) - \$15

Subscription rates - Magazine w/Disk:
1/2 year (3 issues) - \$20
1 year (6 issues) - \$36

Tennessee residents add 7.75% sales tax.
Add \$1.50 per issue if you want First-Class delivery.
Canadian and Mexican orders add \$1.50 per issue.
Other foreign orders add \$1.50 per issue for surface delivery or \$5 per issue for Air Mail.

Send orders, ads, inquiries, and address changes to:
GS+ Magazine
P.O. Box 15366
Chattanooga, TN 37415-0366

Or phone Monday-Friday 9 am-6 pm Eastern Time:
(800) 662-3634 (orders only)
(615) 843-3988 (tech support)
(615) 843-3986 (fax)

If you have a submission for GS+ Magazine, send it to:
GS+ Submissions
P.O. Box 15366
Chattanooga, TN 37415-0366

GS+ Magazine can also be contacted on these online services:
America Online: send mail to GSPlusDiz
or visit our online area by using the keyword GSMAG.
Delphi: GSPlusDiz
GEnie: JWankerl
InterNet: gsplusdiz@aol.com

GS+ Magazine is published bimonthly by:
EGO Systems
7918 Cove Ridge Road
Hixson, TN 37343-1808
**(DO NOT SEND MAIL TO THIS ADDRESS—USE FOR UPS
AND OVERNIGHT DELIVERIES ONLY!)**

GS+ Magazine is produced on the Apple IIGS using the following products:
EGOed - Text Editing
GraphicWriter III - Interior Page Layouts
AppleWorks GS - Cover Layouts
Platinum Paint - Screen Shots
Proof pages are printed on an Apple LaserWriter IINT.
We use a Macintosh LC as a file server because we have to.

Letters

Dear GS+,

... In trying to buy up some software titles for my IIGS over the past year before they become unavailable, I bought an adventure game for my son called Questmaster: The Prism of Heheutotol, originally published by a company called Miles Computing (located in Casablanca, CA).... The booklet indicated that a hint book was available from the publisher and I sent the requested amount to the address indicated in California. After the envelope was returned as undeliverable with no known forwarding address, I tried to get a telephone number and found that no listing existed for a company of that name—all of which I take to mean the company is no longer in business.... I wonder if anyone at GS+ has any suggestions on how to locate a copy of that publication.

Dr. Jeffrey L. Czeisler
Randolph, NJ

Actually Jeffrey, we reviewed that game way back in GS+ V2.N2. In fact, the Post Office returned the complimentary copy we sent them because they had already gone out of business by the time we got the issue mailed out! At any rate, I don't know where you could find a clue book for the game. If anyone out there has a clue book, get in touch with us and we'll put you in touch with Jeffrey.

Dear GS+:

... I would like to mention that I have found a problem (I think) with Rainbow. If you set an icon (hard drive partition) to a color (I've varied the colors) and then set it back to white, each time you click on the icon, the icon and the Finder menu kind of go whacky (flash on and off?). This is solved by changing the color to something other than white. Anyway, I just thought I'd let you know. By the way, Rainbow is great....

Charles L. Mudd, Jr.
Lafayette, IN

Actually, that's the way it's supposed to work! (Black and white are colors too aren't they?) But, since so many people reported this as a bug, we decided to change it. The updated Rainbow is on this issue's GS+ Disk. For more information, see the "Rainbow v1.0.1" article in this issue.

Diz,

I just received GS+ V4.N3 and so far have had only time to read "Writer's Block."

(See, I do read the important stuff first.) I just wanted to take a moment to respond to some of your proposals for future marketing.

I like the idea of publishing some of your programs as stand-alone programs, but does that necessarily mean that they will have to be dropped from the magazine? Why not offer them as stand-alones through mail-order firms (or even to GS+ subscribers who might want to buy copies for friends or relatives who don't subscribe to GS+), but continue to publish occasional updates in GS+. If you package GS+ subscription forms along with the stand-alone software, the chance to get future updates as a subscriber might influence more people to subscribe. Personally, I'm already quite satisfied with current versions of most of the GS+ programs that I use and you would really have to add a whole bunch of features to any program before I would shell out cash (in addition to the magazine subscription) to update any of the current programs....

... In short, the best thing that you can do is to keep up the good work on GS+ Magazine....

Dale Barker
Milford, ME

Thanks for the comments Dale. Thus far, the response we've gotten to the stand-alone software idea has been 100% positive. I certainly do hope we can keep up the quality of GS+ Magazine (but then, I personally think every issue we've done has stunk to high heaven). But, branching out into stand-alone software is something we are going to have to do to survive as a business, and that is going to take some of our time and energy away from the magazine. Of course, if those friends and relatives you mentioned were all subscribers....

Steve,

I'm signing up for one more year but if I get six more versions of EGOed, this will be the last year you'll see me. Let's have some fresh stuff, OK? Software of the Month [club] is shipping old junk and now [puts] Shakespeare on their disks. Big Red hasn't had much new to get my interest. Let's have some new stuff from you, OK? There is one enhancement to EGOed that I would like—a draft print feature, sort of like UtilityWorks. Something that would spill ASCII text over to the printer for a quick print-out,

rather than graphic printing using the GS/OS system.

Rich Hare
Northville, MI

No more EGOed? OK. You got it. Beginning this issue, EGOed is being replaced with EGOed lite. A smaller, faster, less feature-laden text editor that still lets you read, edit, and print Teach, ASCII Text, APW Source, AppleWorks Classic and AppleWorks GS Word Processing files, simply by double-clicking on them in. In the future, we will be supplying EGOed lite on the GS+ Disk and the regular EGOed will be spun off into a separate product in a few months (after an extensive re-write). Since EGOed lite and its source code will only take up about 75K, that frees up a heck of a lot of room for the new stuff that you and lots of other folks want to see (and we might not even supply the source code after this issue—which will mean even more space for new stuff). (And speaking of EGOed, if you are printing to an ImageWriter, try selecting "Text Only" from the Quality menu in the Print dialog. That might be just what you are looking for.)

Still, in defense of our past efforts, I think we've done a pretty dang good job of coming up with new software. Over the past year (from V3.N5 to this issue, V4.N4), we have published 11 totally new programs, and that's not even counting EGOed lite or the almost complete and total re-writes we did on several of our programs (Shuffle v2.0, Quick DA, Autopilot v2.0, etc.). Except for maybe SoftDisk G-S, I don't think anyone publishes more new IIGS software than us. And nobody publishes more utility/productivity software for the IIGS! Not bad for two guys in a basement, eh?

Dear GS+,

I have been a subscriber to your magazine and disk subscription for all but three issues, and I am nothing but impressed! What a resource! The software is amazing, the information is abundant and the people running the show are just great. I am not too concerned if this gets into the "Letters" section but rather that you get the respect you deserve.

In your January-February 1993, you spoke of making individual IIGS software packages. Some examples you gave included EGOed. Ever since the first disk, I have been impressed with EGOed.

I use it with Appleworks GS and more. If you do plan to work on a full-fledged version of EGOed, I would like to see you guys "burn" Claris Corporation (okay, do it lightly) by improving it beyond the AppleWorks GS program and even show them a thing or two about what the IIGS really can do "for the rest of us."

... And to the software/hardware guys out there, we're listening to you and we do see your ads in GS+. We'll buy it all up in time. The IIGS market is alive and well in my book, and I am very happy with the developers and GS+. And let it be known, Diz, that I have been telling all my Apple users in Toronto to subscribe, subscribe, subscribe to GS+. So, I'll take care of this territory for you. (grin). Best wishes, my friends.

Alexander S. Bosika
via Internet

Well hey, I can't ask for anything more than that! Thanks for talking us up!

As for EGOed "burning" AppleWorks GS... we'll just have to wait and see about that one.

Dear GS+,

OK, Professor Gumby teased me with the Star Trek sound discs. Now that I have them, what do I do with them? Actually, I bought the "2001 Space Odyssey" sounds. After finding out that they were compressed, I took them over to my brother-in-law and had him use that "other" computer to uncompress them to disk. SoftDisk's "Sound Wizard" utility didn't recognize them, the IIGS's sound control panel didn't recognize them and Seven Hills' "MacSoundGrabber" only recognized some of them. Help!

Michael Wallace
St. Clair Shores, MI

I passed your letter on to the fellow that actually fed us that rumor: Bill Moore. Bill's working on an article for us about how to move sounds from the Mac to the IIGS. Until that's ready (though, here's what he had to say:

First, you were correct in using a Mac to decompress the files, and to get them into a format the IIGS can understand. (When I did this, I decompressed the files, then moved them all to 800K HFS floppies.) The problem is that Sound Source Unlimited has been selling these files in the new Mac Sound Resource format, and only one IIGS program will recognize these with no modification: the freeware program MacSoundGrabber by Seven Hills Software. The problem with

MacSoundGrabber is, it will only work with files that are 64K or smaller. (I've already spoken to Seven Hills about this, and that was apparently an intentional limitation.) Which leaves us with the problem... what do we do with files that are bigger than 64K?

To tell the truth, I'm still searching for a satisfactory answer for this one. The best angle of attack I've come up with is to somehow convert the files using a Mac to another sound format (such as AIFF [Audio Interchange File Format], or just a plain binary file... in other words, a Mac sound file format that the IIGS has no trouble reading). There is a shareware Mac program called Sound Edit that will take any file (including these files) and pull the sounds out of it and save it in a format the IIGS can use. Another idea bantered around on GENie is to put the sound files into a HyperCard stack, then use HyperMover to convert it to HyperCard IIGS.

I know the frustration you feel. I've banged my head on many of the same brick walls you're now running into. Hopefully, I'll be able to come up with some more complete answers for my article. [Which should appear in the next issue or two - Diz.]

Steve:

First, I'd like to apologize for taking so long to get this letter to you. ... I write to you in regard to the Desktop Enhancer v2.0 review, on pages 39-40 of GS+ V4.N2. Before starting, I would like to remark that this letter is not intended as a putdown of the Desktop Enhancer (which is more than just a screen saver); we just want to make sure a few ideas are clarified.

I feel your comparison between Twilight II and the screen saver portion of the Desktop Enhancer is misleading. Twilight II specializes in being a screen saver. We've put 100% of our development time into protecting your monitor in the most pleasing way possible, and we think it shows. While we are all for competition in the marketplace, and would have no objections to a head to head screen saving faceoff, if you are going to compare similar products (i.e. T2 and TDE), please compare them fully.

Primarily, your review states that the ability to play color cycling animations in ProDOS 8 programs to protect the screen "is a definite plus for TDE." But the first and foremost question that comes to mind, "What about compatibility?" is not even touched upon in the review. What

happens when TDE blanks the screen using this color cycling during a download in an 8-bit program such as ProTerm? What happens when TDE blanks the screen while AppleWorks is printing? What about programs like Publish-It!? What if the 8-bit program is using screen memory for something else? This is the main reason why Twilight II just makes the screen black in text mode (or other non-SHR IIGS display modes) based programs: since there is no easy way to tell if we are interrupting something important, why chance it, especially with simple color cycling effects. One of our design goals for Twilight II was to have it interfere the least possible with the way you work with your computer. Echoing this philosophy, Twilight II will *not* interrupt your file transfer, or stop your printing, after the screen has blanked. On a similar token, we've just finished making Twilight II blank the DHR, HGR, and LGR screens (entirely in the background) as well, protecting in such programs as Publish-It!

Finally, in regard to the comment that "All Simplicity Software needs now is for someone to actually write some additional blankers!"... Twilight II ships with about forty effect modules, right now. ... Twilight II buyers certainly don't have to worry about whether or not someone will in the future write some nifty effects for them! ...

Jim Maricondo
DigiSoft Innovations
Trumbull, CT

After reading back over my review, I agree. I should have done a more in depth comparison of the blankers in Twilight II, The Desktop Enhancer and Phantasm. In fact, now that the new version of Twilight II has shipped, I think we'll run a big "blank off" comparison review.

If you have a question, comment, or criticism about GS+ Magazine, we want to hear it! Due to space limitations, we cannot answer every letter here in GS+ Magazine.

If you want a personal reply, please include a daytime phone number, or enclose a self-addressed, stamped envelope with your letter.

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GS+

Beginner's Guide to Finder v6.0

By Steven W. Disbrow

[Editor's Note: Way back in GS+ V1.N2, V1.N3 and V1.N4, we ran a series called "Beginner's Guide to the Finder." Since those issues are sold out, and since the Finder was recently given a major overhaul, we have received many requests to update the series and run it again. This article does just that.]

If you are a beginning IIGS user, learning to use the Finder can be a daunting task. Especially if you bought your IIGS used and the previous owner didn't supply you with all of the manuals. Even if you did get all of the manuals, they probably don't cover the latest and greatest version of the Finder: version 6.0. Even worse, if you upgraded to System 6 through your user group (or a program like our own System 6 upgrade offer), all you got were the System 6 disks, with only minimal documentation, or no documentation at all!

Fortunately, the Finder is really a simple program to learn to use. All it takes is the willingness to learn a few new concepts, and some practice. Best of all, once you've learned how to use the IIGS Finder, you are well on your way to knowing how to work with every IIGS desktop-based program. Knowing how to use the Finder also gives you a head start on using just about every other available personal computer. Windows, OS/2, the Amiga, and the Macintosh (especially the Macintosh) all work along similar lines. (For more information on the basic concepts of the Desktop interface, see "Understanding the Desktop" in our last issue. If you are completely new to the IIGS, you should read that article first.)

The purpose of this article is to get you acquainted with the Finder that comes with System Software version 6, and what it can do for you. As such, all references to the "Finder" in this article mean "Finder v6.0." This article is not intended to be a replacement for the official Apple documentation!

What You Need

Before we begin a discussion of what the Finder is, we need to discuss a few realities of computing in the 1990's. Specifically, to get the most out of the Finder, System 6, and your IIGS, you need to have *at least* 2MB of memory and a *hard disk*!

Now, some of you may be thinking, "Gosh, I just spent all this money on the IIGS. I don't wanna buy anything else. I

shoulda bought a Mac." Well, guess what? Apple doesn't sell Mac's without hard drives anymore. And the minimum amount of RAM you can get with any Mac is now 4MB. Can you guess why? Because they are worthless without a hard disk and 4MB of RAM. The same can be said of the PC, the Amiga, and the IIGS. If you want to get the most out of *any* computer, you really need that extra memory and a hard disk. (For a complete discussion of what you should add to your IIGS and when you should add it, see "The Basic IIGS" in GS+ V4.N2.)

So, What Is The Finder?

In the most basic terms, the Finder is a *program launcher* and *disk maintenance utility*.

As a program launcher, the Finder allows you to select and run application programs from one of your disks. (Running an application is sometimes referred to "launching" it, hence the term "program launcher.") When you finish with the application program, you are automatically returned to the Finder. This makes the Finder an ideal program to start up your IIGS with.

As a disk maintenance utility, the Finder allows you to copy files from one disk to another, rename files, delete files, initialize disks (i.e. prepare a disk for use), erase disks, organize your files, and more! (Note that you will sometimes see the word "volume" where you might expect to see the word "disk." For the most part, "disk" and "volume" are interchangeable terms—they both refer to a piece of media [magnetic or otherwise] that has information stored on.)

Windows & Folders & Bears

Oh, my. Before we go on, we'd best discuss the concepts of windows and folders, and the way they are used in the Finder.

Like all things in the universe, disks tend to get kind of cluttered after a while. To help you keep things nice and neat, the IIGS allows you to create *folders* on your disks that you can use to logically group related files in. (They aren't *really* folders, of course, but they are *called* folders simply because they serve the same purpose as the folders you use in your filing cabinet.) For example, all of the files that make up this magazine are stored in a (very large) folder called "GSPlus.V4.N4" on our file server. When we want to work on something for this issue of the magazine, we know exactly where to go to find it.

In the Finder, folders look just like, well, folders (see Figure 1). And, just like real folders, you can open them and see what's inside. When you open a folder, its contents are shown in a *window*. These contents can include files and even other folders. In fact you can have folders inside of folders inside of, well, you get the picture. Every time you open a folder, the Finder shows you its contents inside a new window. This is called a "directory window," because it is basically showing you a directory of the files that are on the disk. But, hey, I went over how to use windows in "Understanding the Desktop," so I guess it's time to move on.

How It Works

In the Finder, and most other IIGS desktop programs, working with things is

Figure 1
Some Common Finder Icons



a two-step process: first you select an item, and then you specify an action to perform on it. For example to run AppleWorks GS, you would first select it, and then open it.

Selecting "Things"

Before we can talk about selecting things, we have to specify what types of "things" you will be selecting. The actual things you will be selecting are called *icons*. All an icon is, is a small picture that represents something. In the Finder, you will see icons representing disks, applications, data files and a few other things. For a representative selection of the icons you might see in the Finder, take another look at Figure 1.

The easiest way to select an icon in the Finder is to use the mouse to click on it once. To click on something, you move the mouse on your desk so that the pointer (the little arrow on the screen) moves on top of the icon you want to select, and then you press the mouse button once and let go of it. The colors of the icon you clicked on will then invert (i.e. everything black will become white and all other colors will become black), showing you that the icon is selected.

At this point, you can perform an action on the selected icon. The action you will probably perform the most often in the Finder is to *open* an icon. For example, if you want to see what's on a 3.5-inch disk, you would click on the disk's icon to select it, and then select the Open item from the File menu. The disk would then be opened and its contents displayed in a window on the desktop. (For more on selecting things from menus and exactly what a window is, see "Understanding the Desktop.")

Of course, there are going to be times when you want to work with more than one icon at a time. Fortunately, the Finder gives you several ways to select more than one icon to work with. First of all, there's *shift-clicking*. You simply hold down the shift key while you click on each of the icons you want to select. If you mistakenly select something you didn't want, just click on it again, while holding down the shift key, and it will be de-selected.

Another way to select multiple items in the Finder is to simply draw a box around them. To do this, move the mouse to a spot where there aren't any icons and then click and hold the mouse button. As you hold the mouse button down, drag the mouse towards the icons you want to select. As you drag the mouse, you will see a box form. Just drag the mouse so

that the box encloses all of the icons you want to select. When you have them all in the box, release the mouse button and all of the items will be selected.

If there are some items that you can't get "in the box," you can add, or remove, icons from your selection by shift-clicking on them. You can also hold down the shift key while drawing a box around another group of items that you want to add to the selection.

If you want to de-select everything, just move the mouse to a place where there aren't *any* icons and click the mouse button once.

And, of course, there will be times that you want to select *every* icon in the current window or on the desktop. To do that, simply select the window you want to work with (you select a window simply by clicking on it with the mouse), and then pick the Select All item from the Finder's Edit menu. All of the icons in the window will then be selected. If you want to select all of the items on the desktop, close all of your Finder windows (by selecting Close All from the File menu) and then pick Select All from the Edit menu.

Doing Things

Now that you know how to select things, we need to talk about what you can do to the things you have selected. Like most desktop programs, almost all of the tasks the Finder can perform are accessed through its menus. So, we'll just go through the menus one at a time, looking at each menu item as we come to it. But before we do that, let's discuss a few tricks that the Finder can do without having to go to the menu bar.

Copying Things

If you need to copy something in the Finder, be it a single file, a bunch of files, or a disk, all you have to do is select what you want to copy (using the techniques outlined above), and drag it to the place you want it copied to.

If you are copying things onto a disk or into a folder, simply drag them on top of the disk or folder icon. When you see the disk or folder icon becomes selected, let go of the mouse button and the items will be copied.

If you are just copying things from one window to another, simply drag the items so that the pointer ends up somewhere in the destination window and let go of the mouse button. (One thing to watch out for when copying things is that if you are copying items from one window to

another *on the same disk*, the items will actually be *moved*, not copied!)

There are several different options available for copying things with the Finder. To see a list of these options, hold down the option key as you drag the items you want to copy to their destination.

Renaming Things

Renaming things with the Finder is so simple, I'm not even sure that I need to tell you how to do it. Well, OK. To rename something in the Finder, just click on it and then type the new name and press the return key. That's all there is to it! (Note that if the item is already selected, you may have to de-select it, and select it again, before the Finder will let you change its name.)

Deleting Things

One of the neat things about computers is that they tend to increase your productivity. Unfortunately, most of the stuff they help us produce is garbage. (I hope that's not too ironic.) So, you'll probably want to delete some of it off of your disks. Deleting files with the Finder is extremely simple. You just select the things you want to trash, and drag them into the Trash can at the bottom right corner of the Finder desktop. When there are files in the Trash, you will see it "bulge" (see Figure 1 for a graphic example of this). At this point, you can use the Empty Trash menu item to actually delete the items from your disk, or you can open the Trash, and move the items out. Note that the Finder will *automatically* empty the Trash if you perform certain operations, like copying files or launching an application.

Another "stupid Trash trick" is that you can actually eject disks by dragging them into the Trash can. No files are deleted (except those that were already in the Trash), but the disk will be ejected and its icon will be removed from the Finder desktop. While this makes little sense, it can be a real time-saver.

Let's See The Menus

Now it's time to talk about the various menus in the Finder. Let's get right to it.

The Apple Menu

This menu is where you will find information about the Finder, your IIGS, and the Finder's Help system. This menu also holds any New Desk Accessories (NDAs) that you might have installed.

About The Finder. This item displays a window that shows you version and author information about the Finder. It

also displays some very useful information about how the memory in your IIGS is being used. Among the information displayed is the total memory in your system, the amount that is currently available, and the amount of memory that is being used by the Finder, the System Software, your Desk Accessories, and your INITs and other setup files you have installed. The first time you see this information, you may be very surprised at how much memory the various parts of your system are using.

Help (Command-?). Selecting this item presents you with a window containing help about various Finder topics. A pop-up menu at the top lets you choose a help topic. Topics range from copying files to window "tunneling." Rather than repeat all of this information here, I'll just encourage you to explore this feature on your own.

New Desk Accessories. Below the Help item you will find all of your currently installed New Desk Accessories. These are mini-applications that you can use from inside the Finder or any other application with an Apple menu. Each NDA is different, so be sure to check the documentation that comes with each one for information on using it.

File Menu

The File menu is the menu that you will use to work with the files on your disks. Although you may not realize it, most of the work you do in the Finder will be done via one of the items in this menu.

New Folder (Command-N). This item lets you make a new folder in the current Finder directory window. This folder will initially be named "Untitled," but you can rename it if you wish simply by typing a new name for it immediately after selecting the New Folder item. Of course, you can always rename it later simply by clicking on it and typing a new name.

Open (Command-O). This is probably the single most used command in the Finder. This item lets you open disks and folders, and launch applications. To open something, you first select it and then select this item from the menu. If it is a disk or folder that you are opening, its contents will be displayed in a new directory window. If you are opening an application, the Finder will launch the application for you to use.

And, best of all, you can select and open some data files, like text files. When you do this, the Finder will try to find an application that knows how to open the kind of file you have selected. If the

Command-Huh?

Beside the names of some menu items you will see listed the Command-key equivalent for the item. (These are also known as Apple-key equivalents, because the Command-key also has a picture of an Apple on it. And in the menu, there will also be a picture of an Apple next to the key equivalent.) This Command-key is a keyboard shortcut for selecting the menu item. This allows you to pick a menu item without moving your hands from the keyboard and using the mouse. For example, the Command-key equivalent for the Open menu item is Command-O. So to pick the Open menu item from the keyboard, you would hold down the Command (Apple) key and press the "O" key at the same time. This will cause the Open menu item to be selected just as if you had picked it from the menu with the mouse. Almost every IIGS program makes use of these Command-key equivalents and learning them (and remembering to use them!) can greatly increase your productivity with a given program.

Finder can find such an application, it will launch it and tell it to open the data file you specified. In the past, very few applications have supported this feature of the Finder, but as time has passed, more and more applications have been written to perform this extremely neat trick. (The best way to tell if a particular application can do this is to consult the documentation that came with the application.) If the Finder can not find an application to handle the file, you will probably see the message "An application can't be found for this document."

The last thing you should know about the Open item is that you don't really have to use it. In the Finder, an equivalent to picking the Open item is to simply double-click the mouse on something. So, if you want to open a folder, you don't *have* to select it and then pick Open from the File menu, you can just double-click the mouse on the folder icon and the Finder will automatically open it for you!

Print. This is similar to the Open item, except that it only works for data files, and that instead of telling the application to open the selected items, the Finder tells the application to *print* the item. Unfortunately, very few applications support this feature, but the number is growing.

Close (Command-W). Picking the Close item, closes the topmost window. You can also close the topmost window by clicking the mouse in the window's close box. The close box is the little box in the upper left-hand corner of a window.

Close All. The Finder allows you to have up to 20 directory and information windows (see below for more about these) open at one time. If you ever do have that many windows open, you'll probably find that it's a real pain to close them one at a time. When you select Close All, all of the windows on the desktop will be closed. You can also activate this item two other ways. The first is by pressing

Command-option-W. The second is to hold down the option key while clicking the mouse in the close box of any Finder window.

Duplicate (Command-D). The Duplicate item allows you to make copies of files and folders. To use this item, simply select the items you want to duplicate and then pick the Duplicate item. Since these copies will be created in the same folder as the originals, they can't have the same name, so the Finder will prompt you for the names to give the new copies. Note that if you duplicate a folder, everything *inside* the folder will be duplicated as well! (But you won't have to specify new names for the stuff in the new folder. You'll just have to give a name for the new folder.)

Put Away (Command-Y). A neat feature of the Finder is that you can drag commonly used items out of their folders and leave them on the desktop. (Of course, the items are still *physically* in their folders, they just show up on the desktop so you can get at them quickly.) However, this can lead to a cluttered desktop. So, at some point, you may want to take an item off of your desktop and put it back where it came from. Instead of digging through a bunch of folders to drag the item back into its original folder, you can just select the item, and then pick the Put Away item. The Finder will remove the item from the desktop and put it back in its original folder. Another neat thing about the Put Away item is that it can also be used to retrieve items from the Trash. Simply open the Trash, select the item you want to retrieve, and select Put Away. The item will be removed from the Trash and put back in its original folder.

Validate. This item lets you check the files on your disks to see if they can be read. To use this item, select the files, and/or folders or disk that you want to check and then pick the Validate item. The Finder will then attempt to read all of

the items you have selected. If you select a disk or folder, all of the items inside it will be read as well. If the Finder is able to read all of the items, it will tell you that everything seems to be OK. If the Finder encounters an error, it will tell you so. (If you do get an error, it would be a good idea to dig out your copy of Deliverance or ProSel or UniverseMaster and try to double-check the error and repair the disk if necessary.)

Edit Menu

This menu isn't really used by the Finder. However, it is provided for use with any New Desk Accessories that you have installed. Still, one item, in this menu, the Show Clipboard item can be useful. This item will open a window showing the current contents of the system clipboard. When you select the Copy or Cut items from the Edit menu of any application, the clipboard is where the stuff you are copying or cutting ends up. And when you pick the Paste item, the clipboard is where the stuff you are pasting comes from. For an example of the clipboard in action, select the Show Clipboard item, then select the Help item from the Apple menu. Now select some of the text in the Help window (click the mouse in the text and then drag it so some of the text becomes highlighted). With some text selected, pick the Copy item from the Edit menu. The text you have selected should appear in the clipboard window.

Windows Menu

As I said earlier, the Finder allows you to have up to 20 windows open at one time. If you think closing that many windows is a pain (no pun intended), you should try finding the single window you are looking for amongst all of them! It sure would be nice if there was a way to quickly get at each window—and there is! As you open Finder windows, the name of each window is added to this menu in alphabetical order (note that only *Finder* windows are added to this menu, Desk Accessory windows are *not* added). To select a particular window, simply use the mouse to pick it from the Windows menu. The window you select will be brought to the front and made the active window. Besides the names of Finder windows, there is one other item in this menu:

Stack Windows. Another way to select a window in the Finder is to simply click the mouse on it. However, when you have a lot of windows open, it can be difficult to even *see* a window, let alone click on it. For those occasions, the Stack Windows menu item can come in very handy. When you select Stack

Windows, all of the open Finder windows (again, Desk Accessory windows are not affected), will be arranged in a nice "stack" across the screen. This stacking allows you to see the title of each window so that you can easily select the one you want with the mouse.

View Menu

The View menu lets you tell the Finder how you want to view the contents of a particular directory window. Each directory window can have its own view.

by Icon. This is the "default" view. This view shows you the full-sized icon for each item in the window.

by Small Icon. This view shows you the small icon for each item in the window. This lets you fit more items in the window at one time so that you can see more of its contents without having to scroll around in the window. Note that some types of items may not have small icons defined for them. In this case, the Finder substitutes a "generic" icon of the appropriate type (i.e. generic document, generic application, etc.)

by Name. Selecting this view displays the small icon for each item in the window and lists the items alphabetically by their names. Additionally, the size of the item, what kind of item it is and the date it was last modified are all shown.

by Date. This is exactly like the "by Name" selection, except that items are shown sorted by their modification dates.

by Size. This is exactly like the "by Name" selection, except that items are shown sorted by their sizes.

by Kind. This is exactly like the "by Name" selection, except that items are

shown sorted by the kind of items they are. This view makes it very easy to find and work with all of the documents of a particular type in a folder (like, perhaps, all of your AppleWorks GS word processor documents).

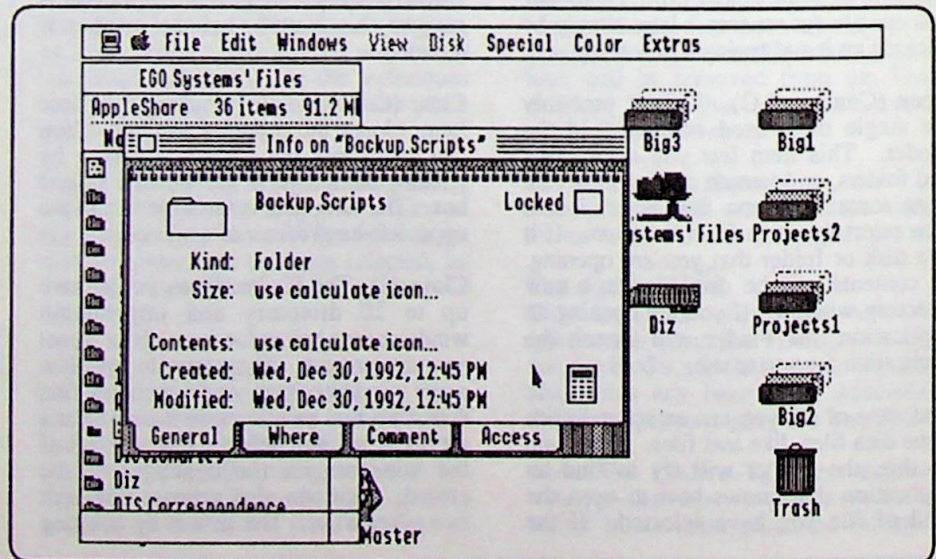
Disk Menu

This menu is what you use to prepare disks for use with your IIGS. To use the items in this menu, you have to first select a disk. It allows you to . . .

Initialize. Also called "formatting," initializing a disk is something that you *must* do to the new disks you buy before you can use them with your IIGS. When you initialize a disk, the Finder prepares the disk for use by the IIGS and writes a sort of "empty road map" onto the disk. As you save files to the disk, the IIGS will fill in this road map and use it to find the files. If you initialize a disk that already has information on it, all the old information will be lost! But, the Finder will warn you about it and give you a chance to cancel the operation.

Erase. This is similar to Initialize, except that instead of writing out a new "road map," the Finder just empties the one that is already on the disk. (So, you have to Initialize a disk before you can Erase it.) This is much faster than actually initializing the disk, but the end result is the same: any information that was on the disk before is *lost!*

Verify. This item tells the Finder to read the disk and see if it encounters any errors. If the Finder encounters any errors while reading the disk, it will tell you where the errors were. If the Finder does report errors, it would be a good idea to dig out your copy of Deliverance or ProSel or UniverseMaster and try to double-check the error and repair the disk



if necessary. (How is this different from the "Validate" item? Validate only checks the items you select. Verify checks an entire disk.)

Eject (Command-E). This item will eject the disk you currently have selected. Ejecting the disk will also remove the disk's icon from the desktop. There are three things to note about ejecting disks. First, you can do the same thing simply by dragging a disk's icon into the Trash can. Second, fixed hard disks can't be ejected (but removable hard disks can). Third, a disk will *physically* eject only if the disk *drive* can actually do that. For example, you can eject a 5.25-inch disk, and its icon will disappear from the Finder desktop, but the disk will *not* magically jump out of the drive. You will have to remove it yourself.

Special Menu

This menu is where you will find the things that don't really fit into any of the Finder's other menus. That's why it's called "Special."

Clean Up. When you select this item, the icons in the current directory window will be arranged on an invisible grid. If there isn't an open directory window, the icons on the Finder desktop will be "cleaned up." (Which can be extremely frustrating if you have your icons on your desktop exactly where you want them!) This item has a special feature that can be accessed by holding down the option key. It's described in the Finder's Help window, and I think I'll let you find out about it on your own. (After all, every tutorial has to have at least *one* exercise for the reader!)

Empty Trash (Command-T). When you select this item, the Finder will delete all of the items that you have in the Trash can. Note that if you don't pick this item, the Finder will empty the Trash automatically when you perform certain operations (such as copying files or launching an application).

Preferences. This menu item brings up a dialog that allows you to control the way the Finder behaves. These preferences are:

List Views. These check boxes let you tell the Finder exactly how much information you want displayed in a directory window when you pick one of the list views (i.e. by Name, by Date, by Size, and by Kind) from the view menu. To tell the Finder not to include one of them, click on the check box next to the item so that there is no longer an "X" in the box. (Note that the four check boxes in the List View preferences have

Command-key equivalents of, from top to bottom, Command-1 through Command-4.)

Save Finder information onto disk (Command-S). When this preference is checked, the Finder saves an invisible file in each folder that you open. The next time you open that folder, the Finder uses this file, called a **Finder.Data** file, to determine the position of the window, the colors of the icons in the folder, the view you had selected for the folder, etc. If this preference is turned off, the Finder does not save any **Finder.Data** files, and so it uses default window positions, icon colors, etc., for any folders you open (unless there was already a **Finder.Data** file present). If you don't care about window positions and the like, you should probably turn this preference off.

"What's a Pathname?"

Every file has a name. This is called a filename. Now, suppose you have a lot of files. These files may or may not have anything in common, so it would be nice to be able to store them on a disk in a logical fashion, grouping related files together. To accomplish this, the IIGS, lets you store related files in folders (also known as directories). These folders may contain files or they may contain other folders, allowing you to further organize your files. A pathname then, is a name made up of the name of the disk the file is on, the names of each of the folders you must open to get to the file and the name of the file itself. For readability, each of these individual names is separated by a colon (":"). For example: Suppose you have a disk named Data, and on that disk is a folder called Sales, and within that folder is a file named April.93. The pathname of the April.93 file would be :Data:Sales:April.93.

This saves disk space and time, since the Finder does not have to take the time to write out **Finder.Data** files for ever folder that you go through. (Note that you can temporarily reverse the setting of this preference "on the fly" by holding down the control key when you close a directory window. Also, you can make the Finder ignore the **Finder.Data** file in a folder if you hold down the control key when you open the folder.)

Hide invisible files (Command-H). If this preference is turned on, the Finder will not display invisible files (like **Finder.Data** files) in its directory

windows. If it is turned on, the Finder will display these files (which makes it easy to get rid of, say, unwanted **Finder.Data** files).

When starting up, check 5.25" drives (Command-W). If you have 5.25-inch disk drives hooked up to your IIGS, you probably don't use them all that often. Unfortunately, when you started up older versions of the Finder, they would *always* look in any 5.25-inch drives that you had connected to your IIGS. If there wasn't a disk in the drive, it would take the Finder several seconds to figure out that the drive was empty, and it would make lots of embarrassing noises in the process. With this preference however, you can put an end to that simply by turning the preference off and telling the Finder not to check your 5.25-inch drives when you start up the Finder.

Color selected icon's background instead of its outline (Command-C). Using the Color menu (described below), you can color the icons on your desktop. Normally, the color you pick is applied to the icon's background (i.e. every color except black). If you turn this preference off however, the color will be applied to the icons outline (i.e. the black bits) instead. Note that you can temporarily reverse the setting of this preference "on the fly" by holding down the control key when you pick a color from the Color menu.

Icon Info (Command-I). To use this item, select an icon and then select Icon Info. The Finder will display an information window that tells you all sorts of neat stuff about the selected icon. This information will be displayed on two to four "flip cards" (see screen shot), that you pick with the mouse or Command-key equivalents. These cards are:

General (Command-1). This card shows the icon for the item, its name, version, kind, size, and creation and modification dates. If the item is a folder or disk, there will be a calculator icon on the card. When you click on this calculator, the Finder will compute the combined size of all the items in the folder or disk.

Where (Command-2). This card will show you the GS/OS path name to the item. (For more information on pathnames, see the "What's a Pathname?" sidebar.) If the item is on a file server, the name of the file server and its network zone will also be shown.

Comment (Command-3). This card will contain any comments that are attached to the file. If you wish, you can change the

comments and the Finder will save the new comments for the file. If the file does not have any comments, an "Add Comment" button will appear on this card. If you click on this button, the Finder will warn you that adding comments to a file will make it unusable by ProDOS 8 programs (like AppleWorks Classic). So, don't add any comments to your AppleWorks Classic data files! (Note that the Finder may not let you add comments to certain types of files. In this case, the Comment card simply will not appear in the information window.)

Access (Command-4). If the item you have requested information on is a folder, and if that folder is on a file server, this card will allow you to view and/or set the user access privileges for the folder. (You can only set the privileges if you are the one that actually created the folder.) If the folder is not on a file server, this card won't be available.

Shut Down (Command-Q). When you select this item, the Finder presents you with a dialog that lets you do one of three things: Shut Down your IIGS (and turn off the power), restart your IIGS, or quit the Finder and return to the application that you ran the Finder from. You pick the option you want by clicking on the appropriate radio button and then clicking the OK button.

The first option, shut down, tells the Finder that you are going to be turning off your computer. So, the Finder gets the computer ready to turn off, and ejects any 3.5-inch disks that you might have in your drives. It then presents you with a dialog telling you that it is safe to turn off your IIGS. At this point, you can turn off the computer, or restart it by clicking on the Restart button in the dialog.

The second option, restart, simply restarts your IIGS. No disks will be ejected.

The last option, quit to previous application, does just that. It quits the Finder, and returns you to the application you ran the Finder from. If you didn't run the Finder from another application, you will be taken to the IIGS Program Launcher. This is a simple little program launcher that will present you with a Standard File dialog box that will allow you to pick another program to run.

Color Menu

The Color menu allows you to apply one of 15 different colors to the icons you have selected. For example, you could color your term paper red so that it would stand out from the other contents of the folder it's in. Normally, when you color

an icon, the color you pick replaces all of the white in the icon. However, if you hold down the control key, the color will replace all of the black in the icon. (This behavior can be changed in the Preferences dialog. See above.) Unfortunately, not all icons (most notably disk icons) will actually show up in these colors, so you will have to experiment with your icons to see which ones you can actually color.

Extras Menu

One of the neatest things about Finder v6.0 is that it has the ability to talk to other pieces of software that can enhance its capabilities. These are called Finder extensions or Finder Extras. Most of the Finder extensions that you have installed in your system will show up in this menu. (If you don't have any installed, the Extras menu won't be visible.) Like New Desk Accessories, all Finder extensions are different, so you should refer to the documentation for each extension to see how to use it. And, for more information on Finder extensions, see the "Casual 6" article in this issue of *GS+ Magazine*.

Applications & Icons

Moving away from the menu bar (finally!) the last part of the Finder that we will discuss is two things that we've already mentioned numerous times: applications & icons. (For even more information on the subject of icons, see "Casual 6: Those Crazy Icons" in *GS+ V4.N2*.)

Before Finder v6.0, the Finder still had icons. But, they were slightly different, and the Finder was a bit different in the way it handled them. To oversimplify: in previous versions of the Finder, it was the responsibility of the *icon* to know where the application it represented was kept. If you moved the application, the location specified by the icon was then wrong, and the Finder would become confused.

In Finder v6.0 however, the Finder has become the one responsible for knowing where applications are and what kinds of documents they can work with. The icons still contain this information and pass it to the Finder (and the Finder knows how to get the same information out of the older style icons), but after the Finder gets the information for the first time, it's up to it to keep track of things.

So, for example, the first time you click on an application icon, the Finder looks inside the application to see if it has a list of the kinds of files it can work with. If it does, the Finder copies that information into a special invisible file called

Desktop. (This file is placed in the **Icons** folder of the disk that the application is on.) The Finder also copies information about the application itself into the **Desktop** file. So, the next time you open a data file, the Finder checks the **Desktop** file to see if there is an application that knows how to open that file. If there is, the Finder launches that application.

If the Finder knows that there is an application for a data file, but it can't find the application (perhaps you renamed it or moved it into another folder), the Finder will present you with a dialog box telling you that it could not find the application. One of the buttons in this dialog will be called "Locate." If you click on this button, the Finder will give you a Standard File dialog that will allow you to search for the application and tell the Finder where it is. (Note that you can also bring up this dialog if you hold down the option key while opening a data file!) After you use this dialog to locate the application, the Finder should remember its new location.

Another possibility is that the Finder has no idea what application it should use for the data file. In that case, you will get that most evil of dialog boxes, "An application can't be found for this document." Unfortunately, the only option for this dialog box is to cancel.

That's All

So, there you have it. Everything you need to know to start using the Finder. Of course, there's a *lot* more to tell, but if gave it all away now, there wouldn't be any reason for you to explore on your own!

I hope this article has been helpful for those of you just getting started with the Finder. If you have any comments, corrections or suggestions, feel free to send them in! **GS+**

Working With the Toolbox

By Josef W. Wankerl
Part 10: LineEdit

With the last installment of Working With the Toolbox (in GS+ V4.N2), I finished covering all the "essential" tool sets for creating a desktop application. Knowing the fundamentals is good, but in order to get anything worthwhile done, you probably want to know about some of the supplementary tool sets too. LineEdit is a supplementary tool set which provides some nice functions for text display and text input. The LineEdit tool set presents a standard interface for letting users interact with your program by typing single lines of text. In addition to providing the familiar LineEdit input boxes, the LineEdit tool set has routines for displaying text in various formats. When the LineEdit tool set is started, your program has access to two more standard controls: the LineEdit control and the static text control.

Static Text Controls

When it comes to drawing text in a window, you have a few choices as to how you can do it. You can manually put some DrawString calls and the like inside your window draw procedure, or you can use a static text control. The advantage of the static text control over DrawString calls is that your text is

managed for you by the Control Manager and automatically drawn by a standard DrawControls call. Static text controls automatically word wrap your text to fit inside the control's bounding rectangle. You can also use embedded changes inside the static text string. For example, if you wanted to display the string "Hello <name>, how are you?" in a string, and the <name> portion of the string would change every time you ran the program, you can easily accommodate this with static text strings containing embedded changes. The string you would have in your program would be "Hello *0, how are you?" and whenever the control needs to be redrawn, the "*0" is found, and a substitution string is put in its place. Why "*0" you ask? Well, you can also have "*1" and "*2", all the way to "*9" for substitutions. Each substitution string is looked up in a substitution array, just like substitution strings for the AlertWindow call. You tell the Control Manager where the substitution array is by using the SetCtlParamPtr call. In order for text substitution to take place, however, the fSubstituteText bit must be set in the control template's flag word, otherwise any "<number>" characters will be left alone. The reference

to the text drawn by a static text control can be examined and changed by using the GetCtlTitle and SetCtlTitle calls.

LineEdit Controls

The main reason you probably want to use the LineEdit tool set is to receive input from the user via a LineEdit control. A LineEdit control can act as a password field where anything typed is shown as the same password character, usually a diamond or asterisk, so that onlookers can't see what you're typing, but you still get some visual feedback that you've typed something. Typical uses for a LineEdit control would be for letting the user enter a name, enter a password, enter some numeric parameters, or entering just about anything that can be typed on a single line. Previous to System 6, getting and setting the text in a LineEdit control was a bit of a hassle, but with System 6, you get two easy Control Manager calls to manage the text in the control: GetLETextByID and SetLETextByID.

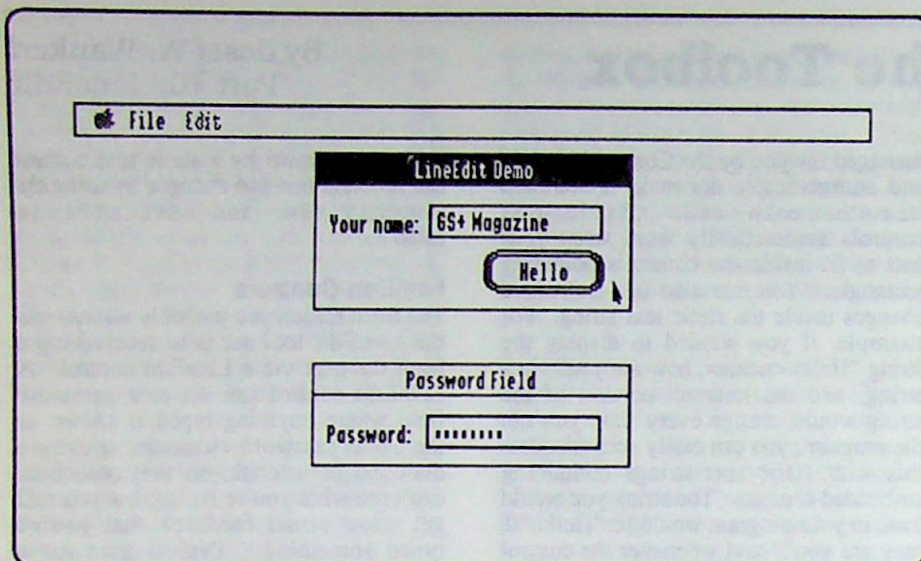
LETextBox and LETextBox2

Although it might seem strange to have text drawing capabilities in the LineEdit

Are you upset?

Angered by the way the GS has been treated lately? Sick of your friends bragging that they have the better computer? Does seeing After Dark on the IBM or Mac make you wonder "Why can't my GS do that?" Do you like dazzling effects that will protect your valuable monitor from becoming useless? Are you tired of dull screen savers that slow you down and interfere with your work, from companies that don't want to upgrade their products? *If so, read on, or turn the page!*

- **Prevent Phosphor Burn In**, a permanent and real condition that happens when the same image is left on your monitor for too long!
- **Protection!** Twilight II supports and protects all your favorite desktop programs, text mode-based programs (e.g. ProTerm, AppleWorks, America Online, etc.), and even DHR programs such as Publish-It!
- **Minimal Overhead!** Twilight II won't slow down you or the way your computer operates.
- **Ease of Use!** Our interface is the result of extensive testing and user feedback.
- **Phantom!** Via the included Phantom module, you can run all Phantasm modules for compatibility.
- **Power!** Nothing else for the Apple II GS can match Twilight II's screen saving capabilities, over two years in the making! Our effect module format is more flexible than the competition's, and even contains support for some features not found in other screen savers for any computer! A more powerful and versatile module format means better effects! And we will publicize our format and offer tech support to anyone writing their own effect modules.
- **AppleShare® Aware!** AppleTalk networks are fully supported!
- **Easy Installation!** Just point and click, using Apple's Installer™ program.
- **Compatibility!** Twilight II is compatible with all hardware and virtually all software for the GS! Twilight II works great with The Manager and Switch-It, as well as with RamFAST SCSI cards!
- **Comprehensive Manual** details all aspects of use.
- **Intelligence!** Twilight II won't interrupt important operations, such as file copying, printing, and file transfers!
- **Effects!** About forty dazzling colorful screen saver modules included with more in the works! What good is a screen saver that comes with only a few meager effects?
- **System 6** fully supported and required. (If you don't have it yet, we'll sell you a copy of all six disks with Twilight II if you want.)
- **Full Technical Support** provided!



tool set, if you think about it a bit, you might realize that the LineEdit tools have to know how to draw text within a rectangle. So, it sort of makes sense to have the "drawing text in a rectangle" tools in the LineEdit tool set. The two calls that draw text in a rectangle are LERectBox and LERectBox2.

The LERectBox2 call gives you the exact same results as a static text control will, except that no text substitution is performed. (If you want, you can perform text substitution yourself by calling the Window Manager's CompileText routine.) Although LERectBox2 doesn't perform text substitution, it *does* support embedded changes of the font style, foreground color, background color, font, justification, left and right margins, and character spacing. So, you could, for example, embed changes in the string that would make it change from Times to Helvetica and from left to right justified, and LERectBox2 would draw the string accordingly. For an example of all the embedded changes you can specify, see page 10-43 in the LineEdit tool set chapter of the *Apple IIGS Toolbox Reference: Volume 1*.

The LERectBox call works like the LERectBox2 call with the following

restrictions: text is not word wrapped (but it is wrapped when a carriage return is encountered), text cannot be fill justified, and no embedded changes are supported. The text is simply drawn in the current font.

A good place to use LERectBox and LERectBox2 would be when you are printing a document using the Print Manager and you need to write out multiple lines of text. All you have to do is set up the rectangle for the text and call LERectBox or LERectBox2 depending on your word wrap and embedded change needs.

But, if you are drawing text in a window, you should probably use static text controls to draw it (especially if you use resources), because it makes designing your windows (and changing them when you find out your initial design needs a bit of modification) easy.

LineEdit Demo

The LineEdit demo program is extremely simple. Two windows are presented: a window that asks for your name, and a window that asks for a password. The window asking for a password is mostly demonstrational—it allows you to type a password so you can see what a password

field looks like, and the source code is there for you to examine so you can set up your own password fields. The password you type into the field is not examined or used in any way.

The interesting part of the demo program lies behind the name window. The main event loop checks the name LineEdit control to see if it is empty, and inactivates the Hello button, if so, by calling the CheckHello procedure. TaskMaster is then called to handle all events. If a control is hit, the DoControl procedure is called.

The DoControl procedure checks to see if the Hello button is hit. If so, the text from the name LineEdit control is retrieved, and a new dialog window is displayed. The dialog window contains a static text control with text substitution turned on. The name typed into the name LineEdit control will be substituted for the "*" in the static text string.

That's All, Folks!

Using the LineEdit tool set is extremely easy. The source code for the LineEdit Demo program covers just about every LineEdit call you'll ever need to make, unless you want to really exploit the power of the LineEdit tools, which should be a rare circumstance. If you need to do more than the LineEdit Demo program does, you should check out the LineEdit chapter of the Toolbox references. Still, if you had trouble following this article, or with the Toolbox references, let me know and I'll attempt to clarify.

I am still writing "Working With the Toolbox" installments "on request." What that means is that you write in and tell me that you'd like to see a program that uses the <insert tool set name here> tool set and I'll work on it. "Common" tool sets will take precedence over obscure ones (i.e. TextEdit, List Manager, and Standard File will take precedence over the Apple Desktop Bus tool set). I look forward to seeing your requests! GS+

Professor G. S. Gumby's - Top Ten Rumors of All Time Number 10 - From GS+ V2.N4, March-April 1991

Truly Outrageous!

Has there ever been a more annoying word than "Synergy?" Have you ever wondered where Apple came up with that word? After an exhaustive search, we think we may have found the answer: Jem. You know, the syndicated cartoon about the girl with the alien earring (Holy Gasseé Batman@!) that allows her to change her appearance. The earring's name is "Synergy." Seriously! Could we make this kind of stuff up?

Of course, we would never have suspected that so many of the policymakers at Apple watch cartoons if we had not caught word of Apple's soon-to-be-launched "Coo-Coo for Macintosh!" ad campaign. Apparently, they wander around the halls screaming, "Coo-Coo for Macintosh! I'm Coo-Coo for Macintosh!" Scary stuff!

During a production meeting one day, we were discussing what new programs should go in this issue. Surprisingly, there weren't many new ideas. So it was decided that we should try and resurrect old programs. I had been working on a program to send PostScript® files to our LaserWriter IINT a loooooong time ago, and it was suggested to me that I finish it up and make it pretty. So I said, "Yeah, I guess I can fix it up." I ended up totally rewriting it from scratch. The original program actually sent the PostScript file to the printer using the AppleTalk PAP (Printer Access Protocol) calls and was written in 100% assembly language. The new program, LASERbeam, sends the file using the Print Manager printer port driver calls and is written mostly using ORCA/Pascal with a little help from a single assembly language subroutine. Using printer port driver calls is a much cleaner and more flexible method of printing than always relying on PAP.

Note that the name LASERbeam implies laser printer support only. This is not true. While we only have a LaserWriter IINT here at the office to test LASERbeam with, you should be able to send PostScript files to any device that

you can connect to your IIGS. You can even send PostScript files to devices which do not support PostScript, such as an ImageWriter II. Of course, if you do this, you probably won't get very pretty results. (If you do send the text directly to an ImageWriter II, be sure that you have the printer set to force a line feed after carriage returns or all the lines will overwrite themselves.)

Installing LASERbeam

To install LASERbeam, refer to "How to Use Your GS+ Disk" in this issue. LASERbeam can only be used with System 6 or later. If you don't wish to install the LASERbeam program, you can just run it directly from your backup GS+ Disk.

Using LASERbeam

LASERbeam is more than just a utility to send PostScript files to your printer, it is actually a PostScript program authoring system! To demonstrate this, let's create a new PostScript program and send it to the printer. First, select the New PostScript® menu item from the File menu. You'll be presented with a new, empty PostScript document window. Now you can type in a PostScript

program. For a small sample program, see Figure 1. Once you have your PostScript program written, you can tell the current printer to interpret it by using the Front Window menu item from the Download menu. If you're proficient in PostScript, you'll probably enjoy how you can work on your program and send it to the printer (using the Front Window menu item from the Download menu) without leaving LASERbeam. There are some sample PostScript programs on your GS+ Disk for you to play with if you don't know PostScript, but you would like to see how LASERbeam works. (My favorite is called GSPlus.) You can use the Open PostScript® File menu item from the File menu to load the GSPlus file into a PostScript document window. You can then use the Front Window menu item from the Download menu to send it to the printer. If all you want to do is send the file to the printer without actually loading it into a document window first, you can use the PostScript® File menu item from the Download menu.

The Menu Bar

The LASERbeam menu bar is a fairly typical menu bar, so let's take a few

Twilight II™

The screen saver with a future!

Requirements: Apple IIgs with two 3.5" drives or one 3.5" drive and a hard drive with System 6. 100k free RAM min. is required. (1.5mb total suggested for optimal use, although 1.125mb will work on a stripped down system.) Twilight II is a *complete* rewrite of Twilight I!

List price: \$39.95. Also available from Big Red Computer Club and Resource Central.

Competitive Upgrades: (only available direct from us—check or charge accepted)

- From Twilight I, with copy of Twilight I shareware payment check: \$21 (\$20 + \$1 S&H)
- From Q Labs' Signature GS, with original manual cover: \$25 (\$24 + \$1 S&H)
- From Simplicity's Desktop Enhancer, with original manual cover: \$25 (\$24 + \$1 S&H)

DigiSoft Innovations

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We're a small group of die hard Apple II enthusiasts who love expanding the "limits" of the GS. We strive to create high quality products at modest prices. We may not be nearly as large as some of our competition, but we feel that we are more committed to supporting and updating our products in the long run. Twilight II v1.1 is our latest example of this, and it certainly won't be our last! Many more treats are in store (such as even more effects!) for the next version of Twilight II! We're not content to sit back and watch our product sell, issuing only bug fix updates or additional effect packages. We listen to user's suggestions, feedback, and requests for features, and incorporate a great deal of these into future versions. You're buying a product with a future—a future that you can have some say in. We're committed to you!

II Infinitem!

moments to go over each menu, one at a time.

The Apple Menu

The first item in the Apple menu is the About LASERbeam item. Selecting this item presents you with a window telling you the version of LASERbeam as well as some information about how much memory you have available. To get rid of this window, click the mouse in its close box or select the Close item from the File menu.

Below the About item will be a list of your installed New Desk Accessories (NDAs). To use one, simply pick it from the menu and then use it as you normally would.

The File Menu

The first item in the File menu is the New PostScript® item. This item simply creates a new PostScript document window so you can type in a new PostScript program.

The second item in the File menu is the Open PostScript® File item. This item presents you with a Standard File dialog letting you choose a PostScript program to load. When you choose a PostScript program file, it is loaded into a PostScript document window.

The third item in the File menu, the Close item, allows you to close the topmost window. If the window is a PostScript document window that has not yet been saved, you will be asked if you want to save the file before closing it. If you answer Save, the document will be saved as if you had picked the Save menu item. If the document has never been saved before, you will be presented with a Standard File dialog box that will allow you to save the report under a new name

(as described under the Save As item below). If you answer Don't Save, the PostScript document window will be closed and any changes will be lost. If you answer Cancel, the operation will be cancelled and the PostScript document window will not be closed.

The next item, the Save item, allows you to save the contents of the current PostScript document window. If the PostScript file has not already been saved, you will be presented with a Standard File dialog box that will allow you to save the PostScript file under a new name, just as if you had selected the Save As item (described below). If the PostScript document has already been saved, it will be saved to the same file name as before.

The next item in the File menu, the Save As item, allows you to save the contents of the current PostScript document window to a new file name. When you pick this item, you will be presented with a Standard File dialog box that will allow you to specify a new file name to save the PostScript document under.

PostScript documents created with the New PostScript® menu item are always saved as PostScript document files. PostScript documents that were opened using the Open PostScript® File menu item are saved as either PostScript document files or plain text files depending on the original format of the file. You can load these files into any text editor (like EGOed lite) that can read text or APW (Apple Programmer's Workshop) source code files (since a PostScript document file is actually a type of APW source code file).

The next item in the File menu, the Page Setup item, lets you change the page setup information that will be used to

Figure 1
Sample PostScript® Program

```
% Draw a box, centered on
% the page
newpath
270 360 moveto
0 72 rlineto
72 0 rlineto
0 -72 rlineto
closepath
3 setlinewidth
stroke showpage
```

print your PostScript code. For best result, I recommend that LaserWriter owners always set the Vertical Sizing option to Condensed and that ImageWriter owners set the Height option to Vertical Condense. If you don't, your printout will look "stretched out" vertically. (Note that this bit of advice can be applied to all IIGS desktop programs, not just LASERbeam!)

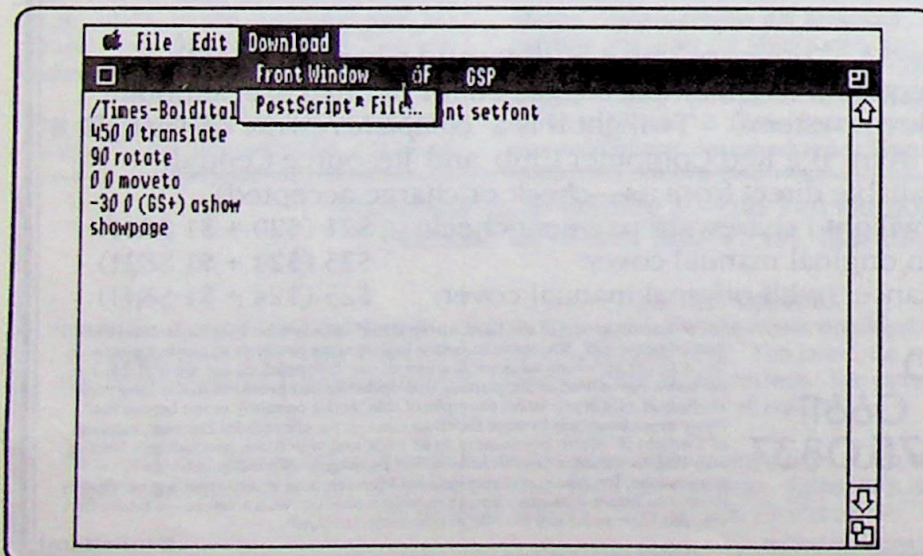
The sixth item in the File menu, the Print item, allows you to print your PostScript code to your currently selected printer. If you select the Print item and you have not yet specified a page setup, the Page Setup dialog will appear, just as if you had selected the Page Setup menu item. After you have specified a page setup, you will be presented with the Print dialog that will allow you to specify the number of copies you want to print and the pages you want printed. Note that the Print menu item actually prints a copy of the current PostScript document window, it doesn't cause the PostScript program to be executed on the printer—to do that, use the Front Window menu item from the Download menu.

The last item in the File menu, the Quit item, lets you quit from LASERbeam and return to the previous application. If you have any open PostScript document windows that have not been saved, you will be asked if you want to save them before quitting.

The Edit Menu

The Edit menu is used by LASERbeam just like it is from any program that supports the Edit menu. If the front window is a PostScript document window, you can select text in the report window using the mouse and then use the Cut, Copy, Paste, and Clear items in the Edit menu just as you would in any other application. For more information on how these editing commands work, refer to your IIGS owners manual.

The last menu item in the Edit menu, the Select All menu item, causes all of the



text in the current PostScript document window to be selected.

The Download Menu

The first item in this menu, Front Window, sends the PostScript code in the current PostScript document window to the current printer. If the current printer is a PostScript device, the PostScript code will be interpreted by the device.

The second item in this menu, PostScript® File, presents you with a Standard File dialog asking you to choose a PostScript document to send to the current printer. The PostScript code in the PostScript document you select will then be sent to the current printer. If the current printer is a PostScript device, the PostScript code will be interpreted by the device. The advantage of using the PostScript® File menu item instead of the Front Window menu item is that the PostScript® File menu item does not have to have the PostScript document open, so very large PostScript documents can be sent to the printer even if they would not normally be able to fit into memory.

PostScript Results

Some PostScript programs produce results, not on paper, but back to the computer that sent the program. An example of one such program is the TestPageOff program. The program disables the test page printing on a LaserWriter when it is first turned on, saving countless trees. The result string passed back to LASERbeam says that the permanent state of the LaserWriter has been changed. Any results from a PostScript program will be shown in a separate "PostScript Results" window. You can save the window contents in a standard text file if you wish. If a PostScript program does not generate any textual results, the result window will not be displayed. (Note that you can use another PostScript program on your GS+ Disk, TestPageOn, to turn the test page back on.)

LASERbeam Tricks

OK, so LASERbeam is another gee-whiz program with no practical applications, right? HA HA! Fooled you yet again!

LASERbeam is an excellent environment for teaching yourself PostScript. You can write and test your own PostScript programs! It's really easy to follow along in the PostScript cookbook/tutorial using LASERbeam, too.

You can use LASERbeam to blast text to a directly connected printer. You'll receive a warning saying that sending

EPS Tips

Printing an EPS file isn't always as easy as it should be. The proper techniques for displaying and printing EPS files take up almost nine pages in Appendix H of the *PostScript® Language Reference Manual, Second Edition* (section H.3 beginning on page 718 to be precise.). But, before you dig out that book, here are two very simple tips that *might* work for some of the EPS files you find online.

First, try adding a showpage command at the bottom of the file. The showpage command tells the PostScript device to display everything that the drawing commands have created.

Next, try translating the image to a new origin. Many EPS files are set so that they are drawn off the edge of your physical page. Look for a %%BoundingBox: x2 y2 x1 y1 comment in the EPS file which should give a bounding rectangle for the image. Figure out where you want the result to appear, and then put a translate command *before* the EPS file. For example, if the file contains a: %%BoundingBox: -100 -100 100 100 comment, try placing a 100 100 translate command at the start of the file. (Note that a basic knowledge of the PostScript language will really help here!)

PostScript to a non-PostScript printer will be unpredictable, but if you know what you are doing, you can quickly send a text file to an ImageWriter II printer, or any other printer that accepts text directly. (Don't forget to make sure that line feeds are generated after carriage returns.)

But the most useful function of LASERbeam is its ability to print PostScript document files that were created by pressing Command-F from the Print Manager's print dialog. If you are printing to a laser printer, you can press Command-F to create a PostScript document file instead of having the file print. To do this, when you're at the print job dialog, just hold down Command-F and then click on the Print button. You should see a message saying that a PostScript file is being created. The file will be saved in the *:System:Drivers folder and it will be called PostScript.GSXX where XX is a number. If you don't have a laser printer connected to your IIGS, but you have the LaserWriter printer driver installed, you can use this trick to save the PostScript file and then take that file to a IIGS connected to a laser printer and use LASERbeam to actually print the file. This way you don't have to have the original application and document to get your output, you just need the PostScript document, a PostScript device, and LASERbeam.

EPS Files

Feeling a bit nostalgic, I was browsing through some really old issues of GS+ Magazine, and I stumbled across a running theme when it came to program requests: EPS file support. An EPS (Encapsulated PostScript) file is basically a PostScript program, it just needs a little manipulating to get it to print correctly. LASERbeam will not print EPS files

directly, but LASERbeam can be used to massage the files into printing *if you know what you are doing!* For some quick tips on printing EPS files, see the "EPS Tips" sidebar. For the final word on PostScript and EPS, check out the *PostScript® Language Reference Manual, Second Edition* from Addison Wesley.

P.S.

I hope you can find some additional uses for LASERbeam than I have thought up, since LASERbeam is a fairly versatile program. If you have any problems with LASERbeam, please be sure to fill out and send in a Problem Form so that I can fix them. GS+

Professor G. S. Gumby's Top Ten Rumors of All Time

Number 9 - From GS+
V2N4, March-April 1991

McGee Goes Nuts

"McGee," "McGee Visits Katie's Farm," "McGee at the Fun Fair"... where will the computing industry's favorite yard-ape turn up next? Well, sources close to McGee (he is a real kid you know) say that the next few games in the McGee line will reflect the fact that McGee is a bit older than when he first started all this. Potential titles include, "McGee at the Free Clinic," "McGee Visits the Mustang Ranch," and "McGee at the Robert Maplethorpe Exhibit." McGee's dad—who is also his manager—was quoted as saying, "I do all the research for these programs, so I'm really looking forward to this new line of games!"

Pointless™ is great isn't it? One of the things I like best about Pointless is that it lets you keep your TrueType fonts on any disk you happen to have. This is really great if you don't have a lot of space on your boot disk. Maybe you have lots of Desk Accessories, or maybe you are running off of a floppy disk. Whatever the reason, it's nice to be able to put your TrueTypes wherever you want them.

But even with Pointless installed, you can't throw away your bit-mapped fonts entirely. In fact, you can even use bit-mapped fonts to speed up Pointless! (See your Pointless documentation for how to do this.) The only drawback is that you have to keep your bit-mapped fonts on your boot disk, which can take up a lot of disk space.

Which is why I wrote Font Memories. Font Memories is a control panel that lets you keep your old bit-mapped fonts (not TrueTypes) on a disk (or disks) other than your boot disk, and automatically load them whenever you start up an application. Font Memories maintains a list of these fonts and automatically loads them from disk whenever you start up an application that uses the IIGS Font Manager. You can add fonts to, or remove fonts from, this list at any time. Font Memories also allows you to view the path to any of the fonts in your list.

Font Memories also allows you to temporarily install a font (or fonts) on the fly for use by the current application. These fonts stay in memory and are available for as long as you use the application you were in when you loaded them.

Installing Font Memories

To use Font Memories, you must first install it on your System 6 (or later) startup disk and reboot your computer. For more information on installing Font Memories, see "How to Use Your GS+ Disk" elsewhere in this issue. Depending on how many fonts you want Font Memories to keep track of, you'll need upwards of 30K of free space on your startup disk.

Using Font Memories

After you have installed Font Memories, open the Control Panels New Desk Accessory (which can be found in the Apple menu), and scroll through the list of control panels until you see Font Memories. Double-click on the Font Memories icon to open the Font Memories control panel. When you first see the Font Memories control panel, the list in the middle of the control panel will be empty. This list will hold the file names of the fonts you'll be asking Font Memories to load for you.

Above the list you'll see a pop-up menu. At first, this menu will be dimmed out. This is because you don't have any font names selected in the list. When the list has some font names in it, and you have one of them selected, you'll be able to pull down this pop-up menu and see the complete path name of the font you have selected. (If you have more than one font selected, the pop-up menu will dim itself again so that you can't select it.)

Below the list are three buttons: "Add Fonts," "Remove Fonts," and "Install Temporary Fonts." Clicking on the Add Fonts button will present you with a

Standard File dialog that will allow you to select one or more fonts from a folder. If you have a single font selected in the Font Memories list, the Standard File dialog will automatically show the folder that the selected font is in. If you keep your fonts in one or two folders, this makes it easy to go directly to the appropriate folders. (The Install Temporary Fonts button works the same way.) Only those fonts that are not already in the Font Memories list will be available for you to select. The fonts you select will be added to the list in the Font Memories control panel. In addition, the fonts will be loaded into memory and made immediately available to the current application.

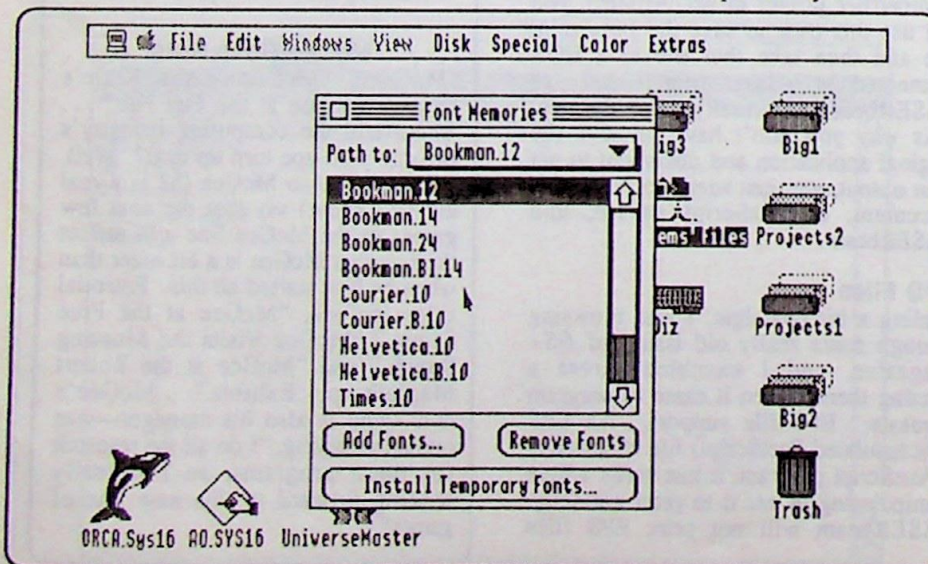
The Remove Fonts button lets you remove fonts from the Font Memories list. Simply select the fonts you want to remove and click the Remove Fonts button. The fonts will be removed from the list, but they will remain in memory until you quit the current application. (If you want, you can add these fonts back to the list by using the Add Fonts button.)

When you click on the Install Temporary Fonts button, you are presented with a dialog similar to the one for Add Fonts. The fonts you select will be loaded and made immediately available to the current application, but they will not be included in the Font Memories list (you can use the Add Fonts button to add them to the list). Also, you will only be able to load those fonts that are not already installed in the system.

Quirks

Unfortunately, the IIGS Font Manager wasn't meant to work this way (it expects all of its fonts to *always* be in the System:Fonts folder of your boot disk). So, there are a few... drawbacks to being able to manipulate your fonts like this. But, to understand them, we need to discuss briefly how the Font Manager normally works and how Font Memories works within these restrictions.

When you start up an application that uses the Font Manager (like the Teach application that comes with System 6), the Font Manager does several important things. The most important of these (for the purposes of this discussion at least) is that it builds a list of all the fonts that you have in your System:Fonts folder. This list is saved to disk (in the Font.Lists file—this list is rebuilt whenever you add or remove fonts to the



Fonts folder) and is used to build the Font menu and the list of fonts that you see in the the Choose Font dialog. However, when it builds this list, it does *not* actually load the fonts into memory. It just keeps track of their names, sizes and styles. The fonts are only loaded into memory when they are actually needed. The advantage of this setup is pretty clear—until you need a font, it doesn't take up any of your memory. (But, it still takes up space on your boot disk.)

Font Memories, on the other hand, has little choice but to load the fonts into memory to let the Font Manager know about them. So, every time you start an application that uses the Font Manager, Font Memories will ensure that all of the fonts in the Font Memories list are *loaded into memory* and available to the Font Manager. This means that you'll be freeing up space on your boot disk, but you'll be eating up quite a bit of RAM. So, it's important that you think carefully about which fonts you want included in your Font Memories list.

Now, Font Memories *could* skip actually loading these fonts into memory, but then you would not be able to see the sizes and styles that were available for a particular font. This is the way Pointless works. (Ever notice how sizes don't show up for TrueType fonts in the Choose Font dialog until you actually type something in that size?) This is OK for Pointless—since it is working with TrueType fonts, it can generate *any* size. Bit-mapped fonts, on the other hand, only exist in one size at a time, so its a bit more important to have this information readily available.

The Font Manager actually makes it fairly easy to add fonts to the list of available fonts, and over the years several IIGS utilities have appeared that let you load fonts from any disk when you need them. Unfortunately, after the Font menu has been built, there is no easy way to let an application program know that the list of available fonts has changed and that it should rebuild its Font menu. In fact, it's pretty near impossible. To get around this, Font Memories tells the Font Manager about all of its fonts right after the Font Manager searches the **System:Fonts** folder. This ensures that all of the fonts in the Font Memories list are available to the system when an application builds its Font menu.

Now suppose that you want to add a font "on the fly," by using the Install Temporary Fonts button. At this point, the Font menu is probably already built, and there is no easy way to tell the current application to rebuild it. However, you

can still get to the fonts that you add this way by using the Choose Font menu item (if the application has one).

Unlike the Font menu, the list of fonts that you see in the Choose Font dialog is rebuilt every time you bring up the Choose Font dialog. So, any fonts that you install on the fly should be available from the Choose Font dialog. Of course, there is an exception, and its name is (surprise!) AppleWorks GS. Why? Well, a bit of investigation revealed that AppleWorks GS tells the Choose Font dialog only to recognize fonts that are in the **System:Fonts** folder. So, when working with AppleWorks GS, be sure to have all the fonts you want to work with in the Font Memories list before you start up AppleWorks GS! If you don't, they won't show up in the Font menu and you won't be able to get to them with the Choose Font item after you add them.

Finally, if you are using The Manager, be careful using Font Memories. During testing, Font Memories seemed to cause The Manager to behave strangely. But, just before we went to press, the problem disappeared! So, the first time you use them together, be careful! If you have problems, don't install Font Memories.

Speaking of not installing Font Memories, you can easily prevent Font Memories from installing itself at boot time. During boot, Font Memories checks to see if the option key is down. If it is, it does not install itself and a red "X" will appear over the Font Memories icon to tell you that it was not installed. (You can then use The Manager without fear of a conflict.)

Thanks For The Memories?

You may be thinking, "Sheesh, this thing eats up memory and it might not work with The Manager. Why should I use it?" Well, if it *always* gives problems with The Manager, you probably shouldn't. Otherwise, there are several very good reasons to use it:

First and foremost, it can free up a lot of space on your boot disk. This can be especially important to folks that are running System 6 from a floppy disk. With Font Memories installed, you can remove all of the fonts from your Fonts folder and load only the fonts you actually need, when you need them, without having to reboot. (Note that you should *not* delete the files **FastFont**, **Font.Lists** or **TrueType.List!**)

Second, if you use Pointless, it can actually help you better organize your fonts and speed things up a bit. For

example, on my system, I have a folder (which is not on my boot disk) called **BitMappedFonts**. Inside this folder are several other folders, one of which is called **GSPlus**. Inside that folder, I keep bit-mapped fonts (generated by Pointless) for certain sizes of the fonts that we use for laying out the magazine. These fonts are included in my Font Memories list. In Pointless, I have the "Use bitmapped sizes if available" preference turned on. So, when I pull up GraphicWriter III to work on the magazine, Font Memories loads these fonts from the **GSPlus** folder and Pointless then uses them instead of taking the time to generate them from scratch. I save space on my boot disk and I don't have to wait for Pointless to generate the fonts.

Another use might be in perusing public domain font collections that you get from your user group. Just use the Install Temporary Fonts button to load the fonts from disk and then pull up EGOed or some other New Desk Accessory text editor and type a few sample lines in the new font. Or, use the Add Fonts button to add the fonts to your Font Memories list, and start up your favorite desktop word processor. Either way, you don't have to copy the fonts to your boot disk, and you don't have to reboot!

This same technique can be used for easily accessing fonts that you don't use that often. Say, just for a purely hypothetical example, that you publish a magazine and that few, if any, of your contributors submit their articles using the fonts outlined in your writer's guide. With Font Memories, you can keep each author's favorite non-standard fonts in a separate folder and load them when you are reviewing their submissions.

Finally, suppose you have two hard disk partitions that you boot from, one for System 5.0.4 and one for System 6. You probably use the same fonts for each boot disk, which is a lot of wasted space. Just move all of the common fonts to a single location, install a copy of Font Memories on each boot disk, and add the fonts to each copy of the Font Memories list.

Try It Out!

I hope you like Font Memories and that you find it a useful addition to your IIGS. I would love to hear any suggestions you have for enhancements to this program, and rest assured that I'll be doing my best to overcome the problems with The Manager. In the mean time, give Font Memories a try and let me know what you think. If you have any problems, be sure to fill out the problem form that is on your **GS+** Disk and send it in. **GS+**

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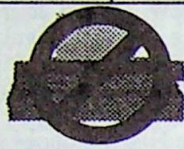


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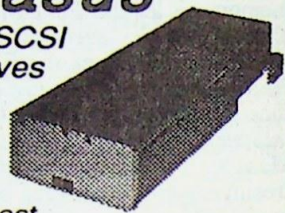


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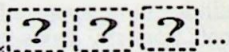
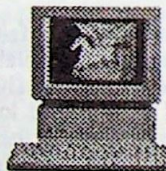
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Pegasus 127i (127 mb)	\$559.00
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The Big Squeezel

Organize Your Data And Reclaim Lost Disk Space

AutoArk™ is the integrated file compression utility that allows you to store files in compressed format and access them directly within your GSOS applications. Reclaim an average 50% of used disk space with most file types. Provides direct access to Universe Master backups!

New version 1.1! Features background compression, expanded re-compression options and file splitting capability.

AutoArk™ Integrated File Compression ... \$39.95

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More Great Products...

We at ECON are continuously working on great new products for the Apple IIGs. In fact, during the course of 1993 we will be adding no less than 12 new hardware and software products to our product line. But we want to do more! The IIGs has a potential that has just barely been scratched. If you are working on a great new software product, or have a great idea for one, let us know. We are anxious to bring as much great software to the IIGs as possible!

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TECHNOLOGIES

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With the release of System Software v6.0, Apple has invited programmers to create add-on utilities to make the Finder a more productive place to hang around in. *Finder extensions* are system files that are commonly made available under the *Extras* menu while in the Finder. Additionally, some Finder extensions are invoked by simply clicking on an icon of a certain file type or through the use of a particular keypress combination. Most any simple function can be made into a Finder extension and the future range available will be limited only by the imagination of programmers and users. Many of the currently available Finder extensions replace the functions of different utility applications, saving the time normally used to start up and shut down the program.

Stick 'em!

First and foremost, there's no use stickin' 'em anywhere if you're not using System 6! Previous versions of IIGS system software just don't include the programming "hooks" necessary for the implementation of Finder extensions. Also, you probably won't have room for any Finder extensions on your System 6 boot disk unless it's a hard drive.

Finder extensions can be placed in one of two places in your startup disk's *System* folder. Although not mentioned in the System 6 documentation, users can create a folder called *FinderExtras* in their *System* folder and place most Finder extensions there. Users may also choose to place Finder extensions in their *System.Setup* folder.

There are advantages to both locations, and users should consider their own system set up and needs before deciding where to place Finder extensions. The advantage of placing Finder extensions in the *FinderExtras* folder is that they will be in memory only when the Finder is active. When you leave the Finder, the memory the Finder extensions were using becomes free. The drawback of having your Finder extensions reside in the *FinderExtras* folder is that every time you travel back to the Finder, they must be loaded from disk. Depending on the number of Finder extensions you have active in your system, this can take anywhere from a couple of seconds to many, many seconds. Users whose systems lack extra available memory will probably find the *FinderExtras* folder to be the best location to keep Finder extensions.

Assuming that you have gobs of available memory, there are several benefits to placing Finder extensions in your *System.Setup* folder. First and foremost, you only pay the time for loading the Finder extensions during system startup. So, returning to the Finder is much faster with Finder extensions residing in the *System.Setup* folder. Also, some Finder extensions include cute little boot icons that will only be displayed when they are placed in the *System.Setup* folder. Finally, because of what they do, some Finder extensions, such as *IR*, (described later) *must* be placed in the *System.Setup* folder to work properly. (Conversely, others must be placed in the *FinderExtras* folder to work properly.) The trade off for placing Finder extensions in the *System.Setup* folder is that the length of initial system startup time is greater and overall available memory for applications is reduced. The documentation for a given Finder extension should tell you the best place to put it on your startup disk. (I should also note that some "Finder extensions" are actually New Desk Accessories, INITs, and other types of software that know how to communicate with the Finder. While they aren't *really* Finder extensions, they do add additional functionality to the Finder. However, I won't be discussing these in this article.)

Wherever you decide to place your Finder extensions, realize that the sheer numbers can quickly become overwhelming. Like TrueType fonts, Finder extensions are so cool that it's easy to get carried away. While most Finder extensions don't take up a lot of disk space, after a while they can tend to pile up and it is important to remember that no matter where you place them, they do consume memory. Also, your *Extras* menu can become intolerably long. Even though the *Extras* menu scrolls, it can be a pain finding a particular Finder extension in a long list. It's too bad that not all programmers put a separating line at the bottom of the Finder extension's name in the *Extras* menu. It would help to clear up some of the visual muddiness of a long *Extras* menu. Users may wish to use a directory sorting utility (such as *The New Order*, which is available on the *GS+ V2.N4* disk) to alphabetize their *Extras* menu or perhaps place the most commonly accessed Finder extensions at the top of the list.

It should be noted that *GS+ Magazine* readers that have had magazine and disk subscriptions since System 6 was released

(and shame on you if you don't get the companion disk!) already have a couple of *dynamic* Finder extensions that perform the functions of several of the following freeware/shareware Finder extensions. Be sure to check out *Quick Folder (GS+ V3.N6)*, *Open From Desktop (GS+ V4.N3)* has the latest version), *Rainbow*, and *EGOed lite* (the latest versions of which are in this very issue) before spending your time downloading *all* of the following Finder extensions.

Currently available noncommercial Finder extensions fall into one of several categories; system utilities, graphic and sound utilities, and totally frivolous (read *fun!*). Many of the following Finder extensions were written by industry-leading IIGS programmers. Additionally, several freeware Finder extensions have been released by commercial programmers in an effort to get you to take a second look at their other wares. It seems like everyone who programs for the IIGS wants to write Finder extensions!

System Utilities

One of the earliest Finder extensions to be written was *IR*, (pronounced "Ear") by Apple's own Matt Deatherage. *IR* lets you activate INITs, Classic Desk Accessories, New Desk Accessories, and drivers instantly simply by double-clicking on their icons. Users can access a list of preferences for *IR* under the *Extras* menu. *IR* must be installed in the *System.Setup* folder to work properly. *IR* is the ultimate system file activation utility, but because it is a Finder extension, it is only available while in the Finder. To get around this limitation, Jay Krell developed *IRnda v1.0*, a New Desk Accessory that uses *IR* to activate system files while you are in other applications. *IRnda* can even access *IR*'s preferences.

A similar Finder extension is Bill Tudor's *InitMaster v2.1*. *InitMaster* takes a slightly different approach to activating system files. Selecting *InitMaster* from the *Extras* menu allows you to select any INITs, Classic and New Desk Accessories, Control Panels, icons, Finder extensions, File System Translators and drivers for activation the *next* time you boot up your IIGS. *InitMaster* also includes the ability to set up three different system configurations that are activated by double-clicking on one of three small icons. *InitMaster*'s interface is beautifully laid out and lets you view each of the aforementioned system file types either collectively or in isolation. *InitMaster* is a must-have Finder extension!

Hot Keys v1.1, also by Bill Tudor, allows users to perform many of the Finder's functions by using single keystrokes. Using the IIGS's keypad keys, users can open many predefined system folders, open other user-defined folders, perform many Finder functions, and even launch applications. Shift-key combinations can also be used to effectively double the number of user defined hotkeys. Extended keyboard users can also use several of their function keys as hotkeys.

Another of Bill Tudor's Finder extensions, MoreInfo v1.2, is an excellent addition to your FinderExtras folder. By holding down the Shift key when selecting Icon Info from the Finder's Special menu, users can view and edit a file's file and auxiliary type, creation and modification date, visibility status, file access attributes (read, write, delete, rename), and backup status. Also displayed is information about both the data fork's and resource fork's size, storage type, and the file's full pathname. While there are a multitude of utilities that perform all of MoreInfo's functions, it is really cool to be able to edit a file's attributes from within the Finder.

One last Finder extension by Bill Tudor, Finder Blanker v1.1, provides for screen blanking on your IIGS after about five minutes of inactivity. After Finder Blanker turns your screen to black (no fancy graphics here, folks), any mouse movement, mouse clicks or keypress restores the screen. What Finder Blanker lacks in flashy graphics, it makes up for in friendly system memory requirements! It occupies only one-half kilobyte of system memory! The only drawback to Finder Blanker is that it blanks your system only while you are actually in the Finder, not when you are working in an application. Most any IIGS user will be pleased with the quality and functionality of all of Bill Tudor's Finder extensions.

Quick Launch v1.0, a Finder extension from the folks at Seven Hills Software, was written by Steve Stephenson. Quick Launch allows you to set up an application launching list that appears in the Extras menu. Users can launch an application simply by selecting its name from the Extras menu. Quick Launch can handle both GS/OS files as well as ProDOS 8 applications. After adding an application to the Quick Launch list, users can edit the original file name so that its name appears as they wish in the list. Users may also assign a Command-key equivalent for even faster application launching. Quick Launch will allow users to unclutter their desktop of icons they've

left out for fast launching of applications. Kudos to Seven Hills for releasing this Finder extension as freeware!

AliasGS v2.1, written by Paul Meyers, brings aliases to the IIGS. An alias is a small file that points to another file. For instance, you can create an alias of AppleWorks GS and then leave the alias on the desktop. To create an alias, simply select a file and then choose AliasGS from the Extras menu. AliasGS asks you to specify a file name and then the alias is created. Double-clicking on the alias opens the file that the alias points to.

Another alias creator for the IIGS, EasyOpen v1.1, by Richard Wifall, works in much the same way as AliasGS except that it is not accessed through the Extras menu. After selecting the application or folder you want to alias, the user presses Shift-Command-D to create the alias. EasyOpen requests the user to enter a file name, and then creates the alias. I found it quite handy using an alias of my FinderExtras folder during the writing of this article. It was great to be able to leave the folder alias on the desktop and then open it for manipulation simply by double-clicking.

TeachReader v1.0 is a Finder extension written by Chris Trimble that makes reading Teach files a breeze. It should be made clear at the outset that TeachReader is not a text editor, it is merely a text viewer. Once TeachReader is installed in your system, all you have to do is double-click on a Teach, text, or SRC file, and a window opens displaying the file. Alternately, users can select a file and then choose View Teach... from the Extras menu. TeachReader is a great way to check out Read.Me files that accompany many files that are downloaded from information services and bulletin boards. (It should be noted that GS+ Magazine and Disk subscribers already own a more powerful text-handling tool, EGOed lite!)

Piece O' String v1.0 is a Finder extension written by Nick Lenz that memorizes and allows for the restoration of currently selected icons. Piece O' String will remember what icons you have selected after launching an application and even after shutting down your system. To use Piece O' String, choose Preserve Selection from the Extras menu after selecting a group of icons. Choosing Restore Selection from the Extras menu causes the window that contained your selections to be opened, or if the window is already open, to be brought to the front. Piece O' String is an easy way to recall icons for some sort of Finder action. I used it several times in preparing this article.

Scarabaeidae v1.0 is a Finder extension written by Richard Bennett that finds and deletes Finder.Data files. Users need only select any volumes they want scanned and then choose Scarabaeidae from the Extras menu. Scarabaeidae will dig through all folders on the volume and delete any Finder.Data files it finds. This resets all windows in the Finder to their default positions.

Folder Jump, by Joseph Schober, is a Finder extension that allows you go directly to a specific folder rather than opening multiple windows to find a file nested several levels deep in a volume's directory. In addition to the Finder extension file, the Folder Jump package includes an icon that you should drop onto your desktop for easy access. Double-clicking on the icon brings up a Standard File dialog that allows you to select the folder you wish to open.

Close All Except Front, written by Steve Bernacki, is a simple Finder extension that does exactly what the name implies. Once installed, selecting All Except Front from the Extras menu causes all of the windows except the front window to zoom out and then close. Mr. Bernacki also saw fit to allow users to set a default Command-key combination to help avoid conflicts with any other Finder extensions you may have installed on your system.

ProBOOT v5.1.2 is a truly cool utility written by Eric Shepherd, that can make rebooting a much simpler process. It will automatically adjust your Control Panel's slot settings so you can boot a device in an inactive slot. It will automatically set your system speed depending on what drive you are booting. Better yet, it even knows how to change speeds on your TransWarp GS or ZipGS accelerator card. The ProBOOT package includes an installer program that patches the copy of ProDOS you have on your startup volume. Selecting the colorful ProBOOT icon from the Extras menu allows you to select which port or slot you wish to boot. Users may also change the system speed at which the IIGS boots. ProBOOT also gives IIGS users the luxury of choosing what port or slot to boot simply by pressing the Command key on startup! ProBOOT is a must-have utility for any serious IIGS user!

Graphic and Sound Utilities

There are two different Finder extensions that allow you to play music in the background while in the Finder. The first, DeskTracker v1.0, by Richard Wifall, plays SoundSmith songs. Once DeskTracker is installed, all you have to do is double-click on a SoundSmith song

file and it will play the song as you work in the Finder. DeskTracker also has the ability to play songs after leaving the Finder, but to do so it must be installed in your **System.Setup** folder. The author warns that with this preference selected, you should avoid ProDOS 8 programs or your IIGS will crash.

The other musical Finder extension, SynthInit, was written by Triad Venture's Mike Nuzzi. SynthInit allows you to play MIDI Synth songs simply by double-clicking on a song file's icon. A series of MIDI Synth songs can be played simply by selecting a group of song files. SynthInit also allows you direct sound output to a MIDI keyboard. While SynthInit has no controls available to the user under the *Extras* menu, it does have several keyboard commands to control its functions in the Finder.

Finder-Sounder v1.0, by Mike Fleming, is a Finder extension that plays sound resources. Double-clicking on an rSound causes it to be played. Finder-Sounder is a great utility for checking out all of those sound resources you've been collecting for use with the Sound Control Panel. The author hopes to include other sound formats in a future version.

Finder-View v3.0, by Brian Clark, is a Finder extension that allows IIGS users to view graphic files either individually or as a slide show. Finder-View supports a wide variety of picture formats including 3200-color images. Images can be viewed in the Finder simply by double-clicking on the file's icon. Additionally, by selecting multiple files and then selecting

Finder-View from the *Extras* menu, users can display a slide show of the selected graphics. Finder-View allows various aspects of control over image viewing through the use of extensive keyboard commands. Finder-View is a great example of a well done Finder extension.

Totally Frivolous FX's!

One of my favorite absolutely useless Finder extensions is Makin' Copies v1.0, by Bryan Pietrzak. Anytime files are copied in the Finder, a familiar phrase, made famous by Richard the copy guy, on Saturday Night Live, is heard. Even after hearing this simple Finder extension hundreds of times, it still brings a smile to my face!

"No. 2," a somewhat more serious, yet still frivolous, Finder extension, written by Lunatic Johnathan Bruce E'Sex, causes your IIGS to say "We want information!" when you select *Icon Info* while in the Finder. Fans of The Prisoner television series will definitely want to add this Finder extension to their arsenal.

One last fun Finder extension, Oow, by Mike Nuzzi, causes an icon that you double-click on to fall to the bottom of the screen and scream Oow! Oow seems to prefer residing in the **System.Setup** folder rather than the **FinderExtras** folder, so be sure to place it there for its full effect. Oow will startle and amaze your friends while they sit fascinated, watching you work on your IIGS!

Where to Get 'em!

By now you are surely wondering, "All of these Finder extensions sound wonderful,

but where the heck do I get them?!" The easiest way to gather all of the previously mentioned Finder extensions is from the commercial online services (that's where I got them!), like America Online and GENie. If you are not online yet, you're missing out on the best thing your IIGS can do for you: get you connected to the rest of the computing world! [For more information on telecommunications, see "The World at Your Fingertips" in *GS+ V4.N3*.] In addition to the commercial services, any of your local bulletin boards that support the Apple II should have some Finder extensions in their libraries. (You'll have to ask around to find phone numbers for local bulletin boards.) Finally, many of the Finder extensions mentioned in this article can be obtained directly from the program's author (see Product Information table). Many of the Finder extensions mentioned in this article are shareware, and as such, require a modest payment to the author if you plan on using the utility after a trial period. It is important to support shareware authors!

While Finder extensions cannot meet every IIGS utility need you may have, they can add new functionality to the Finder. Finder extensions will become even more important with the advent of Seven Hills Software's *The Manager*, and Procyon's *Switch-It!*. It will be easy to head back to the Finder and take advantage of a particular Finder extension's abilities. This overview didn't even touch on the commercial Finder extensions available, and surely more complex and useful Finder extensions will become available in the near future. **GS+**

Product Information

Alias GS v2.1 - freeware
Paul Meyers
910 Century Ave., SE
Palm Bay, FL 32905

IRnda v1.0 - freeware
Jay M. Krell
145 East Lauer Lane
Camp Hill, PA 17011-1313

ProBOOT v5.1.2 - shareware, \$15
Eric Shepherd
6721 El Colegio Road, #54
Goleta, CA 93117

DeskTracker v1.0 - shareware, \$10
EasyOpen v1.1 - shareware, \$5
Richard Wifall
11500 Tahiti Pl., NE
Albuquerque, NM 87111

GENie Information Services
(800) 638-9636
Monthly Fee, \$4.95
Hourly fee, \$6 non-prime time

Close All Except Front - freeware
Steve Bernacki
2 Cherlyn Drive
Northboro, MA 01532-1104

No. 2 v1.0 - freeware
Lunatic Jonathan Bruce E'Sex
3361 St. Michael Court
Palo Alto, CA 94306-5036

QuickLaunch v1.0 - freeware
Seven Hills Software
2310 Oxford Road
Tallahassee, FL 32304-3930

Oow - freeware
SynthInit - freeware
Triad Venture, Inc.
P. O. Box 12201
Hauppauge, NY 11788

Hot Keys v1.1, InitMaster v2.0.2
and **MoreInfo v1.2** - shareware, each \$10
Finder Blanker v1.1 - freeware
Bill Tudor
3925 Greencastle Road, Suite #108
Burtonsville, MD 20866

FolderJump - shareware, no fee specified
Joseph F. Schober
3528 Pintree Terrace
Falls Church, VA 22041-1418

Piece O' String v1.0 - freeware
Nick Lenz
P. O. Box 1606
Monrovia, CA 91017

Scarabaeldae v1.0 - freeware
Richard Bennett
P. O. Box 271
Turramurra, NSW 2074, Australia

America Online
(800) 827-6364
Monthly Fee, \$5.95
Hourly fee, \$5 non-prime time

Finder-Sounder - freeware
Finder-View - shareware, \$10
TeachReader - shareware, \$10
Jupiter Systems
P. O. Box 1396
Barrington, IL 60010

Introducing *The Manager*™

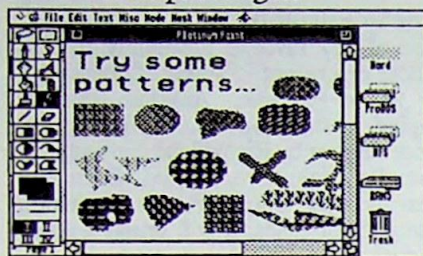
The only true MultiFinder® for your Apple IIGs®

IIGs users can now benefit from the same technology that Macintosh users enjoy—*The Manager* is the first and only true MultiFinder for your Apple IIGs! Multiple applications can be open simultaneously and moving among them is as simple as clicking in a different window. This is a tremendous time saver because you don't have to quit one application to start using another, which is especially convenient when copying and pasting between applications.

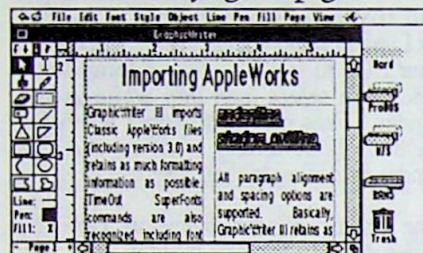
Use *The Manager* to create your own integrated environment...just open your favorite IIGs-specific word processing, painting, DTP, telecom and other programs, then instantly move among them! It is fully compatible with AppleWorks GS, GraphicWriter III, Platinum Paint, Teach, and more. It even works with system extensions such as Express, Kangaroo, TransProg III, and others.

Don't settle for a limited "switcher"—the Macintosh started with this type of program but MultiFinder made it obsolete.

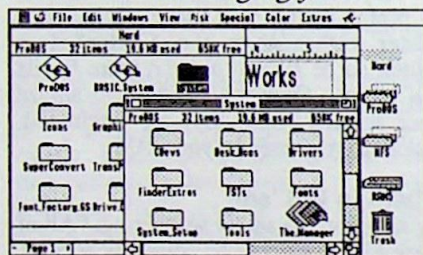
Click! You're painting...



Click! You're laying out pages...



Click! You're arranging files...



Macintosh users know from experience that a MultiFinder program gives you greater control, makes you more productive, and is more enjoyable because it's easier to use. The only true MultiFinder for the IIGs is *The Manager*...it even supports multi-tasking for compatible applications without requiring additional software.

The Manager is the result of a two year collaboration between Seven Hills Software (Express, GraphicWriter III, SuperConvert, others) and BrainStorm Software (Kangaroo, TransProg III, others). It requires System 6 and as little as 2MB memory (4MB recommended for greatest efficiency; required for some program combinations). A hard drive is not required but is recommended because you'll want a fast response from your disk drive when you instantly select programs on the screen.

The Manager is the perfect way to increase your productivity!

Suggested retail only \$69.95!

More great ways to boost your productivity...

TransProg III™ System 5.0.4 and System 6



Don't quit to the Finder each time you want to start a different application! Instead, simply select the application from the TransProg III menu (appears in all standard desktop applications) and the application is launched immediately.

If you're not using *The Manager*, the currently-running application is automatically quit first.

In addition to providing quick launching, options can be set for each application, including slot changes without having to restart the computer! The TransProg III menu is fully customizable, from the color and arrangement of the menu items to the creation of sub-menus in which you can group similar applications together.

Suggested retail only \$39.95

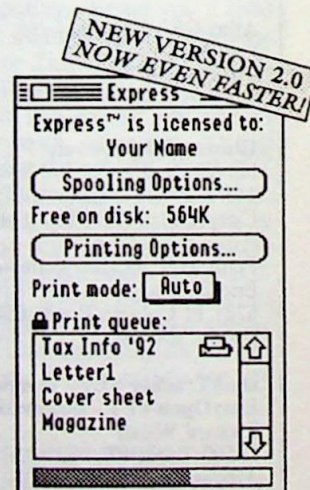
Express™ System 5.0.4 and System 6

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Rumors, Wishes & Blatant Lies

By Prof. G. S. Gumby

Top Ten of All Time!

Do you hate top ten lists? Me too. That's why, scattered throughout this magazine, you'll find the top ten Apple IIGS rumors, wishes and blatant lies of all time. Enjoy!

What's This? AppleWorks GS 2.0?

Rumor has it that several companies are trying to buy the rights to AppleWorks GS from Claris. Unfortunately, Claris isn't interested in selling. But, strangely, they also aren't interested in updating the program. Of course, this has nothing to do with the fact that they were recently absorbed back into Apple Computer, Inc.

Sorry folks, but there doesn't seem to be any way around it . . . One of you is going to have to write an AppleWorks GS killer from scratch!

Out of Sync

Due to a potential, and unspecified, trade name conflict, the publishers of ProTerm, the award-winning telecommunications software, have announced that they are changing their name. The company, formerly known as "InSync Software, Inc." is now named "InTrec Software, Inc." Everything else (address, phone number, hair-styles, etc.) is the same as before.

What? No Caffeine Free?

OK, "EGOed lite" isn't that bad a name. After all it fills up less disk space, and has fewer features than our regular EGOed. Still, I think that our publisher has gone a bit crazy over this whole motif. At our last production meeting, he announced plans to publish a total of four different versions of EGOed: EGOed regular, EGOed lite, EGOed Dry, and EGOed Genuine Draft. When I asked him, "Just what the hell is an 'EGOed Genuine Draft'?" He just laughed and said that "If people will buy Pepsi and Crystal Pepsi, they'll buy four EGOed's."

I Am Depressed

Do you hate the America Online software for the Apple II? Don't you wish they would do a IIGS version? Sure you do. Well, rumor has it that they *did*. The rumor goes like this: someone indirectly associated with America Online wrote the IIGS software in his spare time and presented it to the company. They were so impressed with it, they hired him and promptly put him to work on something else. The IIGS software was abandoned, because it would have cost too much to beta test and train additional support

people. Once again, the bottom line kills another great IIGS idea.

It Can Now Be Told

In another almost completely unrelated rumor, did you know that about two years ago the folks that ran the Apple II areas on GENie contacted our own Joe Wanker! about doing a IIGS front end for GENie? The reason being that Joe was, at the time, one of only two or three people that had done any sort of desktop communications software (Transfusion) for the IIGS. Joe was all ready to go, but the deal fell through at the last minute. (Note to the Apple II folks at GENie: we are still interested!)

Allies Poised to Strike

The Alliance is preparing to launch a new set of Apple II advertisements in some big name national magazines. Apparently they received over 400 responses to the small classified ads they ran in various magazines last year, which isn't too shabby when you consider the size of the ads, and the fact that they were in "mainstream" publications. Given this response, they are projecting responses in the *thousands* for the big ads. So, if you are an Apple II developer, you should contact the Alliance to see about getting on board this latest venture. If you are an Apple II user (and if you aren't, why are you reading this?), you should contact the Alliance to see what sorts of Apple II goodies they have for you. The address is:

The Alliance International, Inc.
P. O. Box 20756
Louisville, KY 40250
(502) 495-0694

Twilight Comes to the Land

Word has it that DigiSoft Innovations has just begun shipping Twilight II v1.1. If you were waiting for your copy, pitch your tent by the mailbox right now! (Don't forget to take an extension cord for your IIGS!)

Ask Mr. 8-Ball

Boy! Talk about popular! After last issue's stunningly spectacular debut, my source, Mr. 8-Ball, is already so well loved by *everyone* in the industry that he might cause me to lose my job. But, hey, that's *only* a rumor, and I know how to deal with rumors.

For those of you that don't know how this works, I'll explain it again. I get lots of rumors. Often, it's impossible for me

to verify these rumors with the people that would know for sure. So, I turn to my *most* reliable source, Mr. 8-Ball (not his, or her, real name). Mr. 8-Ball uses his extensive industry contacts to give me the real story.

Gumby: I hear that some young new software company is about to put out a desktop-based, mailing list package for the IIGS.

8-Ball: Without a doubt.

Gumby: I hear that a certain Florida-based software company has just hired a hot new programmer (whose programs have appeared in these pages once or twice) to help them meet their rather grueling product release schedule for this year.

8-Ball: Yes.

Gumby: Resource Central has just announced that this year's KansasFest will be a two-day affair. However, there's still no word about the Apple Central EXPO from the folks at Event Specialists. We know that there will be a KansasFest, but will there be an EXPO to go with it?

8-Ball: Very doubtful.

Gumby: There's absolutely nothing about Roger Wagner, ties, or HyperStudio in this issue of GS+ Magazine. Is the publisher sick?

8-Ball: As I see it, yes.

Gumby: For once, we agree on something. Moving on . . . Rumor has it that another Apple II magazine almost went under in March. However, it was saved at the last moment by giving the publisher a dose of electric shock therapy. True?

8-Ball: Concentrate and ask again.

Gumby: Sorry, but I don't have time. I have to log onto GENie and read all my fan mail!

If you have a rumor, wish or blatant lie about the IIGS that you would like to share with us, forget it. We make all this stuff up. Oh, what the heck, send them to:

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

GS+

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!!** 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 v5.0.4 or later. (Note that most of the programs on this issue's disk *require* System 6! For more information, refer to the article for each individual program.) 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 EGOed lite 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.)

- 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 Panel Devices, and other system files that come on the GS+ Disk.

Towards that end, we have prepared the following list of "expendable" files that you can "safely" remove from your System Software v5.0.4, or 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 v5.0.4

The standard System Software v5.0.4 **:System.Disk:** has 12K available on it. The following items can be deleted from the root directory of the disk:

Tutorial (11K)
AppleTalk (0K)

After this, things get a bit tricky. Other files that you can safely delete depend on your *hardware setup*. If you have a ROM 01 IIGS, you may delete the file:

*:System:System.Setup:TS3 (15K)

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

*:System:System.Setup:TS2 (41K)

If you do *not* have a modem, you may delete the following files:

*:System:CDevs:Modem (6K)
*:System:Drivers:Modem (3K)

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

*:System:CDevs:Printer (6K)
*:System:Drivers:Printer (3K)
*:System:Drivers:Printer.Setup (1K)
*:System:Drivers:ImageWriter (26K)

If you have a printer other than the ImageWriter (that is not ImageWriter compatible), you can delete the file:

*:System:Drivers:ImageWriter

If you do *not* have a 5.25-inch drive, you may delete the following 7K file:

*:System:Drivers:AppleDisk5.25

Removing some or all of these files should give you ample room (up to 90K on a ROM 01 IIGS and up to 116K on a ROM 03 IIGS) on your startup disk to install any of the System Software v5.0.4 compatible utilities on your GS+ Disk.

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 should 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 or any of the other system utilities from your backup **GS+** Disk.

Note: You will *not* be able to print from EGOed 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 here at **GS+** Magazine.

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.N4.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 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

DISKLESS?

If you did not receive the disk with this magazine and have decided you would like to have it, just send a check or money order for \$6.50 to:

GS+ V4.N4 Disk Offer
P. O. Box 15366
Chattanooga, TN 37415-0366

Or call us at 1-800-662-3634, Monday through Friday between 9 a.m. and 6 p.m. Eastern Time, to bill it to your MasterCard or VISA.

Tennessee residents add 7.75% sales tax.
Price includes First-Class delivery to the U.S., air mail to Canada and Mexico, or surface mail to all other countries. Add an extra \$3.50 (\$10 total) for air mail to all other foreign countries.

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

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.

DG.Rev

This folder contains the picture that Bob mentioned in his DreamGrafix review. You can use any utility that can display 3200 color pictures to view it.

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.N4.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.

Programs

This folder contains the EGOed lite, LASERbeam, NoDOS, and Rainbow programs. Use the Installer provided on your backup *GS+* Disk to automate the installation of these programs. (Note that the LineEdit Demo program is in the self-extracting archive, and not in this folder.)

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.

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! *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.

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+*

Reviews

Salvation: Deliverance v 1.1

by Christopher Warner & Robert Morgan

Retail price: \$159.95

Typical mail-order price: \$85

(Note: These prices reflect the fact that Deliverance is currently not available as a stand-alone program. The above prices are for the Salvation: Supreme package. Contact Vitesse for pricing if you currently own one or more of the Salvation utilities.)

Not copy-protected

Requires System v.5.0.2 or later and 1 MB free RAM (memory above 1.25 MB total increases performance), hard drive recommended but not required

Vitesse, Inc.

P.O. Box 929

La Puente, CA 91747-1669

Orders: (800) 777-7344

Tech. Support: (818) 813-1274

Reviewed by Bill Moore

Deliver Us From Sin . . .

I'm sure many of you recognize (or empathize with) this scenario: You launch AppleWorks Classic to add some new ideas to your Great American (or British, or German, etc.) Novel. You choose "Add files to the Desktop," select the device, and . . . the most dreaded of all messages appears: "Getting errors trying to read NOVEL.DRAFT on /HARD2/APPLEWORKS/DATA." Or that all-important floppy with your data to achieve Lasting World Peace elicits the Finder dialog box about "GS/OS can't read this volume (in device APPLIEDISK 3.5A.) Eject or initialize?"

Bad blocks, whether they are on a floppy or hard storage device, are a bane common to all IIGS users, and sooner or later, one of the above scenarios will be played out in your computer room. Happily, there are several ways to insure that bad blocks don't make for a bad day. First, back up all your important data. And, if that isn't enough, buy a directory/file repair utility. One of the best programs on that particular block (pun intended) is Vitesse's Salvation: Deliverance.

Although there are other programs out there that accomplish the same mission that Deliverance does, Deliverance was the first one to work under the familiar Human Interface Guidelines set down by Apple. Deliverance is currently available bundled with the other Salvation utilities

in "Salvation: Supreme," or will be available in a bundle with Renaissance, since you need to run Deliverance prior to running Renaissance to ensure there are no problems with the volume you're trying to optimize. (See separate review of Renaissance in GS+ V2.N2.)

Deliverance's documentation lives up to and enhances Vitesse's reputation for producing quality literature about their programs. Before the manual even discusses the program, it launches into a quick and dirty rundown of ProDOS and GS/OS interaction with storage devices, at both the block and device level, to give you some idea about the environment that Deliverance operates in. (Some of the stuff was very illuminating to the non-programmer. For example, I learned *why* ProDOS has a limit of 51 files/folders in the root directory.) In addition to covering the program's abilities exhaustively, the manual also includes appendices referring one to other books on the subject, and a complete list of ProDOS file types in hex and mnemonic. However, the manual is not perfect. For example, Appendix B needs to also list the common auxtypes for files, i.e. filetype \$E0, auxtype \$8002 for a ShrinkIt archive.

I feel that Salvation: Deliverance has several advantages over the competition. The biggest being the fact that anyone from the neophyte-beginner, to the IIGS programming god, can use Deliverance *at his or her own level of expertise!* More on this later. Deliverance is also the only program of this type that allows the user to recover damaged files/folders, then copy them to a "safe" volume, without

making any changes to the damaged volume! In fact, you can execute almost any of Deliverance's commands without having to commit to writing anything irrevocably to the damaged volume. This way, you can try to repair something without the fear of "screwing it up even worse than it already is." Deliverance is literally the only utility for the IIGS which allows you to open a damaged device, copy out undamaged files and folders, all without having to make any changes to the damaged disk!

In addition to being able to recover whacked disks and files, Deliverance also boasts one of the most powerful block editors in the Apple II kingdom. It's far easier to use than the one in UtilityWorks GS, and light-years ahead of the one in, say, Copy II Plus, because you can cut and paste blocks to other open block windows, as well as the IIGS clipboard, and it will work with sparse and forked files (unlike Copy II Plus.) [Editor's Note: I don't know how many articles and source code files I've saved using this feature. I just open the damaged file with Deliverance, copy the text I want, and paste it into an EGOed window!]

I tested Deliverance initially on my ROM 01 IIGS w/1.25 MB, one 3.5 and 5.25 drive. Later, I added a CV-Ram card (which I reviewed last issue) and a hard drive. These two components elevate Deliverance from a useful utility into an indispensable one. Deliverance v1.1 was designed to work under System 5.0.4, but I've had no trouble since moving to System 6. And, so long as you have available memory, there's no problem with INITs, DAs, (I used EGOed to write

The screenshot shows the 'File Edit Volume Editor' window. The title bar indicates the current volume is '62MF (D)'. Below the title bar, it shows 'Block: 0000 (0210)' and 'Selection: 0000:000'. The main area displays a hex dump of the selected block, with columns for hex values and corresponding ASCII characters. The hex values are shown in pairs, and the ASCII characters are shown in a single column. The text in the ASCII column is: 'of copyright la', 'w... Quick Change', 'Summary (What', 'you might have t', 'o fix in your mo', 'dules Q partial', 'list)... Modu', 'es must respect', 'all reserved par', 'ameters by not t', 'ouching them.%', 'New bits of Blan', 'kT2's T2Result n', 'ow defined. % Tw', 'ilight II no lon', 'ger passes user!

90% of this review *inside* of Deliverance) or using the Control Panel.

So How's It Work?

Regardless of your knowledge of GS/OS, ProDOS, or the IIGS in general, Deliverance is easy to use. The whole process of fixing a disk is automated into one command, "Complete Overhaul." If you don't know a byte from a header, this is the option for you. Deliverance will look at the botched volume, find out everything that's wrong with it, then try to repair the damage and recover the files. When it's done, you have the choice of fixing the volume permanently, temporarily, or copying files. My personal recommendation is to fix it temporarily, and get what files you can off the repaired disk. A disk that's failed once can fail again. I copy what files I can get onto my hard drive, then zero and reformat the disk. If that doesn't work, I toss the floppy (after all they're cheap and easy to replace.) All of the commands used in a complete overhaul can also be used individually: Disk Repair, Recover Files, and Find Bad Blocks. If you have the knowledge to use them, Deliverance's utilities can be very powerful tools to recover data.

You're also given the option to edit a file or its info, or edit the blocks of a file. Of course, the only time I've really used a block editor was before the IIGS's time. Copy II Plus was the program of choice for a deprotect, a patch, or to cheat on a game. (Ah, the good ole days!) But comparing C2P's Block editor to Deliverance is like comparing AppleWriter to GraphicWriter III. This block editor is all grown up, fully supported under GS/OS.

I know of other programs that can do some of the things Deliverance does such as ProSel 16, UtilityWorks GS, and Universe Master, but I don't have access to these programs to compare them. For my money, nothing in the IIGS world comes close to Deliverance for its specialty: recovering damaged data. Deliverance saved several floppies of mine I thought I'd never see data off of again. It even made a valiant try at fixing my boot volume on my hard drive when my optimization program croaked in mid-stream. (Yes, I know I should have backed it up, but nothing more than a few icon files were lost.) Deliverance wasn't able to fix the disk completely, but it minimized the damage. For this review, I even took a perfectly good disk, used the block editor to 'zero out' blocks 0000-0002 (where the ProDOS kernel and root directory info is stored,) and even ran a refrigerator magnet over it. Although it

took awhile (because I need a ZipGS), Deliverance worked like a charm, recovering nearly all the data. I say "nearly all" because Deliverance rarely can save a file that's in the root directory. The manual explains this in more detail, but the moral of the story is: put your important data in a folder. Don't leave anything in the root directory of even a floppy that you don't have to.

How Does Deliverance Stack Up?

Glad ya asked. I downloaded and played with UtilityWorks GS v2.0.1 (UWGS), but I had little luck getting the block editor to work with the completely whacked floppy I used in the demonstration I discussed earlier. When I tried to get UWGS to look at it, GS/OS would tell me it couldn't recognize the volume. Deliverance clearly has the edge as far as block editors go. Deliverance's block editor makes editing blocks as easy as editing this review. UWGS makes it a chore. UWGS seems to have several other goodies that Deliverance doesn't even try to do, and these probably make it worth having. But then, I'm not reviewing UWGS here, am I? In sum, Advantage: Deliverance.

I've seen ProSel in action on a friend's IIGS, and having read the review provided by Mark Ranes last issue, I would have to say Deliverance gets the edge here, too, if for no other reason than user-friendliness. ProSel can be a bear to use, and if you haven't been using it for years, you can get lost quickly. The nod goes to Deliverance here, too.

Deliverance's toughest competition seems to come from Econ's Universe Master. From what I've read and heard, Universe Master tries to do what the entire Salvation series (excluding Wings) does in one program, rather than four. Mark Ranes (apparently a very busy boy,) also reviewed Universe Master in GS+ V4.N2, and did some comparing between Universe Master, Deliverance, and ProSel 16. Even he gave the nod to Deliverance's block editor. Less clear is how the various repair routines stacked up, but I'll stick with Deliverance for the time being. [Editor's note: The rule of thumb for disk repair utilities is "The more you have, the better!" No one utility is going to be able to salvage all of your damaged disks. We use *all* of the aforementioned utilities here at the office and we still have the occasional disk that *none* of them can repair!]

Don't get the impression that everything will be a bed of rose petals, though. I do have a few gripes. The major one is that the current version of Deliverance is *over*

two years old! A new version has supposedly been in the works for some time. A little bird whispered in my ear that the big reason for the delay is that Vitesse had gotten none other than [a very famous Apple II person] to rework the entire Salvation series, but he was unable to complete the job because he has other irons (or should that be Avatars?) in the fire. According to Vitesse's president Jim Carson, they now have Steve McQueen (no, not the actor, the developer of The Desktop Enhancer) working on rewriting Deliverance. They hope to have the new version ready to go late this summer. This won't be a rewrite from line 10 of the code. It will be mainly bug fixes, better integration with Renaissance, and a couple of new features to make Deliverance work smoothly under System 6. This is part of a major rewriting project for the entire Salvation line, which started with a rewrite of Bakkup. Wings will also be seeing a major face-lift.

Deliverance still holds up well, but it's really begun showing its age since System 6 came out. Deliverance will currently only work with ProDOS disks, so forget fixing that Mac partition with Deliverance if it goes bad. Unfortunately, neither Deliverance nor any of the competing programs can currently fix an HFS disk, so maybe this is something to put on the wish list for the rewrite. Also, some people have reported that Deliverance will hang up and crash if it gets more errors than it can handle. I never have encountered this problem, so I can't say one way or the other. But if it happens to you, don't say you weren't warned.

Don't buy this program expecting it to work in every situation, because it can't. [Editor's Note: No program can. Again, I've found that it's best to try all of the available repair programs if just one doesn't seem to do the job.] It won't always pull all the data off the floppy that baked on your dashboard in August, or the disk you left sitting on top of your microwave. It's not Montgomery Scott, it's not a miracle worker. There are no absolutes when you're in a fix like this. But Deliverance will soften the blow when the day of reckoning arrives for your disks. Every person I know who owns this program (including me) has had it save their bacon at least once. Vitesse had a winner in Deliverance, but with the arrival of System 6 it's beginning to show its age. If the promised upgrade ever shows up, it should elevate Deliverance back to the forefront of programs of this type. If you don't already own it, I'd say to wait for the upgrade, then grab a copy with both hands. **GS+**

DreamGrafix

By Jason Anderson and Steven Chiang

Retail price: \$99.95

Typical mail-order price: \$60

Not copy-protected

Requires: 1.25MB RAM, System Software v5.0.2 or later

Recommended: Color monitor, System Software v5.0.4 or later, printer, extra memory

DreamWorld Software

P. O. Box 830

Iowa City, IA 52244-0830

(319) 338-6491

Reviewed by Robert A. Ribaric

Let's Design a Graphics Program!

If you were to design the ideal graphics program for your IIGS, what features would you include? For starters, I'd want it to support the standard desktop menus that I'm used to. I'd want just about every possible drawing tool imaginable, including a magnification feature. My program would have to be easy to use, as well as fast and efficient. It should be able to recognize any Apple IIGS graphics format so I can edit all my saved pictures. It'd be useless if I couldn't run it from my hard drive, so it can't be copy protected and I'd write it so I could modify it later. Oh, yeah—what about *color*? Let's say... 3200 colors! Is this about what you'd have in mind?

This Is DreamGrafix:

DreamGrafix is different from other graphics programs. It is claimed to be the only 16, 256, and 3200 color paint program for the IIGS. It is also one of the most comprehensive art packages I've ever seen. And, talk about adaptable—DreamGrafix can run on ROM 01 or ROM 03 machines, will utilize any extra memory, and can be operated by users with System Software as far back as v5.0.2. If you have v5.0.4 or later—great! You can use an ImageWriter II to print in 256 colors, but even if you don't have this color-supporting printer, it doesn't matter! This program can drive just about any printer, as it uses standard printer drivers and is even compatible with third-party drivers like Harmonie and Independence. I'll talk more about the amazing printing options later. You can even write add-on modules yourself if you want to expand its capabilities. I told you it was adaptable. As far as my opening paragraph goes—DreamGrafix can do all those things! Is this the ultimate paint program? Let's find out....

The Toolbox

Most computer owners have at least

played with some kind of drawing program. They all use a similar way of accepting the user's input. The format is to provide the artist with a blank screen and to offer different tools with which to draw. Well, this is exactly what DreamGrafix does. The difference is the number of available tools. This software package has so many different drawing tools that it can't show them all at once! It is necessary to scroll through the different tools until you find the one you need. Believe me—for any kind of mark you want to make on the screen, there will be an appropriate implement. There are pencils, brushes, and spray paints of many different sizes. If you want to draw a shape—you can do that, too. You can create any size of square, circle, rectangle, oval, rounded rectangle, or other polygon. You can also make arcs, lines, or freehand shapes. Oops! You say you made a mistake? Well, of course there is an eraser. Or, you can simply select the Undo feature to reverse the last thing you did. Why not use the magnifying glass to get a better look at what you're doing so you won't remove too much? This feature allows you to draw in it, as well. That way you can create a lot of detail. You'll be amazed after drawing for a while under any of the four different levels of magnification when you switch back to normal resolution. In addition to the aforementioned erasing function, there is also a "hand" you can use to just move whole graphics around. If you want to change the color of an object, the fill function will "pour paint" into it for you. You can also add text in whatever fonts, styles, and sizes your system has installed. You can also sort, edit, set, or cycle through any of the colors from the tool bar. Speaking of color....

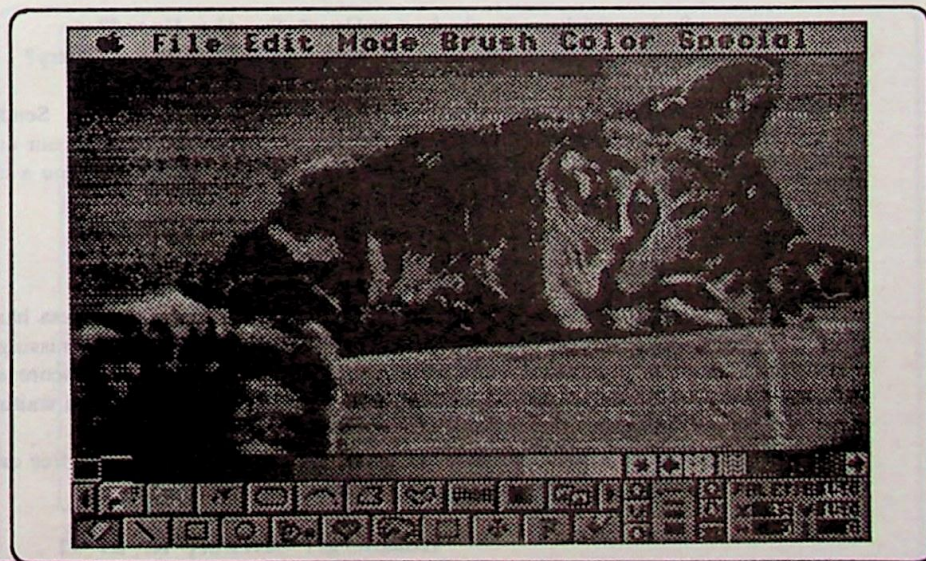
Did Somebody Say Color?

I believe that this program offers more

hues than the human eye can even distinguish (I've never seen a box of crayons with 3200 different colors.) Now, there is actually a trick to how this is accomplished. In 16-color mode, you can put any color anywhere on the screen. However, using 3200 colors makes it necessary to tweak things a little bit. The computer assigns each of the screen's vertical scan lines to any of 200 palettes. Each palette can contain 16 shades of color. You do the math. [200 scan lines x 16 different colors per line = up to 3,200 different colors. - Math Minor Diz] There is an intermediate mode that you might also consider. 256 colors can be used by dividing the picture into 16 sections. Again, 16 x 16 = 256. I didn't have the time to draw a picture with anywhere near the full complement of hues, but DreamGrafix comes with some examples that are simply awesome! Using 3200 mode was a bit tricky. Selecting and setting up that many palettes required a lot of patience. The problem was simply the huge number of colors, not the program. I'd reserve this mode for converting or scanning photos from other sources.

Printing

For me, this was the best part. I've seen several good paint programs, but good printing (especially in color) was always out of the question. The quality was simply not there. DreamGrafix makes it work. I spent some time one night drawing a scene (which is on your GS+ Disk). I was about to get a simple hardcopy when Steve suggested trying it in color. We installed a color ribbon in our ImageWriter II and gave it a go. I was amazed at the speed and accuracy of what I then saw. The printer cranked out a near duplicate of what I had on the screen! DreamWorld claims that using an ImageWriter v4.1 driver allows for use of



256 different printed colors. Again, I never used that many nor do I think I could even tell the difference. But, I'm sure there *are* people out there who would love to print in this many shades. Unfortunately, you can only print the 16 and 256 mode pictures in color—3200 color pictures must be printed in black and white.

Advanced Features

There are several interesting options that the accomplished computer artist might find useful. I can't go into them all, but suffice it to say there are many preferences that can be adjusted to the user's liking. You can define many of the tool, shape, and color options. One neat function is known as "slippery colors." Beginners can use this option in conjunction with the fill tool to change multiple adjacent objects' colors. Advanced users can adjust the dialog of the slippery color function to define how they want things filled.

DreamGrafix supports programmable external commands. These commands are stored in a folder on the disk with the DreamGrafix application and appear in the DreamGrafix tool palette along with other tools. You can then use these external commands just as you would any other DreamGrafix tool.

The manual, which is very good by the way, also includes several appendices describing things like graphics file

formats, using DreamGrafix with the Apple Video Overlay Card, and how to use external commands.

Do You Think I Liked It?

Before I start praising the creators of DreamGrafix, I must point out one problem I faced. When I first started working with the program, I was somewhat confused on how to set and adjust the color palettes. It was pitifully simple after Steve and I figured it out, but we found no help in the (otherwise excellent) documentation. I did find the appropriate screens through the menus, but couldn't seem to make my changes permanent. I think I was in the wrong mode, because I can hardly remember what my problem was. In fairness, it might have just been me, but the instructions should have prevented Steve and I from randomly changing things until we fixed the problem.

I need to say a little about how DreamGrafix compares to Beagle Brothers' Platinum Paint. They are both very high quality programs. DreamGrafix's advantage is its expandability and 3200 color mode. This program is a must for converting pictures from computers with a better graphics quality. Platinum Paint's documentation is a bit more fancy, but both programs adequately explain themselves. The main reason I prefer DreamGrafix over Platinum Paint is its ease of use. All of the tools are on the screen and easily accessible.

You don't have to search for them or memorize keystrokes. An updated version of Platinum Paint has attempted to correct this problem, however. They also included a "junior mode" for kids. I think they should have made the interfacing easier for us legal adults, too. Platinum Paint also has a few different tools, but it is really just a matter of personal preference as to which one you should buy. If you can try both before you pick one, do so!

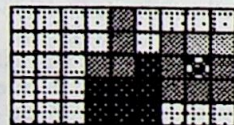
Okay, now that that's out of the way I can begin the compliments—starting with the user instruction manual. Even considering the palette discrepancy I mentioned earlier, the docs for DreamGrafix get a 10! The previous manual I was sentenced to plod through for another review was awful, so DreamWorld's offering was a pleasant surprise. It is sent in a binder, so you can add and remove sections. It could have used an index, but was well-written and well-organized. Enough said. Using the software itself was a pleasure, and there was nothing I wanted to do but couldn't. I also love the fact that the company offers to help with learning how to do more. They aren't just available to solve problems. I tip my hat to the authors and the professionalism of DreamWorld. Good tools, a zillion colors, readable documentation, and great printing. This is just quality. To get all this at an affordable price is indeed a *dream!* GS+

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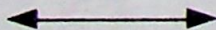
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The Manager

By BrainStorm Software

Retail price: \$69.95

Typical mail-order price: \$49

Not copy protected

Requires one 3.5-inch drive (hard disk recommended), at least 2MB RAM (more is better), and System Software v6.0

Seven Hills Software

2310 Oxford Rd

Tallahassee, FL 32304-3930

(904) 575-0566

Reviewed by Steven W. Disbrow

Been under a rock lately? Well, sit right down and I'll tell you about one of the hottest programs ever to come out for the IIGS: The Manager. Seven Hills Software bills The Manager as a "Multi-Finder" for the IIGS. That is to say, similar to the old Macintosh Multi-Finder, The Manager lets you run more than one application at a time, and switch between them at will! If you regularly use more than one IIGS desktop application, this can greatly increase your productivity.

But, Does it Work?

Actually, yes. It does work. And it seems to work very well! I personally have used The Manager to run AppleWorks GS, Font Reporter, Teach, WordWorks Pro, Personal Journal, Batt Reporter, My Word, GS-ShrinkIt, Universe Master, and the ORCA development environment. Not necessarily all at once, but they do all seem to run under The Manager, and I have run up to four at one time in various combinations.

How Does it Work?

The Manager is a combination INIT and application. The INIT portion is BrainStorm's Hierarchic menu system (which is also used in their other products, Kangaroo and TransProg III [see reviews in GS+ V4.N1 and V4.N3]). The application portion however, is where the real neat stuff is. To use The Manager, you simply run The Manager application file. This means that, if you want, you can start up into the Finder (or Autopilot, or ORCA, or ProSel, or whatever) and then run The Manager from there whenever you want. Or, if you want, you can use the SetStart control panel (or TransProg or Autopilot) to boot directly into The Manager when you start your IIGS.

After you get to The Manager, the first thing it does is start the Finder. From here you can launch your other

applications. (If you don't have a lot of RAM, The Manager also comes with a "Mini Launcher" that you can use in the place of the Finder to launch your other applications.)

For the most part, using The Manager is transparent, just like it should be. In the Finder, you simply launch your applications the way you always have. The screen flashes (annoying, but I'm told they are working on it) and the application opens just like it always has. The only difference is that you can still see the Finder's desktop underneath! To switch back to the Finder, all you have to do is click somewhere in the Finder's desktop. To get back to your application, all you have to do is click in a window that belongs to the application.

Of course, if the application doesn't have any open windows at the moment, it might be hard to get back to it. That's why The Manager provides you with a menu to pick one of the currently running applications from. This menu, which appears at the far left of the menu bar, also allows you to "hide" the current application (i.e. all of its windows disappear), and to change some other settings for the application that tell The Manager how to deal with it.

The Manager also adds three items to the Finder's Extras menu: "TM Application Setup," "TM Memory Map," and "TM Preferences." More about these in a moment.

All Together Now

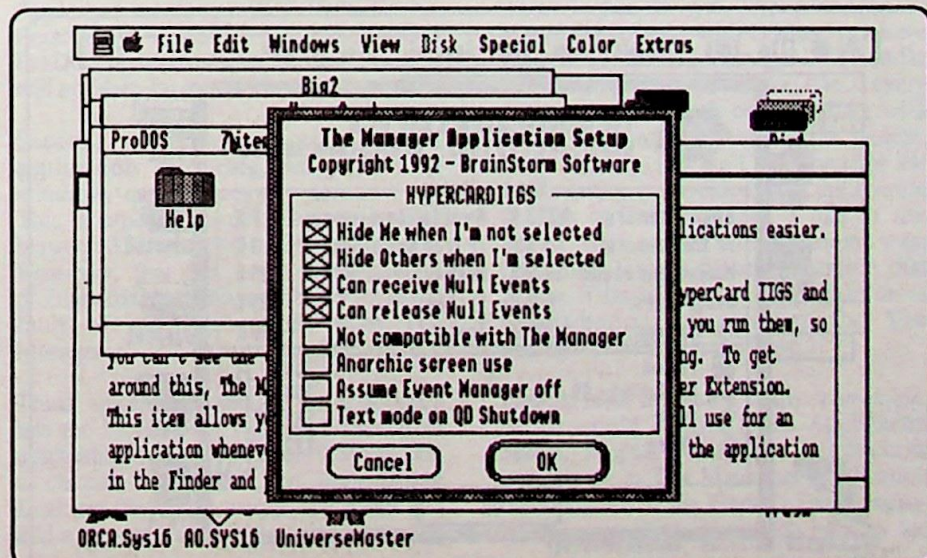
Now that we've briefly looked at all of the major pieces of The Manager, let's take a closer look at how they work.

As I said before, you can use The Manager just by booting into it and running your

applications as you always have. However, and this is very important, the IIGS was *never* meant to do this sort of thing, and, eventually, you are going to run into some applications that don't behave properly. More often, you'll run into applications that are "impolite" when run under The Manager because they never expected to be sharing the screen with anyone else. Fortunately, The Manager takes steps to work around the problems of some of the more common of these applications, but it can't automatically handle everything. So, The Manager provides some tools for you to use to make managing all these applications easier.

"A-hem!"

First, let's talk about "impolite" applications. Specifically, HyperCard IIGS and HyperStudio. These applications completely cover the screen when you run them, so you can't see the windows of any other applications you are running. To get around this, The Manager provides the "TM Application Setup" Finder Extension. This item allows you to set permanent options for an application that The Manager will use whenever you launch that application. To set these options, select the application's icon in the Finder and pick TM Application Setup from the Extras menu. Looking at the accompanying screen shot, you can see how I have the options for HyperCard IIGS set up on my system. The options that I have checked tell The Manager that when HyperCard IIGS is the current application, all other applications should be hidden, and when another application is the current application, HyperCard IIGS should be hidden. This keeps HyperCard IIGS from covering the desktop when you are trying to work with another application. Of course, since you won't be able to see HyperCard IIGS,



you'll have to pick it from The Manager's application menu to get back to it.

The other two options I have checked deal with "multi-tasking" under The Manager. We'll talk about these in a moment.

The only other application setup option I want to point out is "Not compatible with The Manager." If this option is checked, The Manager simply will not run the application. You'll have to quit The Manager first. This may sound bad, but if you find an application that isn't compatible and you *don't* set this option, you could accidentally run the application again and crash your system. If you think losing your work in *one* application is a bummer, wait till you lose it in *four* applications at once!

After you have several applications going, you'll probably want to know if you have enough memory to run another one. The Manager's second option in the Extras menu, "TM Memory Map," can help. Selecting this item presents you with a dialog showing the current state of memory usage in your system (see second screen shot). This dialog shows you the memory used by each currently open application, as well as the amounts used by various parts of the system. But, of all those statistics, the most important are "ZP Free Memory," and "ZP Max Block." These two statistics tell you how much *bank zero* memory is available. ("ZP" stands for "zero page," which is, technically, not what The Manager is reporting here. Seven Hills informs me that this will be changed to "BZ" in the first update of The Manager.) Bank zero memory is a special 64K area of memory that all applications need to work. As you launch more and more applications, they gobble up more and more bank zero memory (the System Software gobbles up

quite a bit too). When you run out, The Manager can't launch any more applications. So, while the dialog shows that I have 1817K free, if the next application I run asks for more bank zero memory than is shown by "ZP Max Block," it simply won't run. This restriction means that, depending on the amount of bank zero memory your particular applications use, you will probably find yourself limited to running about five applications (including the Finder) at once. (Note that if you don't run AppleWorks GS, which is a zero page hog, you should be able to run a couple of extra applications.) Unfortunately, this is a hardware limitation of the IIGS itself and there is no easy way for The Manager to get around it without giving up its ability to run multiple applications at the same time.

The Manager provides one other Finder Extra, "TM Preferences." This item brings up a dialog that, among other things, lets you decide if you want The Manager to start up with the Finder or the supplied Mini Launcher.

Other preferences you can set have to do with allowing "multi-tasking" (we'll talk about this soon, I promise!) and if you want The Manager to try and recover from system crashes. This last option tells The Manager to intercept any BRK instructions and allow you to save your work and shutdown the system gracefully. Much to my amazement, this also seems to work very well. On several occasions, I have had trouble getting AppleWorks GS to launch. On each occasion, The Manager informed me that a serious error had occurred, and warned me to save my work and restart the computer as soon as possible. Several times, I just kept working (not with AppleWorks GS though) and had no problems. One time I

even forgot that the system had "crashed" and went on working for another twenty minutes before I had to reboot to install a New Desk Accessory! Of course, The Manager's manual informs me that this sort of behavior after an error is the exception, rather than the rule, but it's still very, very, cool when it works.

In fact, error checking and reporting seems to be almost uniformly excellent throughout The Manager. The only problem I've had is that sometimes I'll launch an application, but it doesn't actually launch. Most times, I get a nice dialog informing me that "A memory allocation error occurred," but occasionally, I don't get a single clue. (Seven Hills informs me that this is usually the fault of an application that fails to check for memory allocation errors. The application can't get the memory it needs, but doesn't bother to check for this possibility. So it dies, and The Manager has no idea of what happened.)

The Application Menu

Before we talk about "multi-tasking" we need to talk about The Manager's application menu. This menu, which will be on the left end of the menu bar, is where you will find the names of the applications that you are currently running. You'll also find information on The Manager itself and five other items to help you manage all of your currently active applications. These five items are:

Hide Me. Selecting this item hides the current application, and makes the application "behind it" the current application.

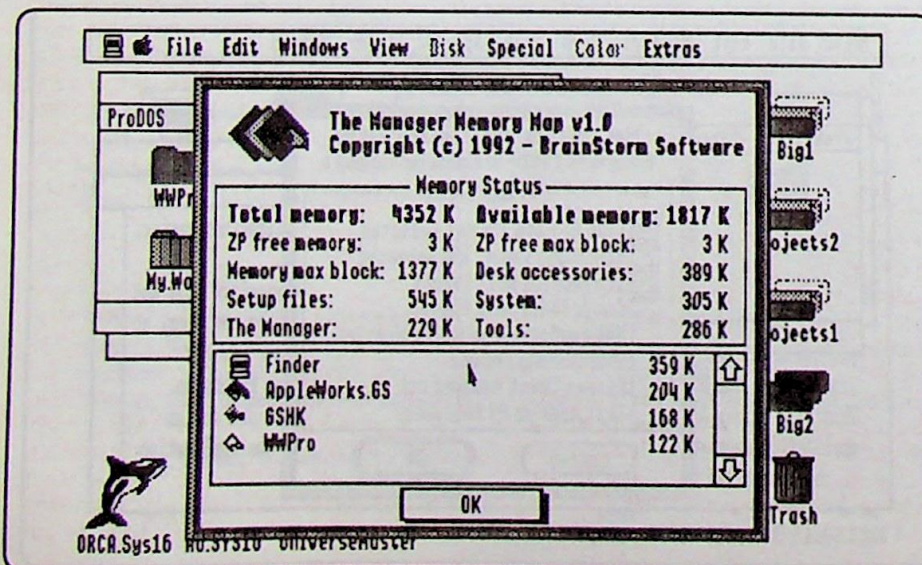
Hide Others. This item tells The Manager to hide all of the other currently active applications. This is a great way to quickly get rid of all those pesky Finder windows.

Show All. This item shows all the windows for all currently running applications. This is a great way to get those pesky Finder windows back quickly.

"Hide Me when I'm not selected" and "Hide Others when I'm selected." These items have exactly the same function as the items in The Manager's Application Setup dialog. However, you can use these items to override those settings.

"Multi-Tasking"

Here we go. It's what you've been waiting for... does The Manager let you multi-task? Really and truly? Well, yes and no. The Manager is set up to allow



applications to multi-task, and lots of them can be made to do it. But, here again, the applications we are talking about weren't written with this in mind, so the results, while impressive, might not be what you wanted.

The way The Manager multi-tasks is this: whenever a IIGS application is just sitting there "doing nothing" (i.e. it isn't doing complex calculations, and the human isn't typing keys or moving the mouse), the system is probably feeding it what are known as "Null Events." These events tell the application that, well, nothing is happening. So, if you have used the TM Application Setup dialog to tell The Manager that the current application "Can release Null Events," The Manager will trap these events and go through the list of currently running applications and see if any of them have been marked as "Can receive Null Events" in the TM Application Setup. (That's a real mind-full, so you should maybe read it again.) If an application can receive Null Events, The Manager will switch to it and allow it to do what it needs to do for that one Null Event. When the background application is finished, The Manager switches back to the current application. The next time a Null Event is generated, The Manager looks for the *next* application that can receive Null Events and sends it to it... and so on, and so on.

So, What's the Problem?

The problem is that, while all IIGS desktop applications will happily generate Null Events all day long, most of them are written so that when something to do comes along, they stop generating Null Events. And, when a Null Event comes along, they don't do anything at all! For example, when AppleWorks GS is just sitting there doing nothing, it will happily generate Null Events right up until you type a key or move the mouse. When that happens though, all of its attention becomes totally focused on following that mouse or figuring out what to do with that key stroke. When it finishes, it goes right back to doing absolutely nothing.

So, for applications to take real advantage of the type of multi-tasking that The Manager offers, they are going to have to be written, or updated, with it in mind. Fortunately, this is not a hard thing to do. Seven Hills provides some good instructions for programmers that want to have their programs take advantage of The Manger. (In fact, GSymbolix [see review in GS+ V4.N1] has already been updated to allow complex computations to be carried out in the background.) But, it will take time for new programs to appear,

and some older programs (like AppleWorks GS) will probably *never* be able to take full advantage of this feature.

Other Neat Stuff

I'm running out of space, and there's still lots to tell, so I'll just hit some more highlights and then get to a few—gasp—problems that I found.

The Manager seems to work great with non-desktop GS/OS applications. I've personally used it with the ORCA shell, and I've read online that it works great with ProSel. However, since you can't get to The Manager's application menu, you have to use a special keystroke (Command-control-tab) to get back to The Manager. (And, even though The Manager will run the ORCA shell, if you do a lot of programming, I wouldn't recommend taking the time of going through The Manager to get to ORCA. The Manager has a lot of overhead that could be better abused by ORCA.)

The documentation for The Manager is excellent. Believe it or not, there are a few bits of The Manager that this review hasn't covered. All of them are explained very clearly in the manual. In addition to the printed manual, there is a compatibility file on the disk that contains a frank discussion of programs that won't work with The Manager. Which brings us to my....

Problems

First and foremost, The Manager might not meet everyone's definition of a "IIGS Multi-Finder." The main reason is that it can't run ProDOS 8 applications (like AppleWorks Classic). At a speech at last year's KansasFest, an Apple employee stated that this capability was part of *his* definition, and the extreme difficulty of adding this feature was one of the reasons Apple had not done a IIGS Multi-Finder. Personally, I could care less about ProDOS 8 applications, so this is not a real problem for me.

Second, sometimes, after a lot of application switching, the colors of windows can get royally screwed up. This is especially true when you switch between 320- and 640-mode applications. However, this has never been a fatal problem for me and it's probably more the fault of the applications than The Manager.

Third, since The Manager never actually lets the Finder quit, when you launch an application from the Finder, it never gets a chance to update the appropriate Desktop file! This means that when you add a new application to your system and

run it, any rIcons or rBundle information inside the application won't be added to the Desktop file, and they won't show up in the Finder as you hop from application to application. However, when you quit The Manager (and therefore, quit the Finder) the Finder will update the Desktop files. This "delayed action icon updating" (for lack of a better term) is a minor problem, but very annoying.

Fourth, you shouldn't use The Manager to run more than one word processor at a time. If you do, the Font menu of the second word processor will clobber the font menu of the first. This isn't The Manager's fault, it's another symptom of the fact that the IIGS was never meant to run multiple applications. You see, almost all word processors use a single tool call to build their Font menus. This call builds an internal table that the IIGS Font Manger uses to convert the Font menu items into actual font numbers that it knows about. However, this table is based on a number that is supplied by the *application*. If another application comes along and rebuilds the table, using a different number, the first application will be unable to read the table correctly. The result is that you pick Times from the Font menu, and you get something else—usually something very, very ugly. (Last minute note: I've just learned from Seven Hills Software that this problem will *probably* be fixed in the next version of The Manager. They also told me that the incompatibility with our Cool Cursor program has been fixed in the next version of The Manager.)

Fifth, while Seven Hills has provided quite a bit of information on how programmers can take advantage of multi-tasking, they need to provide a bit more information about this topic. For example, just before we went to press, I learned that to get The Manager to peacefully co-exist with GSBug, you have to turn off The Manager's "Handle BREAKS" preference. If you don't, every time you try to break on something with GSBug, you end up crashing the system. Unfortunately, this isn't mentioned in the documentation provided with the current version of The Manager, I had to ask Seven Hills what the problem was. (Which is a great place to mention that Seven Hills *does* plan to include more programming information for The Manager with the next release.)

Finally, and this isn't really a *problem*, but, it would be nice if the Application Setup, Memory Map and Preferences items were in The Managers Application menu instead of the Finder's Extras menu. As it is, you have to switch back to the

Finder before you can use any of these items. If they were in the application menu, you would be able to reach them from any application, which would be much more convenient.

A Comparison?

With Switch-It from Procyon? Well, I had planned to do just that, but we didn't receive our review copy of Switch-It in time for this issue. Hopefully, we can have a full comparison soon.

Should You Hire The Manager?

Well, if you hate desktop applications or

are hooked on AppleWorks Classic, probably not. It just won't do that much for you.

If you are a programmer that spends most of your time in the ORCA shell, I can recommend The Manager as something you should get simply to ensure that your new products are compatible. (But don't forget to pester Seven Hills for the extra programming information!)

If you are a "normal" user, and you don't have a hard disk or scads of RAM, my advice is to buy a hard disk, and scads of

RAM and then think seriously about The Manager.

If you already have a hard disk, scads of RAM, and you want a way to make your IIGS even more powerful, I highly recommend The Manager.

Whoever you are, if you buy The Manager, just be sure that you understand that not *everything* you have is going to be compatible and that you *will* have some crashes. After all, The Manager is doing something that the IIGS was never meant to do. **GS+**

The Passport House Letter

Subscription: \$24/year (12 issues)

Published by:
Passport House
P. O. Box 145
Miles City, MT 59301-0145

Reviewed by Steven W. Disbrow

Usually, we don't review other publications. One reason for this is that until recently, there haven't *been* any new Apple II publications. However, this has changed recently, with at least three new publications targeted at the Apple II (although *Fishhead's Children* is only slightly Apple II oriented). In this review, I'll take a look at the first of these publications to hit the scene: *The Passport House Letter*.

After reading descriptions of *The Passport House Letter*, I was expecting something quite a bit like *A2-Central*. What I got however, was quite a bit different. First of all, *The Passport House Letter* is bigger, 12 pages an issue versus 8 for *A2-Central*. And, so far at least, there have been very few letters published in *The Passport House Letter*.

The focus of *The Passport House Letter* is the entire Apple II family. But in the issues I've seen, the majority of the material has been IIGS oriented. Of course, this is probably OK with all of you out there in **GS+** Land.

Each issue of *The Passport House Letter* has product reviews (they call them "Test Drives"), news about new and updated products, technical articles, and, usually, an interview with an Apple II personality.

The reviews are quite good. However, they do suffer a bit from the fact that they have to fit in such a small page count. Still, for all that, they are very complete and are often accompanied by a separate article explaining some background

material for the product. (For example, the Pointless review was accompanied by an article on outline fonts and how they differ from bit-mapped fonts.)

A regular section, called "Maximum Overdrive," features tips and techniques for pushing your Apple II to its limits. In the three issues I've seen, this column has twice been used to focus on how to improve your system through software (i.e. using Kangaroo to speed up the use of Standard File dialogs), which end up reading like another review with the focus on how to actually use the product. However the first issue had a quite-good article on adding RAM to your Apple II and why you want to do it. It explained the difference between how the IIGS and other Apple II's use RAM as well as touching on such topics as RAM disks, DMA, and RAM cache.

As some of our long-time readers know, we used to publish interviews here in **GS+** Magazine. I quite liked them myself—they were easy to edit, took up *lots* of space that would otherwise be filled with my ramblings, and they were good public relations for the individuals we interviewed. However, your feedback showed (and still shows) that you hated them. So we dropped them. As I said, I like them, but I don't know how well they will go over in a publication of this small size, especially when those pages could be used for more reviews or tutorials.

The remainder of *The Passport House Letter* is made up of editorials, letters, etc. Exactly what you expect from any publication.

The one thing that does bother me about *The Passport House Letter* is that its creators (with the exception of Eran Paige), seem reluctant to tell the world who they are. Except for Eran's editorial in each issue, none of the reviews or articles contain any author information. Come on folks, let the people know who

you are so you can take the credit you deserve!

All in all, I think *The Passport House Letter* is a pretty darn good publication. The small page count versus cost worries me, but I know better than anyone else how difficult it is to fill even *one* page with quality material. *The Passport House Letter* does a pretty good job of filling its twelve. **GS+**

Professor G. S. Gumby's Top Ten Rumors of All Time Number 8 - From **GS+** V1N2, November-December 1989

Where No Hard Drive Has Gone Before

Applied Engineering, maker of the Vulcan hard drive, has just announced two new additions to its family of internal hard drives. The new models, named the Klingon and Romulan, offer an incredible number of features and absolutely **unbelievable** amounts of storage (5 and 10 gigabytes respectively). The top of the line Romulan drive automatically senses such things as earthquakes, dust, cat hairs, leveraged buy-outs, and other data-threatening situations. When the drive notices these things, it automatically makes a backup and then parks the heads over a special, data-free area which Applied Engineering calls the Romulan's "Neutral Zone." The controller cards for both the Klingon and the Romulan have a special "Cloaking Device" that will detect the presence of a virus and then make your application programs invisible to it. Unreal! The price? According to an AE spokesman, "If you have to ask, you can't afford it."

The Lost Tribe

Programmed by Frank Andrews

Retail price: \$49.95

Typical mail-order price: \$29.95

Not copy-protected

Requires 1MB RAM and one 3.5-inch drive (two drives or a hard drive and 2MB of RAM are recommended)

Distributed by:

Davidson & Associates Inc.

P.O. Box 2961

Torrance, CA 90509

(800) 556-6141 Tech Support

Reviewed by Greg Zimmerman

"Anyone can hold the helm when the sea is calm!" - Publilius Syrus, Moral Sayings (1st century B.C.)

The Lost Tribe is a new game for the Apple IIGS from Lawrence Productions Inc., the makers of the McGee series of Apple IIGS products. The Lost Tribe is targeted at an older audience, ages eight to adult, and is intended to promote the development of leadership and decision-making skills in a game environment.

The Details

The Lost Tribe comes on three 800K disks that are not copy-protected. The Lost Tribe was originally developed for IBM compatible and Macintosh computers, so the manual is directed at those users, though most of it does apply to the Apple IIGS as well. However, the package also contains an Apple IIGS Supplement which explains the operation of the program on the Apple IIGS, and one of the disks also contains a **Read.Me** file giving even more detailed information concerning the operation of the program on the Apple IIGS.

The Lost Tribe is compatible with both ROM versions of the IIGS. Because the Lost Tribe makes extensive use of photographs, digitized music and sound effects, and cartoon animation, it is much faster and easier to run it from a hard drive using at least 2MB of memory. But the programmer took great care in insuring that it can be played from just one 3.5-inch 800K disk drive on an Apple IIGS with only 1MB of memory. Extensive instructions and suggestions are included both in the Apple IIGS manual supplement and the **Read.Me** file on disk to make it easier and faster for users with minimum equipment to run the program with the least amount of disk swapping and in the fastest possible way.

The Lost Tribe was created by Lawrence Productions, but it is marketed for them

by Davidson & Associates. Both companies have toll-free numbers and my experience calling both companies has been excellent.

What Does it Do?

The Lost Tribe is a strategy game set in prehistoric times. You are the leader of a tribe of people that has always lived at the bottom of a volcano. Of course, when the volcano gets ready to do its thing, it's time to go. The goal is to lead your tribe back to its ancestral homeland, which legend says is a lush, rich paradise near a mountain of fire. The story line is sort of the ancient equivalent of the flight from Subic Bay to Pearl Harbor.

There are six different game scenarios you can choose from as you search for your personal Eden, each with differing challenges and strategies. Of course, a lot of strange things happen along the way.

As the leader of the tribe, you have to consider many things each day in deciding which direction to head. Decisions are made by clicking on tablets or rocks with carved figures representing the various choices. Displayed at all times is such important information as how long you have before the weather gets too bad to continue, how much food you have left, how many tribal members remain alive, and other information which relates to the well-being of the tribe and its ability to continue the trip.

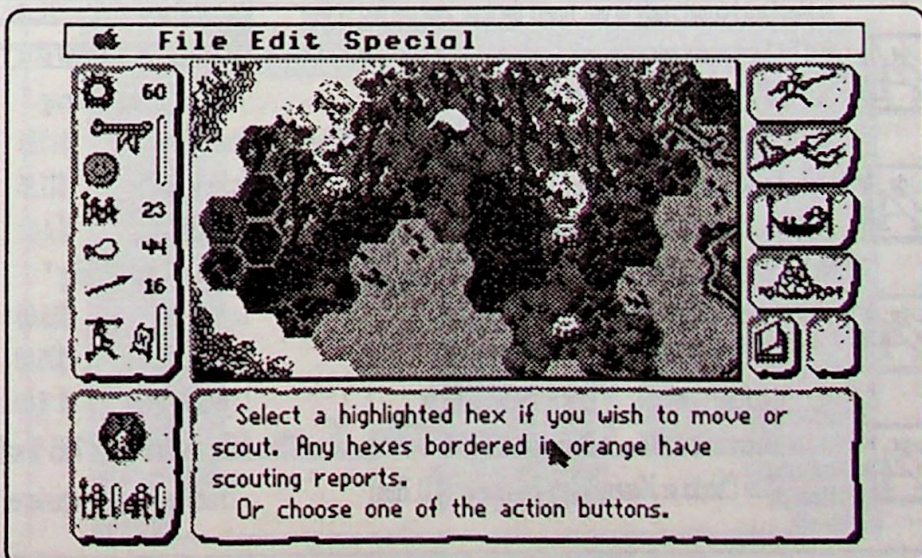
The centerpiece of the game is a map in the middle of the screen showing your current location and giving you choices about adjoining areas into which you can travel. You can rush into new areas, proceed with caution, or even send out scouts to check things out before proceeding. Each new area you enter has distinctive features, such as good hunting,

dangerous mountains, and other natural and un-natural features. Travel can take you through areas with diverse geographic features, such as forests, lakes, mountains, and plains, each with its own distinctive challenges for your tribe and for your leadership. With each step of the way, you have to make decisions that effect the well being of the tribe and its ability to continue the journey.

By way of example, consider the complications of feeding the tribe. Do you need to look for food? Is the area you are in a good one for hunting? How many of your tribe will hunt and how many will gather berries and other edibles? Do you need to take the time to make more spears? Do your tribal members need target practice? What kind of animal will you hunt and which animals are most easily hunted in the area you are in? How much will you eat each day? How much food will you carry with you when you move to the next area of the map? Is the area you are moving into good or bad for hunting? Should you give out full rations, partial rations, or none at all? If morale is getting low (that means people are not really happy with you), is a feast (the tribal equivalent of a pork barrel project) in order? This is just a sampling of decisions required on one issue.

Also during your travels, random events occur which test your leadership by requiring that you make decisions. For instance, people get sick, or one of your tribal members does something strange. In each instance you have to consider the current circumstance of the tribe and choose from among several decisions to act in the best interest of the tribe. The choices are not always easy.

If you aren't doing a good job leading the group, you get the boot. However, if the



tribe makes it to its ancient homeland under your leadership, you get a score which is based on the condition of the tribe upon arrival, the time it took, your leadership score (is everybody happy?) and other similar items.

To help you make decisions along the way, the program includes an extensive on-line illustrated guide covering almost anything you'd ever want to know about the Lost Tribe. If you aren't sure which animal is best to hunt in the area you are in, you can consult the on-line guide. If you need more information about a character's personality in order to make a decision during one of the random events, the on-line guide has the information. As the game gets more difficult, the on-line guide becomes more important, though it is not necessary to use it to reach your goal.

Did I Like It?

The Lost Tribe has a lot to offer for the target age group. It uses a lot of color, animation, graphics and sound, and while it is not a fast-moving, shoot-'em-up action game, it is a fun and educational way to help develop decision-making and leadership skills.

The Lost Tribe in many ways resembles the venerable Oregon Trail program marketed by MECC. The types of decision-making skills that are required to successfully complete the program are the same, and the pace of the game is the same. However, The Lost Tribe is a much richer program for the Apple IIGS in its use of the sound, graphics, and animation capabilities of the computer. It also has added requirements and challenges incorporated in the game scenarios to help develop leadership skills, and has an interface which I think will more appeal to the target audience... once they get used to it.

The interface for The Lost Tribe is not exactly one wherein all your choices in the game are made from pull-down menus. It takes a little bit of experimentation (and manual reading) to decipher the carvings on the various stones where you make your choices, or to understand the symbols showing the status of the tribe. However, once you figure out what everything is, the interface is very easy to use.

The varying challenges of the six different game scenarios are enough to keep a user's

interest level up for many hours. My kids tried out this program for me over several days, and even though they completed a particular scenario, they would come back to it and do it again, trying to get a better score.

My Conclusion

I must be a sucker for a new, colorful, educational game release for the Apple IIGS. I liked The Lost Tribe from the moment I got it running. The combination of the "ancient" interface, combined with the extensive use of photos, sounds, and graphics, make this program easy to enjoy. The goal of the program, to help the user learn to make leadership choices and develop good decision-making skills, is achieved in a way that keeps the interest level high. And of course, the final (and the most important) test, "Did my kids like it?", was passed with flying colors.

This is a high quality program, and I can only hope that Lawrence Productions keeps the Apple IIGS in mind as it continues to develop new software. **GS+**

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DuelTris

Programmed by Steven Chiang
Graphics by David Seah
Music by James Brookes

Shareware price: \$15.00/\$20.00
Download time (at 2,400 BAUD): About 30 minutes

Requires one 3.5-inch disk drive, 1.25MB RAM, and System Software v5.0 or greater.

DreamWorld Software
P. O. Box 830
Iowa City, IA 52244-0830
(319) 338-6491

Reviewed by Raymond A. Ribaric

"Not another Tetris clone! Doesn't anybody have an *original* game idea?"

Those were the thoughts that entered my mind when I first saw this game. Statements like this are becoming all too common when the subject of shareware games comes up. It happens like this: a programmer takes a popular game, adds some high powered graphics and sound, and throws in a new feature or two for "originality." The result is sent out into the world on the assumption that impressive graphics and sound can substitute for creativity and hard work put into the design of the game itself. This is a false assumption.

Humans can become quickly jaded by even the most dazzling graphics and sound. Only game play, and the design thereof, can make a game a favorite for long. Does this mean that spinoffs have no place in the game world? Of course not. But they must offer original concepts in the game, not on the screen.

I Need an Anvil!

DuelTris' additions to Tetris come in the form of six special symbols on some of the pieces and a two-player mode. The special symbols work like this: when the line of blocks containing the symbol is completed, the symbol is activated. They can: invert the other player's controls (right moves left and left moves right), create a gun that destroys blocks, create a gun that *deposits* blocks, remove four lines above the piece, create a bomb that destroys a small area of blocks, or (my favorite) create an anvil that falls to the bottom, destroying a large section of blocks. The result is sort of a cross between Tetris and Arkanoid. In two player mode with DuellINK activated, when one player completes two or more lines at once, an equal number of random lines will slide across to the other player,

bumping up his current lines correspondingly, and possibly provoking obscenities from said other player. Either the special pieces or DuellINK can be turned off; turning off both of them results in a "plain vanilla" Tetris game.

You Inverted Me, You %@&#\$!!!

With all this, the one-player game is still rather boring. But it is the two-player version that is DuelTris' strong suit. The interaction in DuelTris is a strange "unintentional" conflict. You may inflict two flavors of grief upon your opponent: inverting his controls, and passing him lines in DuellINK mode. While it is you doing this, you really have no choice. The features are activated by completing lines, and after all, that's how you play the game. This tends to produce a series of (hopefully) light-hearted insults going back and forth.

Bells and Whistles

DuelTris comes with a full complement of "bells and whistles." Virtually every aspect of the game can be toggled on or off, and there are various difficulty levels. The accompanying music is excellent, but after many repetitions its frenetic beat may grate on the nerves of players and bystanders alike. There is an occasional semi-coherent shout of "areyouready!" (I think) that often accompanies a speeding up of the game. There is an interesting option by which you can use DreamGrafix (also by DreamWorld, see review in this issue) to create custom "tilesets" that change the color and pattern of the pieces. A sample tileset is included with DuelTris for you to experiment with. This is a cute option, but I can't see people collecting libraries of tilesets like they would clip-art. (But maybe I'm wrong about that.)

About the only real problem I found with DuelTris is that if you are in a two-player

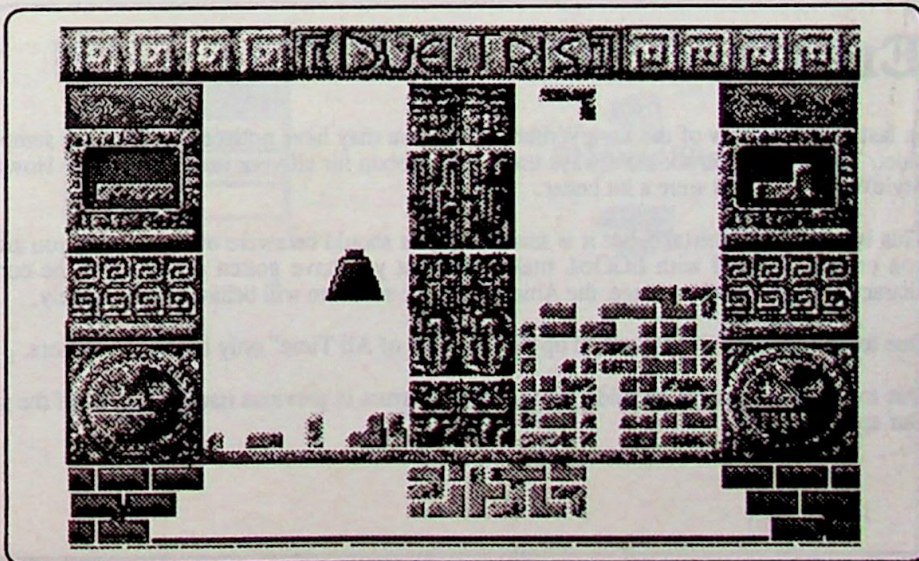
game, with the option to continue after one player "dies," the difficulty level never increases again for the surviving player. This means that you can play and play and play, until you make a stupid mistake, or until your mind turns to lime Jello.®

Did I Do That?

DuelTris is distributed as shareware, and for shareware it is very polished and professional. (One neat little thing I noticed is that the corners of the DuelTris desktop are rounded, just like on the Macintosh screen.) The registration fee is \$15.00, which gets you the program with the save preferences and high score table enabled. Twenty dollars will get you the same version in an attractive little compact disc style plastic box, along with a tiny printed manual. Worth an extra \$5.00? Maybe. One thing to note: the version that you download does not fully implement all the options, including the custom tileset feature. Another incentive to register your copy.

AREYOUREADY!?!?!?

Will you like this game? That depends. If you never liked Tetris to begin with, DuelTris is not likely to interest you either. If you used to like Tetris, but got "burnt out" on it, and have a friend or two to play against, this should be entertaining, at least for a while. Long-term playability will depend on your taste in games. Fortunately, DuelTris is shareware, so you can try it out, and register it only if you like playing it, and this is what I recommend you do. GS+



Rainbow v1.0.1

By Josef W. Wankerl

The Rainbow program, which was introduced in GS+ V4.N3, was a pretty big success. Unfortunately, most people called in to complain of one nasty bug: selecting black or white from the Finder's Color menu didn't turn off Rainbow's remembering the color for a device icon. This was actually the way the program was supposed to work—it remembered the black or white color for the icon, and the next time the Finder was launched, all the black and white icons were colored even though no changes were visible. Version 1.0.1 handles the black and white colors differently. When you color a device icon black or white, Rainbow forgets that the device has been colored.

As you may remember from last time, or for those of you who didn't receive the last issue, I've always been a bit annoyed that the Finder will save icon placement on the desktop and window positions (in those *infernal* Finder.Data files—which I call "Finder droppings"), but it refuses to remember the color for my devices and the trash can. To put an end to this (and a whole lot more!), I give you... Rainbow.

Installing Rainbow

To install the Rainbow Finder extension, refer to "How to Use Your GS+ Disk" in this issue. Rainbow can only be used with System 6, although it will not hurt anything to install it on previous system disks.

At First Glance

OK, now that you already know that Rainbow will remember the colors of your devices and the trash can icon, you might as well try it, right? Let's color the trash

can orange. First, select the trash can by clicking on it, then choose the orange color from the Finder's Color menu. Your trash can will then turn a pretty shade of orange. Now launch an application to quit the Finder, then quit to come back into the Finder. During the Finder's startup sequence, you'll notice that the trash can will be selected and then change back to the nice orange color that you selected before. Pretty neat, huh? Well, wait, there's more!

Rainbow Connection

Has this ever happened to you: you're in the Finder with your *:System window open, you're going to copy a file from a folder called System from another disk, and you become confused as to which window is which? Well, lament no more!

In addition to simply remembering the color of device and trash can icons, Rainbow will set the window title bar color to the same color as the volume icon it belongs to! To try it out, open the trash can. Notice how the title of the trash window is orange? Try something else now: color your boot drive icon green. If you're like me and you use the standard icons that come with System 6, the color of the boot drive icon won't change color since the icon is defined as a "color" icon. However, the Finder still thinks that the icon is green, it just doesn't draw it that way. Now open your boot drive. See that the title of the window is green? Now get information on your boot drive. The title of the information window will be green too!

It's Not Easy Being Green

Let's say that you don't particularly like

your boot drive icon being green. Why not change it to something more appealing... say red? Just select your boot drive icon and choose the red color from the Finder's Color menu. Rainbow will then update all your open windows that belong to your boot drive to appear with the red color.

I Want My Old Color Back

You can tell Rainbow to forget the color for a device by selecting the device and picking either white or black from the Finder's Color menu. Now how much will you pay? Don't answer yet! Just wait to see what else you get as a free bonus gift!

Modfler Mania

When Rainbow is installed, you can instantly close all the windows relating to a particular volume. All you have to do is have a directory window for the volume in the front (not an information window) and select the Close menu item from the Finder's File menu while holding down the shift key. You can also press Command-shift-W to close all the windows relating to a particular volume. You cannot, however, hold the shift key down and click in the close box of a directory window. This is because the Finder doesn't notify Finder extensions of this situation like it does when the actual menu item is selected.

End of the Rainbow

I hope you discover Rainbow to be a pot of gold as I have. If you have any problems with Rainbow, please be sure to fill out and send in a Problem Form so that I can fix them. GS+

Errata

In last issue's review of the StyleWriter printer, you may have noticed that the print samples for the ImageWriter were a bit on the light side. This is why you should always use a fresh ribbon for all your important work. However, it wouldn't have changed the fact that the StyleWriter printouts were a lot better.

This is not really a mistake, but it is something you should be aware of anyway. If you are using America Online to send a message that you originally typed with EGOed, make sure that you have gotten rid of all of the curly quotes (""). If you attempt to send these characters in an e-mail message, the America Online software will behave very strangely.

Due to an oversight, this issue's "Top Ten Rumors of All Time" only includes 5 rumors.

Due to another oversight, we didn't make enough errors in previous issues to fill all of the space allocated for this issue's "Errata" column. Our apologies. GS+

NoDOS v1.8

By Josef W. Wankerl

NoDOS is a new desk accessory (NDA) which provides the ability to delete, rename, move, validate, and get/set file information for GS/OS files. NoDOS v1.0, written by Steven W. Disbrow, first appeared in V1.N1 of *GS+ Magazine*. It was a great utility—I used it all the time—but it had some drawbacks. Namely, it was a modal dialog and it used ProDOS 16 calls instead of GS/OS calls. So, I fixed it up. These new versions fixed these problems and added a bit more functionality—like being able to move files and being AppleShare aware. The origin of the NoDOS name is rather obscure, so if you want the complete story, check out *GS+ Magazine* V1.N1.

NoDOS is also the program I use to test all of the new library routines that I write. So, whenever a new version of the Miscellaneous Library is released, a new version of NoDOS is right on its heels. So, NoDOS version 1.8 is now here. Basically, the only changes from the last version (version 1.7.1 in *GS+ V3.N4*) are that the calls to the old OS Library were converted into their new Miscellaneous Library counterparts (see “Miscellaneous Library” in this issue). Additionally, a new button has been added to NoDOS to allow it to validate files.

Installing NoDOS

To install NoDOS, 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 NoDOS, you must reboot for it to be available. NoDOS requires System 6 or later.

Using NoDOS

Once you have NoDOS properly installed, you can select it from the Apple menu that is available in most desktop programs. A tidy little window will then appear on your desktop with five buttons: Delete, Rename, Info, Validate, and About. To select a file utility, simply click on the appropriate button with the mouse. Each function will repeat until you click on the Standard File cancel button. Each button also has a key equivalence. If you want to Delete files, press D. If you want to Rename files, press R. If you want to get/set Info on files, press I. If you want to Validate files, press V. If you want to see the about dialog, press A.

Prefixes

NoDOS follows our proposed standard for saving prefixes (see “*EGOed v1.33*” in

GS+ Magazine V2.N4). What this means is that NoDOS remembers the folder you were in the last time you used NoDOS and goes there the next time you use it. When you are finished with a NoDOS function, NoDOS restores the current prefix to where it was before you used NoDOS. This makes it a bit easier for you to use your host application because the folder you are using with your host application is almost always different from the folder you want your NDAs to play with. If, for some reason, you don't want NoDOS to use its saved folder when you invoke a NoDOS function, simply hold down the option key when you select that function. When you finally cancel the NoDOS function, you can also hold down the option key to keep NoDOS from saving the current directory (i.e. NoDOS won't remember where it was).

Selecting Files

When you select an option from the NoDOS window, you will be presented with a Standard File dialog to choose files from. Since NoDOS uses the Standard File tools, you navigate through your disks and select files just as you would with any other Standard File dialog.

To select a single file, simply click on it.

To select a group of files, click on the first file, hold down the shift key and then click on the last file in the group. All of the files in-between the first and last file will also be selected.

To select specific files (i.e. files that may or may not be grouped together), hold down the Command key (also known as the Apple or Open-Apple key) as you

select your files. As long as you hold down the Command key, each file you click on will be selected.

Once you have all of your files selected, click on the Accept or Delete button.

Delete

The Delete option lets you select multiple files and folders to delete. It also allows you three levels of prompting: prompt on locked files, prompt on all files, and no prompting. (The default is to prompt on all files.) If you select a folder to delete, everything within that folder is also deleted—so be careful!!

Rename

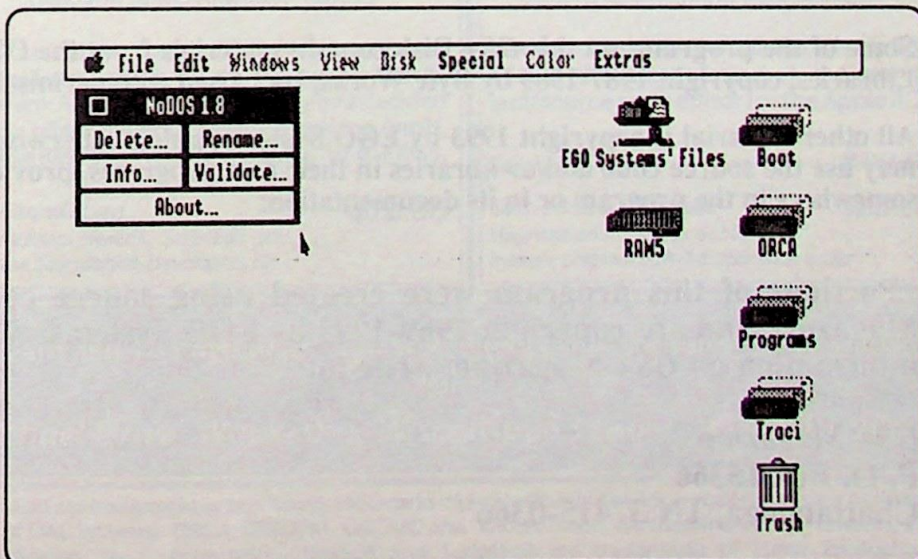
NoDOS lets you select multiple files and folders to rename and/or move. Simply select the files you want to rename or move and a Standard File dialog box will appear letting you either type in a new name for the file, select a new directory for the file, or doing both renaming and moving. Note that you can only move a file to a different location on the same disk. NoDOS cannot move a file to a different disk.

Validate

NoDOS lets you validate files just like the Finder. When you select files and folders to validate, NoDOS reads each file to see if any errors occur. If no errors occur, NoDOS will ask you for more files to validate. If an error occurs, you'll be notified with a dialog telling you the name of the file the error occurred on.

Info

NoDOS lets you select multiple files and folders to get/set info on. Simply select



the files you want to get/set info on and a dialog will appear showing you information on the files you selected, one at a time. You are allowed to change the file type, auxiliary type, and access switches for the file.

There are key equivalents for each of the file access switch check boxes. They are all Command key combinations because, if they weren't, they would conflict with some hexadecimal digits (namely D and B). To toggle the Delete box, press Command-D. The Rename box is Command-N (for Name). The Backup box is Command-B. To toggle the Read and Write boxes, press Command-R and Command-W respectively. To toggle the Invisible box, press Command-I.

The file type is displayed as a three-character abbreviation. (NoDOS knows the three-character abbreviations for 96 types of files. For a complete list of the file types that NoDOS knows, see "What NoDOS Knows" in the NoDOS.Docs file on your GS+ Disk.) If the type is not known, it is displayed in hexadecimal. Also, if you would rather always see the actual hexadecimal file type number, you can hold down the shift key when you confirm the files to get/set info on and also when you cancel or confirm the info dialog box to move on to the next file. If you try to change the file type to a new three-character abbreviation that NoDOS does not know, the type will actually be changed to zero. Additionally, you can change both the file type and auxiliary

type of a file by typing a hexadecimal number (preceded with a \$) or a decimal number. To make the changes permanent, click on the Okay button. To discard any changes, click on the Cancel button.

I've found NoDOS to be an invaluable aid. I can go for weeks without using it, but then there is always an occasion that pops up where I am grateful that it's still in my desk accessory folder. I hope you will get some good mileage out of NoDOS, too. If you find any bugs, be sure to fill out the problem form supplied on the GS+ Disk and send it in to help me figure out what's going on. GS+

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```
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```

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```
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```

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GS+ Back Issue Information

Sep-Oct 1989 (V1.N1)

- 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, Silphed, 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

Jul-Aug 1990 (V1.N6)

- Only 7 left—Call first for availability!
- KansasFest Report
- Beginner's Guide to System Disks - Part 2
- Transfusion - An NDA telecommunications program (ORCA/C)
- Reviews: AMR AS800K 3.5-inch drive, Salvation—Exorciser, Disk Access, MD-BASIC, Katie's Farm, Task Force, BLOCKOUT, OMEGA, 2088: The Cryllan Mission, Hunt for Red October, Revolution '76, Where in the U.S.A. is Carmen Sandiego?

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 (ORCA/M)
- 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

Issues not listed are sold out. Prices for back issues are: magazine only - \$4.50, disk only - \$6.50, magazine + disk - \$9.50. All prices include postage and handling (orders will be sent First-Class to the U.S., Air Mail to Canada and Mexico, and surface to all other countries. For Air Mail to all other countries, add an additional \$3.50 per issue). Tennessee residents add 7.75% sales tax. Mail back issue requests to: GS+ Back Issues, c/o EGO Systems, PO Box 15366, Chattanooga, TN, 37415-0366; or call 1-800-662-3634, Monday through Friday between 9 a.m. and 6 p.m. Eastern Time, to order or verify availability. Please include your phone number on all orders placed by mail (in case we are sold out of an issue)! For MasterCard or VISA orders placed by mail, also include your card number, expiration date, and signature.

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 (ORCA/M, ORCA/C)
- Replicator - A desktop-based disk duplication program that works with any GS/OS device and file system (ORCA/Pascal, ORCA/C, ORCA/M)
- 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

May-Jun 1992 (V3.N5)

- TrueType on a LaserWriter
- Using Archiver
- Writing Phantasm Screen Blankers
- Working with the Toolbox - Intermission: System 6 Updates
- Whoosh - A Control Panel that turns off the System 6 whooshing rectangles (ORCA/M). Requires System 6.
- Rebuild Desktop - A Finder Extension that will rebuild the invisible desktop file under System 6 (ORCA/C). Requires System 6.
- GS+ program updates: Shuffle v2.0, Cool Cursor v1.0.1, EGOed v1.6 (requires System 6), Replicator v1.2
- Reviews: Pegasus Internal Hard Drive, Express, Formulate, Second Chance v2.0 & X2, Shoebox
- PLUS - Casual 6

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 (ORCA/M). Requires System 6.
- Miscellaneous Library - A collection of useful routines to use from any programming language that supports linking to standard libraries (ORCA/M)
- GS+ program updates (all 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

Miscellaneous Library

By Josef W. Wankerl

[Editor's Note: The Miscellaneous Library is not a stand-alone program! It is a programming tool that we think advanced readers of *GS+* Magazine will find very useful. It is intended for those doing advanced IIGS programming. The information provided here is an overview of what's new in the Miscellaneous Library and does not provide complete documentation for all of its calls—if you plan to use the Miscellaneous Library, read the *MiscLib.Docs* file (which is on your *GS+* Disk) for complete information!]

The Miscellaneous Library (*MiscLib*) is a collection of various routines I have found myself using over and over. They can be used from any language that supports linking to standard libraries, such as ORCA/C and ORCA/Pascal. For detailed assembly language stack diagrams on how to make the calls, and for a short description of the parameters, see the figures in the *MiscLib.Docs* file. (This file is located in the *GSP.V4.N4.SEA* self-extracting archive that is on your *GS+* Disk.)

About

To get the easy stuff out of the way first, I've finally written the code that will calculate application, desk accessory, system, and setup file memory usage for the *About* window routines. Now your *about* windows will look almost exactly like the *Finder's*. I did run into a snag or two while coding the calculation routines, and I disassembled the *Finder's* memory calculation code to see how the *Finder* worked in this respect. The most distressing thing I found was in the calculation of the system memory usage. For some strange reason, after all the system memory calculation is done, \$15000 bytes of extra memory are automatically added in. I don't know why this is. But, in order to make the system memory calculations correct by the *Finder's* standard, I add in those mystery bytes, too. Figure 1 contains the memory IDs for handles and what they are allocated for, in case you're curious.

If you have previously been using the *About* routines, you'll be interested in the new *AboutMemory* call. Since all the handles in the system have to be examined to determine whether memory usage has changed or not, the *MemoryRedraw* call now only checks for a memory change once every five seconds. To force a memory recalculation, make the *AboutMemory*

call. The *AboutMemory* call should be made before a new *About* window is created so that the first displayed memory calculations will be correct.

The final change in the *About* routines is the way the resources are used. Previously, hard coded resource IDs were used. Now you can give the *About* window resources any ID number you desire. All you do is make a `#define MiscLibBaseID $xxxx` where `$xxxx` is a base number for the *About* window. You now also have to specifically `#define` the `mscAboutIcon`, `mscAboutString`, and `mscByText` symbols. For specific examples, be sure to read the *MiscLib.Docs* file

List

The list section of calls have received a few little changes. First, even though I said that the correct call to remove members from a *memRec* structure is *DeleteMemRec*, somehow it was *DeleteMember* in the *MiscLib.PAS* (and thusly in the *MiscLib.INT*) file. Oops! It is now correct this time for sure positively absolutely. There is now a new call, *GetMemRec*, which is similar to *FindMemRecPtr*, except that when the *memRec* is found, it is copied to a *memRec* structure. This is handy for when you want to work with a local copy of the *memRec*. Some changes were made to the internal workings of *AddSelectMemRec* and *NextMemRec*—both these calls now test the

disabled bit of the *memRec's* *memFlag* byte. *AddSelectMemRec* will not set the select bit if the disabled bit is set, and *NextMemRec* will not return a member as selected if the disabled bit is set. Finally, *SortMemRec* correctly sorts empty (zero length) *memRec* lists, and *memRec* lists with only one *memRec* are sorted without any compares, since the list is already sorted.

Pathname

Meanwhile, in other parts of the Miscellaneous Library, a few changes have taken place. Last time, when I introduced *ConvertString*, I knew that I would be using it quite a lot. I like the call so much, I went ahead and added its functionality to all of the calls that require or return strings. These calls are all in the *Pathname* section of *MiscLib*. Now *SplitPathname* and *PreferencePath* take string type parameters. For all the gory details, see the *MiscLib.Docs* file.

Meanwhile, Back at the OSLib . . .

Well, it's finally happened. The OS Library (*OSLib*) no longer exists. I finally sat down moved everything from *OSLib* to *MiscLib*, and a lot of conversions and enhancements took place in the process. If you have used *OSLib* before, you need to *carefully* read the new call descriptions, as a lot of the changes are subtle. For example, glue code is no longer required to access the routines from high level languages. Two new sections of *MiscLib* were created with the

Figure 1
Memory Handle ID Types

ID	Type	Finder Calculation
\$0000	Memory Manager	None
\$1xxx	Application	None*
\$2xxx	Control Program	None
\$3xxx	Operating System	System
\$4xxx	Tool Sets	System
\$5xxx	Desk Accessory	Desk Accessories
\$6xxx	Runtime Library	System
\$7xxx	Loader	System
\$8xxx	Firmware	System
\$9xxx	Tool Locator	System
\$Axxx	Setup File	Setup Files
\$Bxxx	Unknown	None
\$Cxxx	Unknown	None
\$Dxxx	Unknown	None
\$Exxx	Unknown	None
\$Fxxx	System	None

* The Application memory calculation is based on exact (disregarding the auxiliary type) handle ID matches

inclusion of OSLib: Names and File. The Names section deals with the namesHandle structure as returned by a SFMultiGet2 call, and the File section deals with the manipulation of files. There is some overlap in the Names and File section since some of the File routines require a namesHandle structure. The Names section generically handles the namesHandle structures, while the File routines have a specific purpose for the namesHandle structures. Also, the routines dealing with prefixes were added to the Pathname section of the Miscellaneous Library. The names of a few OSLib calls have changed as well. Figure 2 shows the old OS Library call names and their new names in the Miscellaneous Library.

WARNING: This version of MiscLib is incompatible with all versions of the OS Library (OSLib). You should remove the OSLib and OSLibGlue files from your 13: directory. You should also remove any E16.OSLib, OSLib.H, OSLib.Int, and OSLib.PAS files.

Pathname

The two new routines in the Pathname section are PrefixGet and PrefixSet. These routines allow you to easily get and set prefixes. These calls make use of the ConvertString routine so you don't have to worry about what kind of string is needed for the prefix. For the details on the new Pathname section calls, see the MiscLib.Docs file.

Names

The Names section of the Miscellaneous Library deals with the namesHandle structure as returned by a SFMultiGet2 call. The calls are: FillReplyRec, GetDirectory, and TraverseNames. The FillReplyRec and GetDirectory calls remain, for the most part, unchanged from their OS Library origins, however, the TraverseNames call has changed significantly. For complete details on the Names section, see the MiscLib.Docs file.

Figure 3
The New Miscellaneous Library Calls

About Calls

AboutMemory: Immediately recalculates memory usage

File Calls

DelAllPrompt: Delete files prompt routine for all files
 DelErrorPrompt: Delete files prompt routine for errors
 DeleteFiles: Deletes files (with Standard File interface)
 DeleteNames: Deletes files (using a namesHandle as a guide)
 DelLockedPrompt: Delete files prompt routine for locked files
 MoveFiles: Moves or renames files (with Standard File interface)
 MoveNames: Moves or renames files (using a namesHandle as a guide)
 MveErrorPrompt: Move files prompt routine for errors
 ValCancelCheck: Validate files cancel check routine
 ValErrorPrompt: Validate files prompt routine for errors
 ValidateFiles: Validate files (with Standard File interface)
 ValidateNames: Validate files (using a namesHandle as a guide)

List Calls

GetMemRec: Copies a memRec from a list of memRecs to a memRec structure

Name Calls

FillReplyRec: Fills a new-style reply record from a multi-file reply record
 GetDirectory: Returns a multi-file reply record containing the contents of a directory
 TraverseNames: Processes each entry in a multi-file record in turn

Pathname Calls

PrefixGet: Returns a handle containing a prefix string
 PrefixSet: Sets a prefix to a specified string

File

The three main routines in the File section are DeleteFiles, MoveFiles, and ValidateFiles. Each File section routine has "support" routines that you can take advantage of. Shrewd readers will notice that the ValidateFiles routine was never present in the OS Library—it's entirely new for MiscLib! I had a bit of free time and decided to spend it writing a new OS Library style routine for the MiscLib. The new ValidateFiles routine will check files for errors. For complete details on the File section, see the MiscLib.Docs file.

For the specifics on how to use the the new routines (and all the other

Miscellaneous Library routines) from your programs, break out the MiscLib.Docs file located in the GSP.V4.N4.SEA self-extracting archive on your GS+ Disk.

If you have any questions about the Miscellaneous Library, send them in! I especially want to hear any suggestions you might have for additions to the Miscellaneous Library. Putting all of these routines in one place has already made my IIGS programming easier—I hope it does the same for you. **GS+**

Figure 2
OS Library Call Name Translations

OS Library Name
 DeleteFiles
 FillReplyRec
 GetDirectory
 HandleToPrefix
 MoveFiles
 PrefixToHandle
 TraverseNames

Miscellaneous Library Name
 DeleteFiles
 FillReplyRec
 GetDirectory
 PrefixSet
 MoveFiles
 PrefixGet
 TraverseNames

Miscellaneous Library Section
 File
 Names
 Names
 Pathname
 File
 Pathname
 Names

When the first version of our New Desk Accessory text editor, EGOed, appeared (way back in GS+ V1.N2), I immediately began receiving requests for additional features: margins, a graphic ruler, support for more file formats, and on and on. So, as time passed, I began shoving as many features as I could into EGOed—it got more powerful, but it got bigger too.

As EGOed got bigger and bigger, a small number of people began asking for something a bit different: an EGOed that was smaller, faster, and didn't require a hard disk just to use it. Dean Esmay of GENie's A2Pro area named it "EGOed lite." As EGOed got bigger, so did the number of people asking for EGOed lite.

So, with our recent decision to spin off EGOed and some of our other more popular programs as stand-alone products, I decided to replace EGOed in GS+ Magazine with EGOed lite. (Of course, the older versions of the full-fledged EGOed are still available on back issue GS+ Disks. See the "GS+ Back Issue Information" department for more information on how to get them.) Since EGOed lite is much smaller than the original (36K vs. 96K) it leaves us lots of room on the GS+ Disk for new programs.

So, What Did I Keep?

The main idea behind EGOed lite was to make it as small as possible, so that people without a hard disk could use it. The second criteria was to keep in as many neat features as possible while meeting the first criteria. But, even with these two criteria hanging over my head, there were a few capabilities that I simply wouldn't give up:

First and foremost is the ability to double-click on files in the Finder and have EGOed lite open them. As a result, EGOed lite requires System 6.

EXTREMELY IMPORTANT NOTE: *If you do not want EGOed lite to open the files you double-click on, hold down the shift key as you double-click on the files! This will tell EGOed lite to let the application that owns the file open it.*

Second, I didn't want to put any restrictions on the number of files that EGOed lite could have open. So, with EGOed lite, you can open and edit as many files as available memory will allow. Each file will be in its own window, and you can freely cut, copy, and paste between windows.

The last thing that I wouldn't give up is the ability to read, with as much formatting as possible intact, AppleWorks Classic and AppleWorks GS Word Processor files. So, EGOed lite still does that. However, the ability to save AppleWorks Classic Word Processor files is gone. In fact, EGOed lite only saves in two file formats, Teach and ASCII Text. So, if you open an AppleWorks GS Word Processor file and save it as a Teach file, be *certain* to save it under a new name! If you overwrite your AppleWorks GS file with a Teach file, you'll be sunk, because AppleWorks GS can't read Teach files!

So What Did I Give Up?

Beyond these things, EGOed lite is stripped down pretty severely. The Preferences are gone, which means that EGOed lite does not create or use a preferences file, which saves even more space on your boot disk. The ruler is gone (but EGOed lite will correctly read and preserve all ruler and page setup information in Teach and AppleWorks GS files). Many of the style change items (Set/Change Hi-Bits, ALL CAPS, etc.) are gone. Undo/Redo is gone. The Smart Quotes facility is gone. And, finally, the Replace subsystem is gone. (However, EGOed lite can still Find any character, including Tabs, returns, etc.)

So What's Next?

Like the old EGOed, there will be updates to EGOed lite. However, where the old EGOed updates always took up more and more space on the GS+ Disk, we won't publish an update to EGOed lite unless it is *smaller* than the previous version. This will also help us keep our commitment to fill the GS+ Disk with new programs.

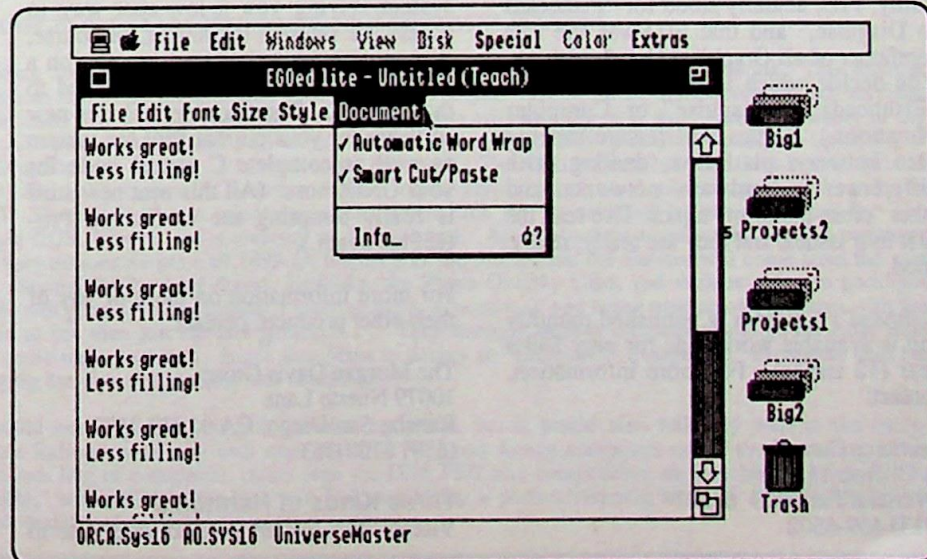
Is That It?

Yep. I really don't have the room here in the magazine to give you the full story on what EGOed lite can do. For that, you'll have to read the EGOed.lite.Docs file on your GS+ Disk. In closing, let me say that if you like the old EGOed, don't bother installing EGOed lite. If you are a new reader, give EGOed lite a try, I think you'll like it a lot. Finally, if you are one of the ones that requested EGOed lite, I hope it's everything you wanted in your EGOed, and less! **GS+**

Confused?

If you are new to GS+ Magazine, you might be a bit confused at all this talk of "EGOed" and "EGOed lite." Basically, EGOed and EGOed lite are New Desk Accessory text editors that you can access from within any IIGS desktop application. EGOed lite is a compact editor that gives you the basic tools you need to quickly and easily edit ASCII Text, Teach, AppleWorks Classic, AppleWorks GS, and Apple Programmers Workshop files without having to actually run a separate application. You can also use EGOed lite to print your files. EGOed lite takes up only 36K of disk space and runs under System 6. Complete documentation for EGOed lite is on your GS+ Disk in the file EGOed.lite.Docs in the Documentation folder. (For a detailed example of how to install and use EGOed lite, see "How to Use Your GS+ Disk.")

EGOed on the other hand, is a full-featured text editor that has all of the above features and more. A complete description of EGOed's capabilities can be found in an appendix in the EGOed.lite.Docs file on your GS+ Disk.



Fishheads, Fishheads . . .

Just when you thought WestCode had cornered the market on, er, innovative, product names, along comes the new Resource Central publication, *Fishhead's Children*. As you can tell from the name, *Fishhead's Children* is about mutated computer users and their offspring.

Each month, *Fishhead's Children* will focus on the victims of these mutations, and look at the computer hardware that exposed them the dangerous radiations that made them so . . . different. Although it may disgust some of the more rabid Apple II fanatics out there, Resource Central is not going to restrict itself simply to victims of Apple II mutation, but will also focus on the threats posed by Macs, PC's, and even the lowly VIC-20.

In recent years, Tom (Uncle DOS) Weishaar, founder of Resource Central, has shied away from writing for his other publications. In a surprise move, Tom will be handling almost everything involved in preparing each issue of *Fishhead's Children*. A mutation himself (you think he *wants* his hair to look like that?), Tom hopes to bring much needed attention to this threat to humanity.

Eat Them Up—Yum!

Sorry folks, but I just couldn't resist. Actually, *Fishhead's Children* is a new publication from Resource Central that is targeted at people that work with more than one kind of computer. Macintosh, MS-DOS, OS/2, the IIGS, and others, will all be covered in *Fishhead's Children*. (The title "Fishhead's Children" comes from Tom's contention that the name of the old Apple II disk utility, FID, actually stood for "Fishheads In Disguise," and that FID was the true forefather of all Graphical User Interfaces. You decide which is less likely: FID = "Fishheads In Disguise" or Computer Mutations.) Topics will feature moving data between platforms, dealing with differences in hardware, networks, and other "cross-platform" topics. I've read the first four issues, and they are really, really, good.

Fishhead's Children is published monthly and is available worldwide for only \$49 a year (12 issues). For more information, contact:

Resource Central
P. O. Box 11250
Overland Park, KS 66207
(913) 469-6502

More From MDG?

Last issue, we told you about the new version of MD-BASIC from the Morgan Davis Group. This time out, MDG sent us no fewer than three new press-releases. The items discussed were:

Basic Programmer's Workshop.

This is a bundle of three of MDG's AppleSoft BASIC programming tools: The MD-BASIC v2.0 package, RADE (Real-time AppleSoft Debugging Environment) v1.0, and the Object Module Manager (which allows you to easily create and use external AppleSoft commands). The entire package is \$99 (plus shipping) direct from the Morgan Davis Group.

ProLine Price Reduction.

Up till now, the price of MDG's excellent ProLine BBS software has been \$259. Effective 4/1/93, the price is only \$159. I can't even begin to describe all the neat things ProLine can do, so contact MDG directly for more complete information. If you are thinking about running a BBS on your Apple II, you really ought to look into ProLine.

New Internet Gateway.

When I was running the old Pro-GSPlus BBS, one of the top items on the wish list of ProLine owners was the ability to easily connect to the Internet (a network of University and Government computers providing almost instantaneous access to almost any kind of information). Now, for a measly \$59, MDG is adding this capability to ProLine with the new μ MDSS software for ProLine. μ MDSS allows your ProLine BBS to connect to, and exchange files with, a UNIX host system, giving you a low-cost way to access the Internet (assuming, of course, that you can get a low-cost account on a UNIX system that is itself connected to the Internet). The package includes new software for your current ProLine system as well as complete C source code for your UNIX host. (All this neat new stuff is really tempting me to fire up Pro-GSPlus again.)

For more information on these or any of their other products, contact:

The Morgan Davis Group
10079 Nuerto Lane
Rancho San Diego, CA 91977-7132
(619) 670-0563

Three Kinds of Harmonie

Vitesse, Inc. has announced an update to

their collection of IIGS printer drivers, Harmonie. These drivers allow you to use scads of different non-Apple printers from your IIGS desktop applications, like AppleWorks GS. Harmonie v2.1 (note that the press release we got called this update "version 2.0.1," but the disk and the on-disk documentation called it "version 2.1") now includes drivers for the Hewlett-Packard DeskJet and DeskWriter models 500C and 550C (these are *color* printers folks!). In addition to these drivers, the Harmonie package includes drivers for most other Hewlett-Packard ink jet and laser printers, as well as drivers for Epson printers, the NEC PinWriter and an improved ImageWriter driver. The retail price for the complete Harmonie package is \$59.95. If you bought Harmonie v2.0 after March 1, 1993, you will automatically get an upgrade to v2.1 when you send in your registration card. If you bought Harmonie v2.0 before then (and you are a registered user), you can upgrade to v2.1 for only \$14.95 (plus \$3.50 shipping, \$7.50 shipping outside North America). If you own an earlier version of Harmonie, you will have to contact Vitesse for update information.

Of course, if you are like most IIGS owners, you probably only have (or plan to buy) one printer. This makes the \$59.95 price tag a bit steep if you will only be using one of the drivers in the package. So, Vitesse now offers two subsets of Harmonie, one for Hewlett-Packard printers and the other for ImageWriter owners.

The "HP-Printer Driver Pack" contains drivers for the Hewlett-Packard DeskJet, DeskJet Plus, DeskJet 500/500C, DeskJet 550/550C, PaintJet, PaintJet Plus, DeskWriter, DeskWriter 500/500C, DeskWriter 550/550C, LaserJet II/IIP, and the LaserJet III/IIIP. The retail price is \$29.95.

If you own an ImageWriter, and you aren't satisfied with the Apple ImageWriter driver, you can get the Harmonie ImageWriter driver all by itself in a package called "PerfectImage." It also retails for \$29.95.

Bakcup a Minute

In addition to the new version of Harmonie, Vitesse has also announced a new version of their disk backup utility, Salvation: Bakcup. This new version includes a bunch of new features, including: data compression, support for the SuperDrive and SCSI tape drives and

improved label printing and backup macros.

The retail price for Backup v2.0 is \$69. Owners of previous versions (which have been called "Salvation: Guardian" and just plain "Salvation") can upgrade for \$39.95. For more information on this product and the Harmonie upgrades, contact:

Vitesse, Inc.
13909 Amar Rd, Suite 2A
La Puente, CA 91746
1-800-777-7344 (Orders only)

Expressly For You!

Seven Hills Software has announced a new version of their print spooler software, Express. Some of the listed improvements include:

- An overall performance increase. Seven Hills says that spooling speed is improved for both parallel and serial printers, and that you can "fine tune" Express to your particular hardware setup to get the best speed possible.
- A larger printing cache. This means less disk access when actually printing, which means things go faster.
- Express now lets you specify the name and location of the spool folder (it can be put anywhere, including RAM disks or the "data" partition of a hard drive). This means that you won't have lots of spool files littering your boot disk, which means more room for fonts, desk accessories, etc.
- Express can now automatically print multiple copies of a spool file.

The suggested retail price for Express is now \$49.95. But, registered owners of any earlier version can upgrade for only \$12.50 (plus \$3.50 shipping and handling).

For more information, contact:

Seven Hills Software
2310 Oxford Rd
Tallahassee, FL 32304-3930
(904) 575-0566

Sound Advice

For some time now, the fine folks at ECON Technologies have been showing off their new SoundMeister Stereo Amplifier/Digitizer board for the IIGS. Well, it's finally ready to ship! And by the time you read this, it should, in fact, be available.

According to the press release, "The SoundMeister's built-in 1.5 watt per channel amplifier and unique filtering produces a smooth, clean sound that surpasses any other board ever produced for the IIGS." It also notes that the SoundMeister can be used with amplified or unamplified speakers, and can be hooked into your stereo system. Hopefully, it will sound as good as it sounds!

Of course, you can also record sounds with the SoundMeister. The press release states that you can use a microphone or any amplified sound source to record your sounds. Note that the SoundMeister only records mono sound. (A second card, the SoundMeister Pro, which ECON hopes to release soon after the SoundMeister, can record in stereo.)

Once you have your sound captured, you can use the included DigitalSession software to play it back, edit it, and save it. DigitalSession, which will also be available separately (and will apparently work with lots of different IIGS digitizers), will allow you to save the sound in any of the several sound formats now in use: rSound (used by the Sound control panel, HyperCard IIGS and others), HyperStudio (used by just about everyone else), and more! (Depending on the hardware that you use it with, DigitalSession can record in either mono or stereo.)

Best of all, the *retail* price for this entire package is only \$89! Quite a bargain.

For more information, contact Ozzy or Negrito at:

ECON Technologies, Inc.
99 North Central Ave. STE B
Oviedo, FL 32765
(407) 365-4209

If you have a IIGS product you want the world to know about, send your press release to:

e-Mail
America Online: GSPlusDiz
Delphi: GSPlusDiz
Genie: JWankerl
Internet: GSPlusDiz@aol.com

U. S. Mail
GS+ Magazine
P. O. Box 15366
Chattanooga, TN 37415-0366 **GS+**

Professor G. S. Gumby's Top Ten Rumors of All Time Number 7 - From GS+ V2N3, January-February 1991

Apple Computer to Enter the Home and Entertainment Markets

Apple Computer, in an effort to beef up their eroding market share, has turned its attention to the hot 16-bit game machine market. This summer Apple is going to release a 16-bit home/entertainment computer which Apple believes will rival their current 16-bit competitors, which includes Sega's Genesis, NEC's TurboGraphix-16, and Nintendo's new Super Famicom. The new system will actually be a sleek, compact model of the Apple IIGS. The system, called the "Apple Enticer," will sport an 8 MHz 16-bit 65C816 processor, 1.125 MB of RAM (expandable up to 8 MB through an expansion slot), an internal 3.5-inch SuperDrive, a joystick, a mouse, and a keyboard. The CPU will include two serial ports (printer and modem), external drive port, composite (TV) and RGB output, RCA stereo output, a dual-joystick port, an AppleTalk port, and an Apple Desktop Bus port (for the keyboard and mouse). There will be two expansion slots (which each can be assigned to any slot number). The Enticer will be fully compatible with current Apple IIGS software and a majority of its hardware. Apple plans on mass producing this computer and selling it in popular department stores at the very reasonable price of \$499 (A majority of the profit from the Enticer will come from the sale of external options; including monitors, printers, external drives, hard drives, joysticks, the Video Overlay Card, and various software packages (HyperCard IIGS, AppleWorks GS, etc. . .)). Apple will promote the computer's entertainment, educational, and home productivity features with the slogan, "The Apple Enticer, Because there is more to life than just fun and games . . ." They strongly believe consumers will go the extra mile and purchase the Enticer over their competitors' game-only machines. Apple also plans to design an "Enticer/GS Compatible" expansion card for their Macintosh LC and Mac II line, thereby merging the two systems into one computer.

This computer, if sold at a reasonable price, would not only take the game market by storm, but it would also sell very well in the entry-level/home computer markets. The attractive Apple Enticer could very well edge the IBM PS/1 and Amiga computers out of these markets. This would result in more people moving to the Macintosh line of computers, rather than the IBM PS/2 and compatibles, as they begin to upgrade to "higher performance" systems. Hence, the "Enticer," with its Mac-like look and feel, would lay a perfect stepping stone to Apple's Macintosh line. The "Enticer/GS Compatible" expansion card would make this transition even easier.

GS+ Classifieds

New Shareware Collection

Experience quality GS shareware! 100 disks of entertainment, utilities, and FTA demowares available, and growing! \$2 U.S. per disk. Send Money Order for \$2.50 U.S. for catalog and demo disk.

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Canada V1Y 7N2

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Contact:
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5734 Lamar Lane
Mission, KS 66202

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Contact Andy at (717) 633-9787.

Readers can place an ad in the GS+ Classifieds for only \$5. This cost buys 25 words in one issue of GS+ Magazine. Additional words are just 25 cents each. The GS+ Classifieds are a great way to contact thousands of other IIGS owners.

The deadline for inclusion of a classified ad in the next issue (Volume 4, Number 5) of GS+ is June 1, 1993. Simply send your ad along with your name, address, phone number, number of issues to run, and payment (made payable to "EGO Systems") to GS+ Classifieds, P. O. Box 15366, Chattanooga, TN 37415-0366; or call us at (615) 843-3988, Monday through Friday between 9 a.m. and 6 p.m. Eastern Time, to place an ad with your MasterCard or VISA. You can also FAX us your classified ad by calling our FAX number: (615) 843-3986.

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TTFC & POINTLESS \$99.00

AppleWorks Addons from JEM Software

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ProSel-16 (voted BEST Apple II Utilities in 1991)
ProSel-16 still offers more utilities than ANY
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Glossary

In each issue of *GS+* Magazine, we present a glossary of some of the more common terms in the IIGS world and some of the more uncommon terms that we use in each issue. If you have a term or bit of jargon that you would like to see explained, let us know and we'll try to get it in a future "Glossary" installment. Also, don't forget about the glossary that's in your IIGS owner's manual! At this point, it contains many more terms than the *GS+* Glossary!

Past installments of the *GS+* Glossary can be found on your *GS+* Disk in the plain ASCII text file, **Glossary**, in the **Documentation** folder. (Entries marked with an "*" have appeared in previous installments of the *GS+* Glossary and are repeated here for our beginning readers or because they have relevance to topics discussed in this issue.)

8-Ball™

A toy. You ask it questions and it responds with one of twenty random answers, that may or may not make sense. (In fact, you don't even have to ask it questions, it can read your mind and then respond randomly.) About \$6 at your local toy store. Not tax-deductible as a "production tool." See "Jokes" below.

Bit-mapped Font *

A bit-mapped font is a font whose characters are defined by a series of bits showing explicitly which pixels on the screen (or other output device) should be turned on or off to give the characters their shape. For each point size of a bit-mapped font, you need a separate bit-map showing the definitions of the characters in the font.

"Ethics In Journalism"

Haven't a clue. What does it have to do with *GS+* Magazine? Could someone help me out here?

Finder.Data File

Finder.Data files (or "Finder droppings" as we lovingly call them), are invisible files that the Finder uses to remember information about the various folders on your disks. The Finder saves out these files when you close a folder's window. Among the information kept in a **Finder.Data** file is the view that you have selected for the folder, the positions of the icons in the folder, and the position on the desktop of the folder's window. If you wish, you can tell the Finder not to save this information by turning off the "Save Finder information onto disk" preference in the Finder's Preferences dialog.

Finder extension *

A Finder extension is a program that adds new options to version 6.0 and later of the IIGS Finder. Most Finder extensions show up in a special "Extras" menu at the end of the Finders menu bar and do not operate outside of the Finder. Some Finder extensions however, take the form of New Desk Accessories or Control Panels that operate inside any IIGS desktop program but have extra functions when operating inside the Finder.

Font *

A given combination of typeface design, weight, size and style.

Font Family *

All instances of a given typeface design (for example, the "Times" family includes Times, Times Bold, Times Italic, etc.)

Font Manager *

The Font Manager is a tool set built into the Apple IIGS Toolbox that allows programs to easily work with different fonts.

Icon *

An icon is a graphic representation of something. On the IIGS, icons are used to represent disks, applications, data files, folders, and other "items" that you work with while using your computer.

Jokes

Jokes are stories that are intended to be humorous. In general, no harm is meant by them, they are only told to amuse or entertain. However, a growing number of people are having trouble dealing with this concept. Studies show that these people have a higher risk of heart disease, voted Republican, and think that Rush Limbaugh should be on Mt. Rushmore. Our deepest apologies if you are one of these individuals.

Lawsuits

Definitely not a joke. No sir. We take these very seriously. Yes sir. Let's just forget the whole thing, shall we? Thank you.

PostScript®

PostScript is a page description language. That is, it's a language that allows you to specify the placement of text and graphics on a page (or pages). You will most commonly find PostScript implemented in laser printers, but PostScript has also been adapted for use on video displays (Display PostScript), FAX machines and other output devices. PostScript was invented by Adobe Systems Incorporated and is included in most Apple LaserWriter printers. The complete reference to the PostScript language can be found in the book *PostScript® Language Reference Manual*, published by Addison-Wesley.

Tabloid Journalism

Hey! You're soaking in it!

GS+

Professor G. S. Gumby's Top Ten Rumors of All Time Number 6 - From *GS+* V3N5, May-June 1992

WonderWare!

Believe it or not, Claris Inc. is about to release an update to AppleWorks *GS!* They sent us a beta copy of AppleWorks *GS* v2.0 (code named "WonderWare") and I have to say, it's *unbelievable!* As opposed to the measly 6 modules in AppleWorks *GS* v1.1, WonderWare has 10 different modules. Our copy had modules for 3-D spreadsheet, relational database, word processing, graphics, telecommunications, page layout, electronic mail, presentation graphics (i.e. slide shows), an outliner, and project management. While this sounds great (and it is) there may be a problem... our beta copy would only run under System Software v4.0 or earlier.

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CV-RAM

The NEW CV-Ram comes with 4 Mbs already installed and is user expandable to 8 Mbs utilizing standard 1x4 DRAMS. Fully DMA compatible, unlike other common memory cards, C.V. Technologies' NEW CV-Ram can expand beyond 4 Mbs to 8 Mbs! Adding memory is as simple as plugging in two chips and moving a jumper. Start at 4 Mbs and add as necessary to 5, 6, 7 or 8 Mbs of totally DMA compatible memory for those memory intensive applications, like the GS/OS Finder. Need a Ramdisk? Under GS/OS 6.0 using or adding any frills such as fonts or desk accessories can eat up several megabytes in a hurry. Don't buy a non-expandable memory card. Sure, 4 Mbs sounds like a lot now, but tomorrow's applications may cause you to run out of ram—then what do you do? If your memory card is not expandable, you'll be stuck! If you have CV-Ram, you just buy another megabyte and keep right on computing! The CV-Ram is backed by a 1 Year Parts & Labor Warranty and a 30 Day Unconditional Money Back Guarantee. Designed to fit your needs by one of the most reputable companies in the Apple II market—C.V. Technologies!

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