

Washington Apple Pi General Meeting

4th Saturday • 9:00 a.m. • Community & Cultural Center Northern VA Community College • 8333 Little River Turnpike Annandale, Virginia

Nov. 20, 1993 Hewlett-Packard

Microsoft

Dec. 4, 1993

Computer Gule.

Computer Gule.

See map elsewhere

Jan. 22, 1994
Ares Software

N○VA

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Tally π From the Beltway (I-495) take Exit 6 west on VA 236 approx. 1 mile. Turn left into the campus of Northern Virginia Comm. College. Loop around to the rear parking lots, and walk to the Community & Cultural Center Building. Northern Virginia Community College There is abundant free parking adjacent to the Community & Cultural Center.

Washington
Apple Pi
Semi-Annual
Computer

Saturday
December 4
9 a.m. to 2 p.m.

6201 Branch Ave. Camp Springs, MD



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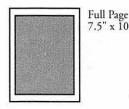
by Kathleen G. Charters

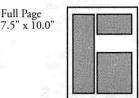
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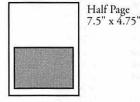
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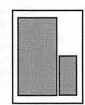
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Third Page	\$225	\$191	\$169	\$135
Sixth Page	\$125	\$106	\$93	\$75

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Copy may be received as traditional mechanicals, rc-paper, velox prints, or film negatives. Negatives will incur an additional \$15.00 strip-in charge.

Washington pple Pi

This issue of the Washington Apple Pi Journal was created on a Mac SE/30, proofed on an LaserWriter IINT, and produced by electronic typesetting at The Publishers Service Bureau.

The page layout program used was PageMaker 4.2a, the word processing program was Microsoft Word 5.1; the principal typeface is New Century Schoolbook (10/12) for the articles; and Helvetica for headlines, subheads, and emphasis.

Cover Design: New WAP Journal cover design was created by Ann Aiken in collaboration with Nancy Seferian. The Capital artwork was illustrated by Carol O'Connor for One Mile Up, which donated it for use on our cover.

Icon Guide



Macintosh

Calendar Pages



Apple II, IIe, & IIGS



Apple Disk Libraries







Hotline/Phone List



General Interest



TeleCommunications System (TCS)

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Editors' submis	ssions
January	Nov. 23
	Dec. 25
Ad space reserv	ations
January	Nov. 18
February	Dec.17
Camera-ready a	id copy

January Nov. 26

February Dec. 23

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Change of Address should reach us 60 days in advance of the move to ensure that your Journals continue uninterrupted.

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A Special Thanks

by Lorin Evans

he Pi is about to hand the Journal over to a new editorial team. Debbie Hoyt, our managing editor for the past two years is going to try some new ventures and we are going to learn to work with a new crew.

Under Debbie's tutelage, the Journal rose to a new level of esthetic excellence. Her forgiving demeanor helped ease many through writer's block and elicited the best from those who contributed articles each month. She commanded a loyal and very dedicated editorial staff which is an essential compliment to the process of converting the written word to a

finished journal.

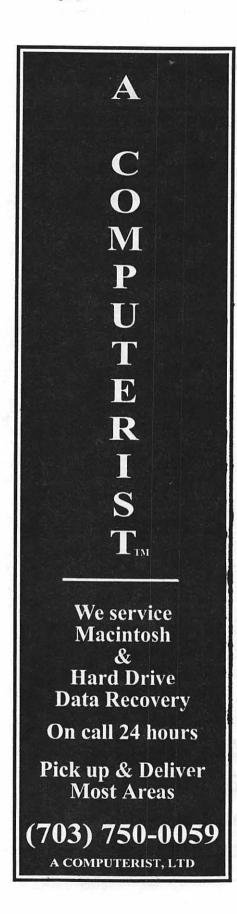
Refinement is a constant in her craft and Debbie was subtle master of it. The user group community was also aware of the leadership she exerted, for it was under her editorial guidance that we won national recognition for having the best large user group publication in the country.

A team manager, with team players, for a winning effort. In the finest of traditions, Debbie is leaving the Journal a better publication than she found it. I know she will be watching our progress. I look forward to her continued participation in our activities.

We're Looking for New Office Space

The club's office lease will be up in the fall of 1994. Read about our concerns on page 46. Then help us find the solution.





Women's SIG Meeting

by Lawrence Charters
based on the novel
by Kathleen Charters
soon to be a minor motion
picture

Dennis Dimick, Picture Editor at National Geographic, was the featured speaker at the October Women's SIG meeting. After the traditional dinner (this is the only Washington Apple Pi activity that regularly includes food), Dennis explored the rapidly changing, explosively expanding world of CD-ROM (Compact Disc-Read Only Memory).

While they might look like regular music CDs (and some even contain regular audio tracks), CD-ROMs store digital information, and feature two and a half big benefits: they are cheap, and have staggering capacity. The "half" benefit is the permanent, read-only nature of the storage; good for archiving and information distribution, poor for roughdrafts of the Great American Novel.

Rather than talk about the subject in the abstract, Dennis brought a wide range of examples of CD-ROM discs (note that disc is spelled with a "c"): Kodak Photo-CDs; Nautilus CD (a monthly magazine published on CD-ROM); From Alice to Ocean, an award-winning illustrated travelogue of a journey across the Austrailian desert; Just Grandma and Me, a heavily illustrated, animated interactive children's story; MacWorld Guide to Desktop Video, which is a "complete" guide to QuickTime and related technologies in book form, complete with a CD-ROM; and the BMUG public domain software CD, a massive compendium of 600 megabytes of public domain software on a single CD-ROM. This vast wealth of material, most of it very inexpensive, masks an odd irony: to really make use of Photo CDs and

massive data CD-ROMs, you need to have a machine with a generous amount of both memory and hard disk space.

Photo CDs are clearly Dennis' passion, and illustrate the problem. A single Photo CD can hold up to 100 photos, each stored in five different resolutions taking up to 18 megabytes per picture for the highest resolution images. If you want to edit one of the high-resolution images, you must copy it off the Photo CD onto your hard disk and, with requirements for editing and other tasks. this single image could require 60 or more megabytes of hard disk space. Needless to say, editing an 18 megabyte file is much easier if you have copious quantities of RAM.

"Consumer" Photo CDs are available through Kodalux dealers at a price of roughly \$1.25 per image — just take a roll of Kodak film and have them "print" it on CD rather than paper. Multiple rolls can be stored on one CD. "Professional" Photo CDs are similar, except that the highest resolution files take up 72 megabytes per image.

Dennis had some specific suggestions on how to get a reasonable start in the world of CD-ROM and Photo CDs:

- use a color Macintosh with at least 8 megabytes of RAM;
- use System 7.0 or later, with QuickTime;
- use either a large, fast hard drive or a removable media drive (such as the Syquest or Bernoulli drives);
- Apple's CD300 (internal or external) CD-ROM drives seem to have the best combination of speed and software compatibility.

Dennis touched on a wide range of topics, from how to build photo databases, to how to make QuickTime movies, to using TeachText 7.0 to view color PICT images, to the wonders of the new Quadra AV Macintosh computers, with their built-in audio and video editing tools. Many of these

topics are covered in his excellent articles in the Washington Apple Pi Journal.

Once considered exotic, CD-ROMs are rapidly becoming an essential in the Mac world, and Dennis left little doubt as to why. If you weren't there, you missed a great show.

by Morris Pelham

. Startes to the

At our August meeting, Miles Weissman showed up and spoke up about *Quicken 4*, and I was impressed with it. So I called up the mail-order folks and ordered one. It landed on my doorstep the next morning.

For our September meeting I was away, and Mark Pankin took over for me. Thanks again, Mark!

For our October meeting, I tried to install Quicken 4 and keypunch in all our Beating the Dow 1993 portfolios, including the dividends and distributions, but I didn't quite make it. My hard drive crashed again, and I spent a day with the Norton Utilities. I ran Disk Doctor, then I zapped my PRAM, then I updated my drivers, then I replaced my system and Finder and finally it worked again. Lots of head scratching and a few walks around the block and a whole day lost. So I know a little about Quicken 4, but not yet everything.

First impressions about Quicken 4 are that it wants to replace your bank. It wants you to use Quicken checks and even a Quicken Visa card! I skipped over all of that and went right to the portfolio section.

Second impressions about *Quicken* 4 are that it has an inflexible format and requires lots of keypunching. I set up one portfolio with all 30 Dow stocks, then a second with the 10 highest yielding of the Dow stocks, then a third with the 5

lowest priced of the 10 highest yielding stocks. And I had to keypunch all three of them. Unlike *Excel*, I couldn't copy to create the second and third portfolios. Then I keypunched in the dividends, and again I had to do each of the three portfolios because it can't copy from one to the other.

Third impressions about Quicken 4 are that it's inflexibility can be an advantage. I have spent days with Excel trying to figure out how best to set up the worksheet to display and compute what I wanted to do. With Quicken that's not necessary or even possible. Almost all your time is spent keypunching because there isn't anything else you can change.

So I brought all of this to our October meeting and we talked about it. Several other people had *Quicken* but no immediate solutions were found. I will keep keypunching away and we will keep talking about it at our meetings and I am sure we will figure out a better way as we get more experience with it.

Did you see the Wall Street Week show on September 17, 1993? They took and answered a question about something near our Beating the Dow strategy. They garbled the question a bit, but answered that investing in the 10 highest yielding of the 30 Dow stocks and rebalancing every year produced about double the growth of buying and holding the 30 Dow stocks over the past 20 years.

Mark Pankin brought an update on our Beating the Dow 1993 portfolio to the end of September, a forecast of what might be the 1994 portfolio, and some research showing the results of following this strategy since 1986. He passed all of these around, we all took a close look, and we all talked about it. Our 1993 portfolio results are still holding at 32.1% plus dividends and distributions. 1993 is the second best of any year since 1986 using

this approach, second to 1991 with a 56.4% gain. On the other hand 1990 showed a -20.6% loss.

You know of course that if it sounds too good to be true it probably is. Any stock market strategy that really, honestly works over time will have some losses along the way. The trick is to keep the losses small and/or for a short time while the gains are allowed to grow large and/or for a long time.

We have the hint of a new strategy that sounds interesting. Something about using the Fidelity Select mutual funds, using a 5-week moving average to pick the best one to invest in, and rebalancing every week. We talked about this some and may investigate it further and talk more about it more at later meetings.

Mark's worksheets are in Excel 4.0 and mine will be in Quicken 4. We are willing to swap our keypunching work with others who also have something to contribute. If you have Excel or Quicken and want a copy of our data bring a floppie to the meeting and let's talk about it.

None of us have bought our 1994 portfolios yet, and none have yet sold the 1993. Sometime between now (October 15) and the end of December we're going to have to make a decision and carry it out.

Do you remember my "energy efficient" lightbulb from Pepco? It died last week, age six months or so. I had moved it away from my computer and continued to use it a couple hours a day. That commercial on TV where the little kid grows up to be a teenager before the bulb dies is not my experience.

Stocksig welcomes both experts and novices to our meetings. Anyone using the *Quicken* 4 software is particularly welcome while we try to figure it out. Stocksig meets the 2nd Thursday of each month at 7:30 PM at the WAP office.

October General Meeting

by Lawrence I. Charters

ctober's General Meeting was held on the fourth Saturday of the month, October 23, but in a "new" location, the Bethesda Holiday Inn, marking a return to Maryland for the first time in more than a year. True, the Garage Sales have been held in Maryland, but we won't let mere facts get in the way of trend analysis.

Andy Stadler and Rick Kapur flew out from Cupertino to demonstrate the Newton, Apple's not-quitea-pound computer the size of a trade paperback book. Displaying something so small to a large audience seemed a daunting task, but Apple has had lots of practice at this, and rented around six hundred pounds of video gear, including something most of us had never seen before: a "visualizer." This looks, and acts, much like an opaque projector, one of the staples of high-school audio-visual presentations, but it uses a video camera to capture and project the image. And the image of a ten-foot Newton certainly captures your attention.

Andy's background is software engineering. While he didn't say much about himself, he did mention at one point that he wrote much of the Newton 1.0.4 operating system, and was clearly at ease with the system. The Newton has a remarkably flexible calendar, which is intimately tied in to an alarm system, which is seamlessly tied to a "to do" list, which can also be tied to a database of names and addresses designed to match the look of business cards.

The much praised, and much maligned, handwriting recognition was impressive. While Andy had an occasional character go astray, he didn't seem to have any difficulty entering hand-printed characters, cursive characters, or an odd mixture of both. Some spontaneous testimonials from the audience suggested that, if you follow the instructions, the Newton will, in fact, learn to recognize your handwriting. But this also revealed a limitation: the Newton will learn one person's handwriting. It really is a "personal" electronic device, and isn't up to being shared around the office, or among spouses, lovers, or "just friends." One person per Newton.

Among the titles already available was an interactive Fodor's travel guide that, while the audience watched, found a specific kind of restaurant in the DuPont Circle neighborhood, then generated directions on how to reach the restaurant from a hotel a mile away. Another application, a highly graphic map of the Washington Metro system, demonstrated that a robust shareware market has already emerged.

Rick's focus was Newton peripherals, a job he clearly loves. After talking about various cases, memory cards, networking options (the Newton can be directly linked to an AppleTalk network), printing options (built-in support for the Style-Writer and Apple PostScript printers, and the Printer Pack option allows it to work with roughly 900 MS-DOS type printers), data mo-

dems, fax modems (complete with automatic cover sheets) and other goodies, he demonstrated what might become a killer peripheral: a Messaging Card.

First, he called the "Belgian Waffle Company" computerized voice mail system in California, with the Newton generating the dial tones from the Belgian Waffle Co. business card stored in its memory. Next, Rick punched in a request for sales data on "Apple Waffles," and hung up. Within a few minutes, the Messaging Card beeped (it can receive and store pages even when it isn't installed in the Newton), he inserted it in the Newton, and read the sales data off the screen. I immediately thought of dozens of uses for a onepound, networkable computer that can also receive wireless pageswhich is undoubtedly why he conducted the demonstration.

Next Rick demonstrated the Macintosh version of the Newton Connection Kit, a software package that allows everything on the Newton to be stored (and in most cases, edited and revised) on a Macintosh. (A separate kit is available for Windows machines.) He never actually said as much, but clearly a portable Newton extends the flexibility and utility of a desktop computer. Even more clearly, a Newton really needs a desktop computer to take full advantage of its unique features.

Before closing with an extensive question and answer period, we got to see commercials. I'm not aware of any other computer company that routinely shows video commercials to user groups, or that has actually built a cult following of those commercials, but the Newton commercials might deserve their own cult. Two of them—one involving a vacuum cleaner, one involving the world's most boring meeting—brought tears to my eyes; they were painfully funny.

There were some interesting ironies surrounding this meeting. First,

the main topic was the Apple Newton, a flat computer weighing less than a pound. But to display the Newton to the audience, Apple rented several hundred pounds of audiovisual equipment, and the setup started shortly after 6 a.m. — three hours before the meeting. In contrast, setting up the Pi's Mac IIci (40 pounds, including monitor and keyboard) required about 10 pounds of projection equipment, and took five minutes.

Another interesting irony were the Complaints. People complained that the "Apple II meeting was taken over by the Mac people," forgetting, of course, that the Newton is not a Mac. Then there were complaints that there was "no Mac program this month," forgetting that the name of the organization is "Washington Apple Pi" — the focus is on computers, not any particular kind of computer.

But possibly the most interesting ironies involved the Questions. One gentleman said he was managing a project that might require 1,500 Newtons "just for the beta testing." Then he asked a torrent of technical questions about the Newton. Why didn't he ask the Apple engineers during the meeting. "Well, I didn't want to disrupt things."

Another person wanted to put a Newton in the hands of every one of their field personnel nationwide. "But we have both Macs and IBMs on the desktop. Do you think they could modify it to work with IBMs?"

"It already does, as long as the IBMs are running Windows."

"Oh. Well, that's too bad, we run MS-DOS."

"Windows runs under MS-DOS."

"It does? That's strange. None of our machines in the agency run Windows."

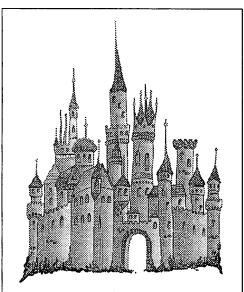
At this point, he then wanted to discuss MS-DOS and Windows, but I sent him off to chase down Rick Kapur, who is Apple's resident wizard at Newton to Windows connectivity. But Rick and Andy had reportedly already left for Chicago...

This does bring up a General Rule: vendors send representatives to Pi meetings to talk about their products. While there have been some noteworthy exceptions, these vendor representatives are the experts on their company products—so direct your technical questions to the representatives. While I don't mind offering opinions, keep in mind that Apple spent several thousand dollars to fly in and put on their Newton presentation, and directing your Newton questions to the Newton engineers seems the best mix of Apple's time and your needs. It might even be worth their missing a plane out of town.

November 1993

And speaking of engineers, Hewlett-Packard will send some of their finest in November as the General Meeting returns to Northern Virginia Community College in Annandale. The meeting will be a week early, on Nov. 20, to avoid conflicts with Thanksgiving. This will also be a Big Event, with Microsoft joining Hewlett-Packard for a busy meeting. Hewlett-Packard has, historically, given out the most spectacular drawing prizes during the entire year(printers! scanners! nifty pens!), and always brings first-rate people real, live engineers — to demonstrate their hardware.

Microsoft will be introducing their new Consumer Products division, with games and low-cost applications for the Macintosh. Microsoft is planning to arrange for a local dealer to be at the meeting to offer members special prices on selected software packages, so bring money. Or plastic.



Desktop Publishing **Graphic Design**

Greencastle Graphics Nancy Seferian

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1425 Foxhall Road, NW, Washington, DC 20007

December 1993

There will be no meeting in December, but the Pi will hold what promises to be their largest Computer Garage Sale — ever. Scheduled from 9 a.m. to 2 p.m., rain or shine, on December 11, the usual bargains, wheeling and dealing will be supplemented with a series of tutorials, including an "all day" Question and Answer session, complete with a Macintosh and projection system so you can actually see what everyone is talking about. There is a combination poster and map in the Journal, plus a copy saved as a GIF (Graphics Interchange Format) image, posted in Area 5, Pi Documents, with details on who, what, when, and where (why is left as an exercise to the user).

January 1994

Ares Software, postponed from

October, will be at the General Meeting on January 22, joined by Mannesmann Tally. Ares will demonstrate some font utilities, and tell you more about the mysterious world of fonts than you ever imagined. Mannesmann Tally will be demonstrating a portable PostScript printer and, unlike a preview shown during the past summer, this time they will demonstrate it using a Macintosh. And they'll give a printer away.

May 1994

MacWorld Washington, DC is scheduled for May 10-12 at the Washington Convention Center, and Washington Apple Pi will be the "host" user group. It is by no means too early to volunteer to help out; in addition to the usual booth volunteers, we need both people and ideas to make this MacWorld special.

Drawing Winners:

MacWorld: MacWorld Beach Party ballcap — Peter Hammond MacWorld: MacWorld CD-ROM — Harlan H. Gebhard

User Group Connection: T-shirt — Lynn Lasswell

User Group Connection: T-shirt — William J. Jones

BMUG: T-shirt — Jackson Jones Intuit: Quicken T-shirt—Seth Mize Intuit: Quicken 4.0 — Ken De Vito Apple Computer Corp.: Newton

Connection Kit — Rick Zeman Nabisco: 18 (eighteen!) Apple New-

tons — Rick Zeman

(The TCS Committee is saddened to report that, after sticking a Farallon PhoneNet connector into the carton of Apple Newtons, thus bringing them "online" on the Pi office network, the Newtons essentially "evaporated" in just a few minutes. But they were tasty.)

Supporting Cast:

Projection Panel: Proxima Ovation loaned by Proxima Corp. Setup: Tom Witte, Beth Medlin Question and Answer support: Tom Witte Penguins: Dennis Dimick, Nancy

Seferian

Mac IIci: donated by Falcon Microsystems

Bernoulli Transportable 150: loaned by Iomega Corp.

Apple Quadra 900: loaned by Skipole, Inc.

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Ghosts In Machines: On Being Online

by Lindsay Edmunds

n February, 1993 I started to use two online information services: CompuServe and America Online. My original motive was work-related. (I am a selfemployed writer and editor specializing in medicine and education.) Being online would provide access to research resources, enable networking with other writing professionals and facilitate quick and easy communication with non-local clients.

I discovered that being online does indeed enable all of those things. I discovered something else, too: being online is a kick—a kick I hadn't expected.

In the last nine months, I have learned that "cyberspace" is a vast, intricate place, with its own sociology, neighborhoods, turf wars, clubhouses, libraries, pick-up bars, park benches, underground railroads and performance spaces. It is a not a place where I want to be serious; it is a place where I want to jazz around.

Spectral Power

"There is a spectral power in thought that walks alone," the poet Emily Dickinson wrote 124 years ago. "Spectral power" is a grand phrase for most of what being online is about, which is ordinary stuff. (I've never had an online conversation about the power of thought that walks alone, but I've had several about the weather and more than I

can count along the lines of "where can I find/get x and how does ywork?") But Dickinson's statement is true regardless. Online, you are as incorporeal as a ghost.

Being just the sum of your thoughts is disorienting at first (like adapting to weightlessness). Then it is intoxicating. Then it becomes a strange, but intelligible, part of life, with good and bad aspects. Alive in agrav (agrav is science-fiction novelist Vernor Vinge's term for weightlessness), you have no body, no past, and only as much present as you choose to reveal.

The kick is that individual identity survives this translation. In fact. identity may be sharpened and heightened in cyberspace. One of the first pleasures of being online is learning to sort out and respond to other people on the basis of their words alone. Bonds form and break. fights start, affection is poured out, support is given, learning is accomplished. All that in a gray country of fog and spirit.

In one way, what happens online is the same thing that happens via any type of remote communication: television, radio, telephone, fax, books, articles, even the humble handwritten letter. What's different about cyberspace is that it really is a space—a place where thousands or millions of people congregate. You do not need to be a celebrity to speak to a wide audience of strangers; you do not need to be a

spy to eavesdrop on the conversations of others.

Coins on the Table

In the country of words, information rules. We are the information we give away, and the information we ask for. Facts, rumors, and opinions are bartered like goods at a bazaar.

Here are a few "info-coins" that I've gathered in the last several months, in no particular order of importance:

- The composer of "Graceful Ghost Rag," William Bolcom, recorded this haunting piece on a Nonesuch album called Heliotrope Bouquet.
- T-cells get their name from the fact that they mature in the thymus gland, a pyramid-shaped organ located near the heart.
- The idea of Norwegians colonizing space is heresy.
- · Professional writing skills are a plus if you want to work for the Atlantis Project, a Las Vegas, Nevada-based organization that is creating the new country of Oceania. (Just when I thought all the good jobs were gone....)
- Tom Servo's head is a red gumball machine made by Carousel Industries of Des Plaines, IL: the name for it is "executive snack dispenser."

If you hang around long enough, vou learn what information is valuable and what is considered junk (something that varies from group to group). More important, you learn what coins you want to put on the table, so to speak. How much you are willing to give in exchange for what you want is a key question online, as it is offline.

Mystery Train

I am taping episodes of Mystery Science Theater 3000 for someone I met through the AOL MST 3K fan club. Our cyber-friendship enables the last leg of a long journey that starts in Eden Prairie, Minnesota, where MST 3K is produced; proceeds to New York-based Comedy Central; lights out into space, where the broadcast signal is bounced off a satellite; comes back to Earth at Cable TV Montgomery, which sends the transmission into homes in suburban Maryland; zeroes in on my living room, where a six-year-old Zenith VCR translates the signal back onto videotape; and ends with the tapes doggedly making their way via snail mail to a small town in New England—to the home of a guy I don't know except by E-mail.

This connection is ordinary and unremarkable only if I don't think about it too hard.

A Hothouse for Thought

In cyberspace ideas grow fast, and they can grow very strangely. The most freakish, feverish, and colorful of these ideas develop during "flaming"—intense attacks of someone or something. Like the man-eating plant in The Little Shop of Horrors, these freaks of thought can rage out of control.

Information itself has a wide range of operating temperaturesfrom cold facts to blazing opinions. Part of adapting to life online is determining the climate you prefer.

The Wood Where Things **Have No Names**

Connections can be made online that would be impossible or incredible offline. I have made a few myself. These are drifting, gentle, undemanding friendships based on a common interest.

In Through the Looking-Glass, Alice walked through a place called "the wood where things have no names" with her arms around the neck of a fawn. When they came out the woods, the fawn remembered its name ("I'm a Fawn!") and recognized Alice for what she was-a human child: "A sudden look of alarm came into its beautiful brown eves, and in another moment it had darted away at full speed."

The anonymity of cyberspace is why there can be an unspoken fear about pushing a connection too farmeeting your cyber-pal face to face, for example. It might be fun. It might be the end of the relationship. When you come down from cyberspace, you have names for lots of things.

Holding onto the Air

There are two approaches to talking online. They are extremes, and most people use a combination of both.

The first approach is to decide that anything goes---you say whatever you want to say, to whomever you want to say it. If you want to write a 500-word post, you write one. If you want to rip someone's arms off, metaphorically speaking, you do it. You operate from impulse.

The second approach is based on restraint. You move around cyberspace as you might move around outer space (rather carefully, that is). You weigh and choose your words. You treat feelings and opinions as though they were explosive devices. Your posts are outer-directed rather than focused on self.

In my experience, the most advanced online communicators lean toward the second approach. They never brawl. Most of the time they don't have a huge amount to say, either.

No Rules

There are no rules for cyberspace. You can tell the truth or lie; be yourself or invent yourself. However, I've noticed that the following guidelines apply if you want to develop a good relationship with an individual or group.

Cut and simplify; boil your

words down to the essential few. In this respect you should think like a poet, although without a poet's highbrow phrasing. Fancy words have a very low flash point in cyberspace and tend to make you look foolish.

Some gifted people can write on and on and stay interesting, even as the online meter ticks. They are the exception, though.

Be yourself. As a ghost, you are transparent. Remember that. You can be seen through, just as you can see through others.

Stay frosty. Fights start easily online. A delicate touch when choosing words can be a definite asset—unless, of course, a brawl is the point. The power of online words can be deflected, too. Deflection is one of the functions of emoticons :-).

Give the Poet the Last Word

When Emily Dickinson remarked on the spectral power of the mind alone, she referred to books and letters. But if she were alive and online today, she would find the truth of that romantic metaphor written larger than ever, in millions of posts and cross-flying E-mailoutrunning the body, erasing the miles.

Lindsay Edmunds is a self-employed writer and editor. She can be reached via America Online (LindsayE) and CompuServe (73520,642).



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Macintosh Tutorials

Volunteers and Instructors

You can't have training without teachers. If you have expertise in any subject useful to Mac or Apple users, please consider teaching. Instructors have an opportunity to work with students in small groups and informal settings. The teaching process is truly rewarding. Besides the spiritual and intellectual, rewards also include compensation; you will be paid. We especially need someone who can offer training in *HyperCard*. Call me if there is a subject that you are qualified to teach.

I am very pleased with the response to our requests for volunteers. We have a very bright and enthusiastic group of volunteers working to bring you the best possible classes and programs. We encourage and welcome additional support for the training program. Graphic designers, desktop publishers, and illustrators—we could use your help in promoting our program with brochures and fliers. For further information call Beth Medlin at the Pi office, (301) 654-8060.

Macintosh Tutorials

The Macintosh introductory tutorials are a three-part introductory series designed for beginning users or those desiring to brush up their skills. The primary focus of these courses will be on the System, Desktop, Icons, Windows, and basic concepts in System 7, but System 6 hangers-on are welcome and encouraged to participate. Their issues and concerns will be addressed. Please try to take all three parts; this is the most beneficial arrangement.

Some Specifics

- Where: Unless otherwise stated, all tutorials sponsored by Washington Apple Pi are given at the office located at 7910 Woodmont Avenue, Suite 910, Bethesda, Maryland.
- When: Unless otherwise stated, all tutorials are three hours in length and begin at 7:00 PM on the date listed. The office building is secured at 6:00 PM. To gain access, pick up the telephone located by the glass entry doors and tell the operator where you are going.
- Fees: \$25.00 perclass for mem-

bers and \$35.00 per class for non-members. Pre-registration and payment must be made to hold a seat.

- Class Size: Class size is limited to 6 students per class.
- Bring my Computer? All classes are taught seminar-style with the instructor using a computer and an overhead display. We encourage students who wish hands-on training to bring their computers.
- Instructor Cancellation: If a class is canceled by the instructor, all students will be notified of the cancellation. Please check your home answering ma-

Introduction to the Macintosh, Part I (Course # M120693) You should go through the Guided Tour disk that comes with your computer or system upgrade kit before you come to class. You'll learn: how to safely turn your Macintosh on and off: what the basic dos and don'ts are: how to understand common Macintosh terminology found in manuals and other documentation; and how the basic components of your Macintosh system, hardware and software, work. You'll also learn why the Macintosh user interface is consistent across all applications, and how this makes learning and using software easier.

Materials Required: Your Macintosh, hard disk drive, start-up disk, and an unformatted DSDD 800k disk.

Date: Mon., December 6, 7-10 pm.

Introduction to the Macintosh, Part II (Course # M121393) Part II will continue the exploration of the basic components of your Macintosh system, hardware and software. You'll learn more of the dos and don'ts; the finer points of the Menu Bar, Error Messages, Dialog Boxes, Icons, Folders, Keyboard Shortcuts, Scrap-

chine if you have not given a work number for notification.

■ Student Cancellation: A cancellation must be received by the office 72 hours before a classisscheduled: The only exception to this is a cancellation due to illness.

December Tutorials are the 4 basic ones:

- —Intro to Mac 1 12/6/93 (M120693)
- —Intro to Mac 2 12/13/93 (M121393)
- —Intro to Mac 3 12/20/93 (M122093)

Barra Sarayan di Jeya Waka di Waka di Waka di Alama da Kara

—**Maintaining the Mac** 12/29/93 (M122993)



book, and Clipboard will be discussed. You'll learn the basics of installing software, as well as about the Chooser. peripheral devices, and how they are connected to the Macintosh.

Materials Required: Your Macintosh, hard disk drive, start-up disk, and an unformatted DSDD 800k disk. Date: Mon., Dec. 13, 7-10 pm.

Introduction to the Macintosh. Part III (Course # M122093) Part III will follow up the concepts in Parts I and II. You will learn more advanced Macintosh skills and terminology; about the system software and using, installing, and updating system files; about managing memory, hard disk space, fonts, sounds, and other resources, the Apple menu, aliases, launching applications, inter-application communications (Publish and Subscribe), and Balloon Help. You'll also learn about how to buy hardware and software, how to upgrade, and what kinds of software are available for your Macintosh.

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Materials Required: Your Macintosh, hard disk drive, start-up disk, and an unformatted DSDD 800k disk.

Date: Mon., Dec. 20, 7-10 pm

Maintaining Your Macintosh (Course # M122993) How to maintain and troubleshoot your Mac. Topics will include: organizing and managing your hard disk; backing up and back-up strategies, archiving, disk formatting, defragmentation and optimization; managing start-up resources (including System 7 extensions or System 6 INIT's); avoiding conflicts and incompatibilities; virus protection; memory management; upgrading or replacing the operating system; system enhancements; customizing software installation; cleaning your mouse; and Macintosh "housekeeping" philosophies.

Date: Wed., Dec. 29, 7-10 pm.

Washington Apple Pi Tutorial Registration Form

Washington Apple Pi 7910 Woodmont Ave., Su. 910 Bethesda, Maryland 20814 301-654-8060

Basic Information Course Numbers Please fill in the course number of the class(es) that you wish to attend. City/State/Zip _____ Class #1_____ Phone (day) _____ (evening) _____ Class #2 Member Number _____ Non-member _____ Class #3_____ Number of Classes _____ x Class Fee \$ ____ = Total Fee \$ ____ Class #4_____ Check/Money Order Credit Card Card Number _____ Class #6_____

No

Yes

December 1993

Card Expiration _____ Signature ____

Can you bring your own computer to the class?

WAP Form #CL006 (mod. 7/90). Mail registration

and payment to the above address.



Macintosh Special Program

Performa Products Promotion Program

Apple Computer is again making it possible for the Pi to bring you computer hardware savings. may recall that this summer the Pi, along with a few other user groups, was invited by Apple to participate in a prototype sale of discontinued Performa 400 computer systems. The User Group community acquitted themselves quite well and Apple has decided to make these kinds of sales a regular part of its relationship with user groups. At the beginning of each month, we will receive a list of com-

puter equipment and peripherals that have been discontinued, are excess stock or have been refurbished. Apple will offered these items for sale to our members at significantly reduced prices.

For the month of November. Apple is offering the following Performa computers and printers. The Performa is the consumer line of Macintosh computers. They are the same as their Mac counterparts, except where noted.

The first offering is the Performa 200 [Macintosh Classic II]. It may turn out to be the last monochrome compact unit from Apple. It has a

> built-in SuperDrive, comes with 4 megs of RAM and an 80-meg harddrive. The central processor is a 16 mhz 68030. This allin-one classic is great for the tightest of work spaces.

> The second offering is the Performa 405 [Mac LC II]. It is a very affordable modular color unit. You can add the IIe emulation card (available from Apple retail channels) so as to run Apple II software.

> The Performa 450 is the LC III. This model offers a 25 mhz 68030 chip with the possibility of adding a math coprocessor. If there is a CD -ROM in your future, this is the color unit to consider.

The Performa 600CD [a IIVX derivative] is a neat package. It is fully equipped with an Apple 300CD, the 14" Apple Trinitron monitor, 5 megs RAM/160 meg HD and the Apple extended keyboard. It uses the 32 mhz 68030 chip.

Each Performa comes complete with the standard Mackeyboard (extended with the Performa 600CD). mouse, monitor, all cables, system software (7.01p for the 200, and 7.1p for the others), and ClairsWorks 1.0. The 600CD comes with 8 CDs, including Alice to Ocean, an encyclopedia, Nautilus, etc. [See footnotes for additional details.1

We have the first PowerBook offering. It is the Model 170. With its sharp active-matrix screen and 4 megs RAM/40 meg harddrive, the 170 gives you the option of adding a math co-processor to its 25 mhz 68030 CPU. There is room for an internal modem (not included).

Finally, the StyleWriter II inkjet printer is available this month. It offers laser-quality (360 dpi) printing at a very affordable price. It takes advantage of Apple's GrevShare software which allows printing sharing and gray-scale printing for sharp printed graphics.

You can order any of this equipment from the User Group Connection in one of the following three ways:

- A Cashier's check made out to **USER GROUP CONNECTION** INC. and sent to User Group Connection, PO Box 67249, Scotts Valley, CA 95067-7249.
- 2. VISA or MASTERCARD orders by fax to 408-461-5701
- 3. VISA or MASTERCARD orders sent via AppleLink USER.GROUPS or via AOL to APPLE UGC

Be sure to include your Washington Apple Pi membership number.

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Product #	Model: RAM/HD Size	Cost
M1686LL/A	Performa 200: 4/80(internal 9")	\$ 549.00
UGC405	Performa 405: 4/80 (.39 Monitor)	\$ 659.00
UGC450	Performa 450: 4/120w (.29 Monitor)	\$ 799.00
M1383LL/A	Performa 600CD: 5/160 w/CD (14" Apple RGB Monitor)	\$1479.00
M1174LL/A	Powerbook 170: 4/40 w/o modem	\$1299.00
M2046LL/A	Stylewriter II (inkjet printer)	\$ 229.00
The shipping o	charge for each product ordered is \$15.00	

Notes:

- * Refurbished products are equipment that has been returned to Apple by existing resellers. It may have been returned for any number of reasons, including discontinuation of that model, a return by customer, or a malfunction in the product. All returns are checked for proper function, repaired if necessary, repackaged, and marked "refurbished" on the box.
- ** Orders will be taken on a first come, first serve basis and only from Nov. 1 through Dec. 15, 1993.
- *** Shipment of all orders will be made the week of December 15th.
- ****All products come with a 90day in-home warranty.
- ***** You must be a member of a user group, such as WAP, to participate.

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rtists on exhibit

by Blake Lange

This column will look at the art and artists of Washington Apple Pi and the techniques and tools used to create the art.

Artist Info: Nick Freda is the Supervisor of the Art and Illustration Section for the U.S. Government Printing Office in their Office of Type and Design commonly known throughout the Government as T&D. This group of designers have the additional distinction of being experts in printing technology and part of their responsibility is to act as printing graphics consultants to the Federal Government. It is interesting to note that T&D has twelve Macs and only one PC.

Many of the seals and logos in use by the United States Government have been designed by this office. This month we are going to look at the process used to create the logo for the Chemical and Biological Defense Command at

> Aberdeen Proving Ground in Aberdeen, Maryland.

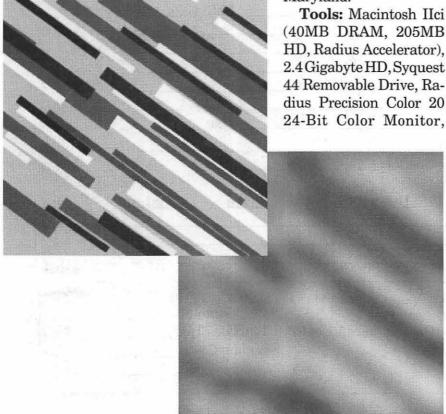
> Tools: Macintosh IIci (40MB DRAM, 205MB 2.4 Gigabyte HD, Syquest 44 Removable Drive, Radius Precision Color 20 24-Bit Color Monitor,



Howtek Scanmaster 3+ Scanner, Adobe Illustrator, Adobe Photoshop, QuarkXPress, Canon CLC 500 Printer with a Fiery RIP (for proofs), and the Linotronic L-300 Printer.

Techniques: Initially a rough sketch was all that was provided with the request for the creation of a finished 4-color process seal. The first step was the creation of an outline in Adobe Illustrator 3.2. To accomplish this the rough drawing was scanned and used as a template in Illustrator. The template was then traced and the drawing polished. Then the type was added. At this point the type was converted to outlines. One of the policies of T&D is to always convert type used in logos to outline objects. This eliminates the need to provide fonts when printing the logo at some later time.

The second step is to separate the seal into parts. The outline



border and the type outlines were to be used as masks. The way a mask works is that it becomes filled with whatever is behind it. The intention was that there would be a pattern behind the logo giving it a gold metallic quality.

The pattern was created in Adobe Photoshop because it has a good collection of what are known as filters for creating special effects. Applying a filter to a graphic is one of the most memory intensive tasks one can do on the computer so requires a powerful system. The first step in creating the pattern was to use the line tool with various width designations using CMYK colors. [CMYK stands for the four primary colors used in printing:

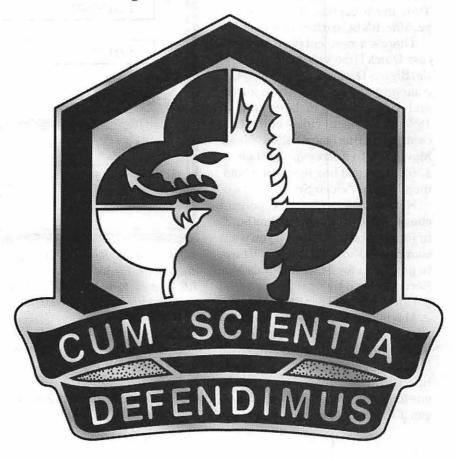
SCIENTIA CUM DEFENDIMUS

Cyan, Magenta, Yellow, and Black.] This pattern was then given a Gaussian Blur (8 pixels) to create the background fill.

The seal was assembled in Photoshop. First the seal mask was brought into Photoshop from Illustrator. There it was filled with the Gaussian Blur. The drawing of the seal without the text was placed on top of that image. The outline type was then brought in, positioned, and filled with the blur pattern. In the final seal the hexagon and rib-

bons are blue, the club is red and white, and the blur is golden vellow. Each area is outlined in black.

The entire finished seal was saved as a CMYK tiff image, brought into QuarkXPress 3.11, and then 4-color film separations were output on a Linotronic L300 at 2540 dpi, 150-line screen.





Movie Movie: Video Capture Card Sounds Like a Good Deal

© 1993 Dennis R. Dimick

o doubt you've seen Quick-Time movies, and have wished you could make some yourself. You probably have a video recorder or camcorder, and a stack of recorded tapes. You've been puzzling, "Now all I need is a way to get those video images into my Macintosh."

Wait no more. Until lately, unless you've acquired one of the new AV Macs or you're a high-dollar video producer, your Mac video capture options have pretty much been limited to Video Spigot, a Quick-Time movie capture board from SuperMac. It's been extremely popular.

There's a new entry in the low-cost QuickTime video capture arena. Sigma Designs, a Fremont, CA, company specializing in monitors and video cards, in late summer 1993 released a video and audio capture NuBus board called "Movie Movie." With a street price of about \$300, this card has much to recommend it over Video Spigot.

Not only is it about 20 percent cheaper, Movie Movie also has builtin sound capture ability. If you want sound with Video Spigot, you'll have to pay extra for MacroMedia's Mac Recorder (and tie up a scarce serial port for its audio capture box.)

Movie Movie is a 7-inch card designed to fit in Centris 610s (with NuBus adapter) and any Mac with NuBus slot capability. Movie Movie has RCA-type plugs on the back, one for NTSC (regular North American TV) video, and monophonic au-

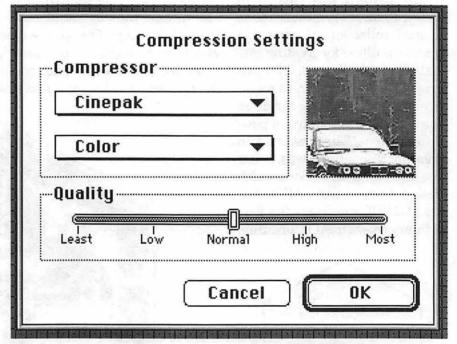
dio (22-Khz) input.

Movie Movie does not support output to video tape, but if that's what you need, first get a Quadra 840AV and spend another \$3500 for Radius Video Vision Studio, the only card (as of mid-October 1993) that

the essence of Movie Movie is that it works smoothly. I've been using this card for more than two months now and can say it works the way Sigma Designs says it should. I've never had a problem.

Ever since Video Spigot hit the market, I was intrigued, but the price seemed high, especially since it wasn't easy to tell the level of its audio support. The catalogs and ads always said, "Video Spigot Plus Sound," and of course the price was more than a hundred dollars higher. What? Video Spigot was a videoonly board? When's the last time you watched a silent TV program?

Then last spring I started hearing about the impending arrival of



Movie Movie's ScreenEdit utility offers a typical QuickTime compression dialog box. Please note that "Cinepak," a compression offered in QuickTime 1.6.1, used to be called "Compact Video." Several compression types and qualities are available via QuickTime.

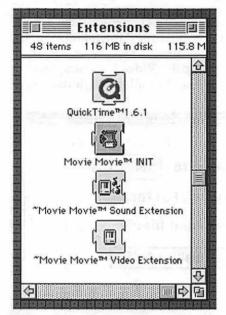
cleanly supports full-screen flickerfree (60 fields per second) video and stereo audio out to tape.

Movie Movie's Superb Simplicity
Other than price and features,

Sigma Designs' Movie Movie card. Video and audio all in one. Now we're talking, so to speak. Besides, my three-slot Mac IIci has only so much room, and both serial ports are in use for printing or telecom-



munications much of the time. After a video monitor card and a Quick-Time capture card, I wasn't interested in devoting my last open Nu-Bus slot to an audio card, or fiddling



These extensions must be in your system folder for Movie Movie to work properly. Programs such as Adobe Premiere and Avid VideoShop require the sound and video extensions when capturing QuickTime with Movie Movie.

around with juggling serial port cables. This is why Movie Movie sounded (if you will) like the card for me.

Performance Details: Vastly Variable

Movie Movie supports 16-bit video. This means thousands of colors in Macintosh video parlance. Video Spigot claims to support 24-bit, or millions of colors, but I'm not sure whether that's significant since Apple's QuickTime video standard is optimized for 16-bit video.

Sigma Designs claims 30 frameper-second capture performance for Movie Movie. It seems to do just that at the 160x120 pixel frame size. Bigger frame captures up to 320x240 pixels have very good video

quality and audio synchronization, but frame-per-second performance is also dictated by many variables beyond the Movie Movie NuBus card itself.

Your CPU chip and logic board, clock speed of both, available RAM, QuickDraw video acceleration, hard drive speeds and SCSI data transfer rate, QuickTime frame size and type of compression all have significant impact on the rate Movie Movie can capture video and sound. Your success will depend on experimentation to find optimum conditions for your equipment setup.

All things being equal, a Quadra 700 will give you larger video frames at higher rates per second than a Macintosh IIci. A highly accelerated (e.g., 40 MHz 68040) IIci with lots of RAM and QuickDraw video acceleration can give you better QuickTime capture performance than a stock Quadra 700 with less RAM. To say the least, performance variables in movie capture, storage, and display are enormous.

Still Frames from TV: Snapshots

Movie Movie does a good job of capturing still frames from video at pixel sizes up to 640x480. I've had quite a bit of experience with Photo-CD, and was interested in adding another image source to my bag of visuals. Movie Movie provides great raw material for still frame editing with programs like Adobe Photoshop or Fractal Design Painter. You are of course limited to the visual quality offered by NTSC television, which is pretty dismal, compared to any good quality still photographic image.

Here's an example of what you can do with still-frame capture. This fall, a peace treaty signing took place at the White House in Washington, DC, between Israel and the Palestine Liberation Organization. I was able to get from television a 640x480 screen shot of PLO Chairman Yassir Arafat offering his hand to the Israelis, and had a print from a Laser Writer minutes afterward and nearly a day before newspapers arrived with



This frame, taken from CBS, was cropped from a 640x480 pixel still screen capture via Movie Movie. This ceremony between Israel and the Palestine Liberation Organization took place at the White House in Washington.



this image on the front page.

Movie Movie also produces full 640x480 motion video, but framesper-second performance is probably no more than 10, even on a very fast Mac.

Movie Movie's Software and Manual: No Frills

Movie Movie comes with two disks of installation software, including QuickTime 1.6, Movie Movie Extension, and video and audio digitizer extensions. The digitizer extensions are needed so programs like Adobe Premiere or Avid VideoShop, which can capture audio and video directly, know Movie Movie is present in your computer.

Movie Movie also comes with a QuickTime movie capture utility called ScreenEdit. It's a basic utility program that allows you to view and listen to incoming video at the same time, and gives you a variety of choices about capture size, QuickTime compression selection, and image quality vs. speed of capture.

It also has on-screen slider bar controls that allow you to modify audio levels (though it won't help if you have weak incoming audio to begin with,) and a set of controls allowing change of brightness, hue, saturation and sharpness.

ScreenEdit does not provide any image cropping at all, so if you have any incoming video edge glitches from broadcast, or a poorly composed camcorder tape, you'll have to look elsewhere for video frame cropping tools.

ScreenEdit also allows you to watch TV while doing other things with your Mac. If you have enough RAM installed and a big enough screen, it's possible to set up a 160x120 window in the corner of your monitor and watch (and listen to) whatever you like while writing the Great American Novel.

The 33-page book that comes with Movie Movie is more a booklet. It gives clear instructions on how to install the card and software, and offers basic information on what QuickTime is, and how to capture a movie or still frame. Beyond that, you're pretty much on your own.

A Trip to Radio Shack: Cables Please

You will need to buy cables to link your VCR or TV to Movie Movie, as these do not come in the box with

Cinepak: Read the QuickTime "Read Me"

I did come across one point of confusion during installation, as I already had been using QuickTime 1.6.1, a bug fix from Apple that superseded the QuickTime 1.6 extension on the Movie Movie disks. Movie Movie's book describes using "Compact Video," a compression scheme that allows high data com-

□ Compress recorded movie Recording drive: graphics.230 Still Capture Size ○ Current window size ○ Small screen ○ Large screen ● Full screen interlaced (still source)	Recording ———— □ Limit recording	speed to 30 fps lity () Faster
○ Current window size○ Small screen○ Large screen⑥ Full screen		
○ Small screen ○ Large screen ● Full screen	Still Capture Size	
○ Large screen Full screen	O Current window	ν size
Full screen	O Small screen	
	○ Large screen	
O Full screen interlaced (still source)	Full screen	
	O Full screen inte	erlaced (still source)

ScreenEdit offers several options for QuickTime capture. You can, for example, choose higher frame rates per second, but quality will be slightly degraded. Final movie quality depends mostly on the CPU and speed of your computer, the size and speed of your hard drive, and how much RAM you have installed.

the card. A quick trip to Radio Shack or other electronics store should suffice. You will need cables with RCA-type connectors (just like the ones you use to hook up tuners, tape decks and compact disk players to stereo receivers.) If you have a stereo sound source, you also will need a Y-type connector that merges the left-and-right channel connectors to the one monophonic input on Movie Movie.

pression with little loss of Quick-Time image quality.

After installing Movie Movie, "Compact Video" was nowhere to be found, and I thought something was wrong with the software. I queried Sigma Designs' support team on CompuServe and was told to use QuickTime 1.6. Of course, had I or Sigma Designs' Tech Support people bothered to read the "Read Me" file that comes with QuickTime



1.6.1, we would have discovered a note explaining the name change from Compact Video to Cinepak. The compression scheme remains the same, though.

ly released Adobe Premiere 3.0 explains that Cinepak has replaced Compact Video as a capture compression option.



This uncropped 320x240 pixel image from CNN shows the image quality available in a smaller still frame capture. This scene occurred at Ramstein Air Force Base in Germany after a hostage American soldier had been released by Somalis.

Finding Out About QuickTime

Movie Movie clearly is designed for the entry-level user, and would benefit by having more comprehensive explanations of QuickTime. However, there are several fine books now on the market to help you with QuickTime, so this is not a big deal, especially at Movie Movie's price.

One good starter book on Quick-Time is "Quicker QuickTime" from BMUG. Another is "Mastering the World of QuickTime," from Random House Electronic Publishing. A third is "MacWeek Guide to Desktop Video," from Ziff-Davis Press. Buyer beware, none of these three otherwise fine books mentions, "Cinepak," as a QuickTime compression option. Only the manual to the recent-

Movie Movie Has Its Flaws

ScreenEdit does a fine job of synchronizing audio and video with the Movie Movie card. I can't say the same when using Movie Movie with other video programs like Premiere or Diva VideoShop. I'm not sure why audio gets out of synch with these programs, but it's not a huge concern since these are programs designed more to edit what you already have captured with ScreenEdit.

ScreenEdit also limits capture sizes to 160x120 or 320x240 Quick-Time movies, and it offers no provision for capturing an intermediate size such as 240x180. I would love more flexibility here, as my Mac easily does 30 frames per second at the smaller size, but not as well at the larger size. An intermediate capture size would allow me to still get high frame rates and a bigger frame size than the tiny 160x120.

A Bundle with VideoShop

One version of Movie Movie comes bundled with Avid (formerly Diva) VideoShop, a popular QuickTime video editing program. This bundle has a street price of somewhere between \$350-\$400. When Movie Movie came out last summer, Diva VideoShop 1.0 was included, but VideoShop has since been bought by Avid, and the program has been upgraded to version 2.0. Early reports say Avid VideoShop 2.0 is a pretty cool editing program especially since its redesign to eliminate (slow) HyperCard dependence.

The Movie Movie/VideoShop bundle may be all the video capture/ editing package you ever need. (As an aside, Adobe has just introduced a \$160-180 street price product called Audition, which includes limited edition versions of Premiere, its video editor, and Photoshop, Adobe's image editor.)

Grab Those Frames. **But at a Price**

Movie Movie is a great low-cost way to get into QuickTime movie capture. In some ways though, Movie Movie may end up being the cheapest part of the equation. You'll need a Mac that supports 16-bit color video. Anything more (only) or less and video capture is degraded. Be sure you have a nearly empty big and fast (230 MB or lots bigger) hard drive and lots of RAM.

Video capture requires a minimum of about one MB hard drive space per second of uncompressed video captured to disk. In most cases you need to capture video without compression, as on-the-fly compression during capture reduces your frame rates dramatically. You can compress later while editing. If you have enough RAM, it's possible to



capture to RAM, getting much higher frame rates and bigger pictures, at least for very short time bursts.

Sound Movies for the Rest of Us

QuickTime is an exciting technology that has allowed the Macin-

this attractive new audio and video capture card from Sigma Designs.

I've been very pleased with Movie Movie, and expect you will be too if you need a low-cost way into Quick-Time movie-making. ered in Dimick's basement. Maybe the Beta tape will be worth something one day. Besides the WAP TCS, Dennis can be reached via email: ddimick@aol.com.

What: Movie Movie, a NuBus Quick-Time Video and audio capture card. It captures 16-bit video and 8-bit (22KHz) monophonic audio. With required software extensions and 33-page booklet. This seven-inch card fits Centris 610s (with NuBus adapter) and all NuBus Macs.

Requires: System 7, QuickTime 1.5 or later, 4 MB minimum RAM, 8 MB recommended, 80 MB hard drive.

Price: Approximately \$300 street, approximately \$400 street with Avid VideoShop 2.0, a QuickTime video editing program.

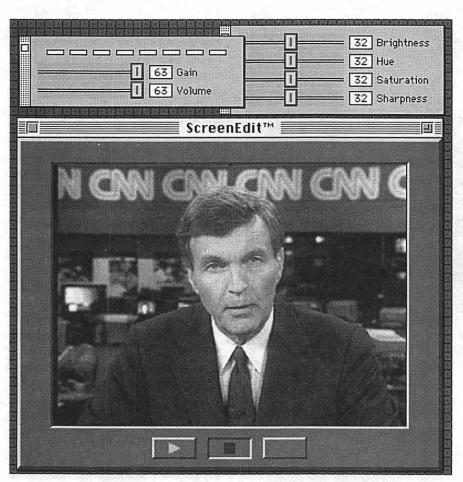
Manufacturer: Sigma Designs, Inc., 47900 Bayside Parkway, Fremont, CA 94538

Telephone: 510-770-0100

Fax: 510-770-2905

Sales Information: 800-845-8086

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Anchorman Ralph Wenge of CNN appears in a 320x240 capture window produced by Movie Movie's ScreenEdit Utility. Slider-bar controls for audio level and video quality appear at top. Screen Edit limits capture sizes to 320x240 or 160x120 pixel sizes.

tosh to move easily into multimedia and video production roles. But Quick-Time requires incredible amounts of CPU and hardware power.

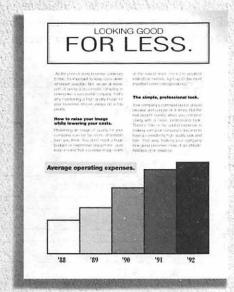
These issues deal less with Movie Movie and more with challenges faced by any Mac user moving into the QuickTime video realm. The books noted earlier already address these larger issues, which are way beyond the realm of a discussion on

Dennis Dimick's first QuickTime movie was nine seconds seconds long, takes two MB of disk space, and was created from the original pilot program of "Max Headroom," a futuristic "Blade Runner" -like 1987 program that lasted six weeks on ABC. Max, who later gained fame in Coca-Cola commercials, originally was recorded off cable to a Beta format tape recently discov-

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An ASTOUND ing **Presentation!**

by Norm Gebhard

ave you ever needed to get a presentation ready in just a few short hours and wished that you could include a Quicktime Movie, great sound and impressive animation effects, without hiring to have it done? If so, then Astound from Gold Disk may just be what the doctor ordered.

Installation

Astound starts with an impressive array of clip art (over 500 pieces) and a straightforward installation procedure. The recommended installation which includes the main program, templates, QuickTime, simple QT player, true type fonts, various sounds, a Windows 3.1 player and the above mentioned clip art, requires a hefty 20 Megs of storage on your no doubt already overloaded hard drive. The only problem I encountered in using the recommended installation procedure was that it replaced my up to date QuickTime 1.6.1 (thanks TCS) with the older 1.5 version.

What's in a Name?

Astound claims to be a presentation package that lets you create traditional presentations as well as ones with exciting multimedia effects. I feel that it lives up to that claim and for a program that has so much power it is relatively simple to learn and use.

In its form as a slide maker, Astound is a direct competitor to both Microsoft PowerPoint and Aldus Persuasion. It offers all the basic tools that users of both those products will recognize and more. The Outline View (see outline window graphic) is reached by clicking on the outline icon and displays a text outline of all the slides in the presentation. You can use the outline to enter the text for your slides or you can enter text directly on the slides. Regardless of how text has been entered you can quickly edit, rearrange or add text using the outline view.

Full text editing capability available in the slide view and includes conover trol font, style, size, leading, justification, kerning and color.

Astound offers a slide sorter also accessed

through an icon. The slide sorter provides you with a thumbnail view of each slide and allows for rapid renaming or reordering of your presentation. Additionally, while in the slide sorter you can perform actions on all selected slides. For example you could change the background color of your entire presentation or on only selected slides.

Astound uses the Master Slide motif to contain the attributes of your presentation. For example a master called Company could hold your company logo and normal background color, as well as a title placeholder and perhaps a company sound track. A second master slide could hold a chart placeholder, which depicts a chart showing company monthly profits. Astound would access the profit data directly from your Excel or Lotus 1-2-3 spreadsheet using System 7's Publish & Subscribe capabilities.

To Template or Not to Template...

To ensure consistency in your presentation you will probably want to use templates. A template is a set of master slides. Astound provides you with 35 predefined templates which have been optimized for various sized monitors, slides, and transparencies. The templates in addi-

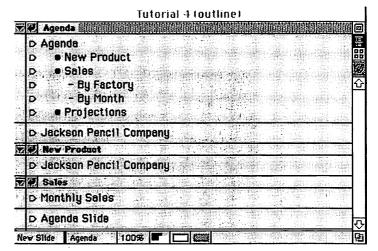


Figure 1—Outline

tion to having various title placeholders and background colors also have built in animation features. Animation such as birds that fly across the presentation, letters that fall from the top of your screen, bullet sentences that enter from the right side of your screen, as well as various sounds and even QuickTime movies. The templates are a great



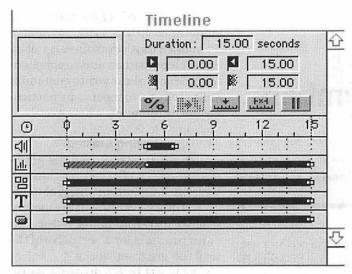


Figure 2—Timeline

place to start on that last minute presentation you need to have ready in the morning. Of course, you can also build your own templates with as many multimedia effects as you need to sell your point. These templates can be saved and any object or picture can then used in future presentations. The 500 + clip art

objects which c o m e with Astoundare accessed through this same library feature and if you're artistic minded, Astound comes with a full range of

drawing tools. Normal draw functions such as grouping objects, layers, aligning, are all integral parts of Astound. You can also convert objects to PICT or Bitmap formats.

The package also includes the required utilities to create postfiles script which can be sent to the Autographix Slide Service for creation 35MM slides.

The Sands of Time...

The real strength of Astound lies with

its ability to add multimedia elements to a normal slide presentation. The main tool used in this process is the timeline. The timeline is the key to controlling all audio and visual events in your presentation. (see timeline window) The timeline window controls the sequence and timing of events and transitions within an individual

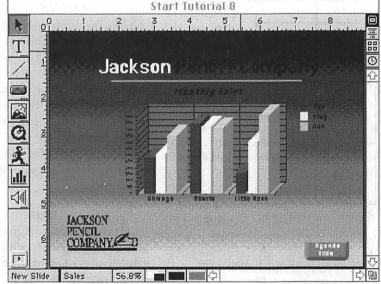


Figure 3—Slide Sample

slide, as well as the timing of slides within a presentation. Timelines control all aspects of a multimedia presentation. For example, you can have a timeline that controls an

object's sound, transition, and path of animation. Timelines can also control QuickTime movies. You can control an object or QuickTime movie in seconds or as a percentage of the slide's duration. A nice feature is the ability to add a button to a screen. Once you work through the tutorial, using the timeline becomes relatively simple while offering unprecedented control over your presentation.

Imports

Astound offers a full range of import capabilities and can import objects, spreadsheet data, pictures, and QuickTime movies. Images can be imported in various formats: PICT. GIF, TIFF, PCX, EPS, Photo CD, JPEG, and BMP. Sounds that can be imported include SND resources, SoundEdit, SoundEdit Pro, Audio IFF, Amiga IFF & Waveform Audio (PC Windows Wave). Additionally Astound can import PowerPoint and Persuasion presentations.

The Bottom Line

Macworld gave Astound a four star rating, while MacUser gave it 4 1/2 mice; I have to agree. Gold Disk has made a big splash in the multimedia presentation market with Astound. The suggested retail price for Astound is \$399 but as an introductory offer the program is available for \$99. I highly recommend that anyone thinking of buying PowerPoint or Persuasion or looking seriously at multimedia presentation software give serious consideration to Astound.

Vendor: Gold Disk System Requirements: MAC Plus or later, Requires System 6.0.8 System 7 recommended.

Name: Astound

Minimum of 4 Megs required for system 7,8 Megs or more highly recommended

Hard Drive required Any Monitor, but color recommended.



SYSTAT for the **Macintosh: Crunch Numbers** Without a Cray

© 1993 Kathleen G. Charters

YSTAT for Macintosh is a comprehensive graphics oriented statistics package. SYSTAT applications include (but are not limited to) biomedical, environmental and social science research. This program requires Macintosh System 6.0.2 or higher, 2 Mb of RAM, and a hard disk drive. It comes with two program disks (either the 68020+/coprocessor version or the 68000 non-coprocessor version); a data disk (with sample data, help files, and import drivers); four manuals (Getting Started, Data, Statistics, and Graphics); and a Quick Reference Card (overview of menus and windows).

Though SYSTAT is one of the most powerful tools for analysis and visualization of data ever created, it is surprisingly easy to use. You may work from menus using icons, or you may write commands in the command window, or mix and match. The icons are readily understood, but if you should need to use the reference manuals (several pounds of them) you will find clearly written explanations, complete with examples and references. The clarity and power is not limited to just the interface, either. SYSTAT allows you to use QuickTime to create animated visualizations of the graphs you generate (each graph becomes a frame of the movie), a huge advance from the static character-based plots of the recent past.

SYSTAT is written by statisticians, and their professionalism is evident in the effort that has gone into this product. For example, in

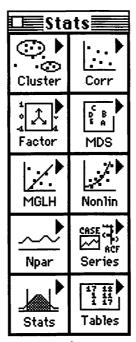


Figure 1—Stats menu

controversial areas. the authors' approach is presented along with alternative schools of thought, and complete bibliographic references are provided.

lent support system 0 SYSTAT users. SYSTAT, Inc. and

There is

an excel-

Apple co-sponsor data analysis seminars. If you purchase SYSTAT when you register for a course, the registration fee is reduced. SYSTAT, Inc. produces SYSNET, a quarterly SYSTAT Network newsletter, and provides technical support by telephone (Monday through Friday, 9 a.m. to 6 p. m. Central Time) or through the SYSTAT Electronic Bulletin Board Service (available 24 hours a day, seven days a week). Several companion and supplemental products allow you to customize data analysis to meet your particular needs, no matter how exotic.

Getting Started

To get started I used the aptlynamed SYSTAT: Getting Started, Version 5.2 Edition manual. This gives a quick overview of the menus, windows and manuals, then provides tutorials for a test drive of the way the program works.

I suspect this is more of a learning experience than the authors intended, as discrepancies occur between what the manual states will happen and what actually occurs on the screen. Instead of "Open"ing a file as described in the manual, you are given the option of either "Edit" or "Use." The command selected makes a big difference in which features are available. For example, scatterplot brushing tools are missing when the "Use" command opens the file, but these tools appear when the "Edit" command opens the file. Using the tutorial to work with a SYSTAT data file does encourage experimentation. For example, importing a file can be done, just not the way the manual describes. Eventually I figured out how to produce the desired results, though not always in the manner suggested by the tutorial.

Data

Data is entered into the Data Editor Worksheet, which has the appearance of a spreadsheet, but is not a spreadsheet. It does not store formulas in individual cells (it will store the results of mathematical transformations), nor does it insert rows and columns (it will add new columns and rows after the last entry). Data is kept in files, not memory, so capacity is limited only



by the availability of disk space. The worksheet format is easy to use, review and edit.

There are five ways to create a SYSTAT file, including typing the data in, transferring via the clipboard, or importing data (as ASCII text files or from Excel, map [cartographicl, and DOS SYSTAT files). The DATA Command Procedure provides even more flexibility in creating files. Once the SYSTAT file exists, it is easy to transform the data. The dialog box shows existing variables and math functions, so the options for transforming variables or deriving new variables are readily apparent. This information can also be used to recode data by specifying conditional (IF...THEN) transformations. A complete programming language, SYSTAT BA-SIC is available should you desire to program even more complex transformations. The results of transformations are immediately seen on the Data Editor Worksheet, providing visual confirmation.

Data may be sorted, ranked, or standardized from the Data menu, or the user may opt to write a DATA program for variations not available with the Data Editor. Temporary subgroups may be created. Four grouping variables are provided in DATA, and others may be created using SYSTAT BASIC. Every statistical module is capable of creating temporary subgroups. Files may be rearranged or combined. This includes dropping or extracting variables or deleting cases (by creating a new file), or even transposing a file (numeric data only, maximum of 99 cases). Files may be merged horizontally or appended vertically.

Exporting data is done using the clipboard; or saving a file as comma-delimited or tab-delimited; or using the PUT command to select subsets of cases. Data may be output to the screen or the printer, and

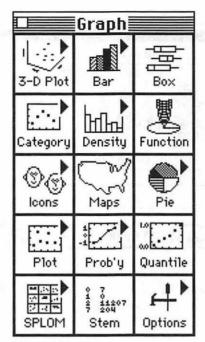


Figure 2—Graph menu

the user has complete control over what subset of the data (e.g. variable names) is selected and how the data appears (e.g. number of variables per line). In short, SYSTAT provides extensive data management capabilities. Data entry, manipulation, and output are clickand-point easy, augmented by sophisticated flexibility to create advanced applications.

Statistics

The documentation in SYSTAT: Statistics, Version 5.2 Edition is exceptionally well done. The authors take great care to cover not only the methodology of running an analysis, but also the appropriateness of the test. In the introduction the authors explain statistics "formally summarize our observations of the world. As we all know, summaries can mislead or elucidate." The focus of the text is to inform the user "how to use numbers to elucidate rather than to mislead." This approach yields a wealth of information in readily understandable language supported by numerous examples.

Descriptive and inferential statistics are covered. A variety of cluster analysis methods, measures of correlation and similarity, principal components or factor analysis, and nonmetric multidimensional scaling using different algorithms are provided. The multivariate general linear hypothesis can estimate and test any univariate or multivariate general linear model, and covers methods of regression, analysis of variance (ANOVA) and multivariate models. Nonlinear modeling and nonparametric statistics are also supported. A wide variety of time series models, including

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smoothing, autoregressive integrated moving average (ARIMA), seasonal decomposition and adjustment, exponential smoothing, and Fourier analysis can be used for modeling and forecasting. t-tests include independent, paired, matched pairs, and one-sample tests. Frequency tables provide useful summaries. Significance tests, or measures of association for two-way tables, or log-linear models may be applied to the tables. (See Fig. 1 for the Stats menu icons.)

The SYSTAT: Statistics, Version 5.2 Edition manual covers each category in detail. The chapters provide an introduction, usage, computation, and examples. These chapters are more intelligible than most statistics text books. SYSTAT's point-and-click menu interface can be used in conjunction with the Command window, revealing command line equivalents to pointing and clicking. Appendix I: Command Reference explains command syntax and defines all the options and arguments, giving reasons for using the command interface and

instructions for editing and submitting batch files. Examples in the manual use mouse instructions. Equivalent keyboard commands for those examples are provided in Appendix II. A wonderful 15 page section contains a comprehensive bibliography of classic and contemporary statistics works. The extensive index is carefully cross-referenced so even a novice can find what they are looking for.

Graphics

The most notable advantage of personal computer statistical computation over mainframe statistical computation lies in the ability to easily produce quantitative graphics. SYSTAT contains SYGRAPH, an extensive graphics program (which can be purchased separately). SYGRAPH was designed by an expert in graphics perception, so features shown in published re-

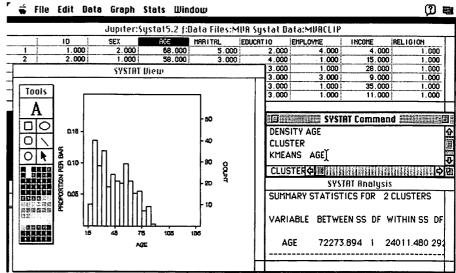


Figure 4—Density graph and cluster analysis of age.



Fighting the Battle of the Bulge in a Sherman M4: Sherman Tank Simulator

by Ray Settle

fter flying at Mach-2 light speed, a simulator that moves one along a the leisurely pace of 20 miles per hours might seem a bit lethargic, but M4: Sherman Tank Simulator is anything but. Those who have spent many hours with charts, dice, and model tanks trying to simulate armor combat in WWII will surely appreciate this computer simulation.

The game starts out by assigning the player a new M4 Sherman tank with the caveat that it can't stand up against most of what the enemy (the German panzers) can dish out nor can it do much against enemy tanks unless it surprises them. After this bit of discouragement, one must name the other four crew members (an excellent opportunity to reek simulated vengeance on one's more annoying co-workers or acquaintances by assigning them to a particularly dangerous position) and the tank itself. Next, one must load in additional ammunition; this task is easy to miss since most players would assume that the tank would come fully loaded. If one misses this opportunity to max out the ammo load, he will spend most the game running away and hiding once the ammo gives out. The simulated supply train is notoriously unreliable and seemingly incompetent. The only way to get more ammo is to get another tankeither through promotion or suicide.

The simulated battalion commander communicates via digitized sound over a good reproduction of a WWII tank radio and the radio is the only source of information and help. Through digitized sound bites, one can get a reconnaissance report, artillery missions, TAC air sorties and weather reports. One communicates with the various support units by keying in coordinates for fire missions, order verifications and security (copy-protection) checks.

The simulation main screen depicts the inside of the tank turret with a viewing slot to the outside. Clicking on various hotspots on the screen fires the cannon and machine guns, loads shells, rotates the turret, raises and lowers the cannon, gives directions to the driver, issues orders and asks the other crew members for sightings. Besides the limited view via the sight, one can gain a wider view by sticking one's head out of the turret and using binoculars. While this view gives a better view of the targets, it wastes valuable time and the turret cannot be rotated while in this view.

In M4, one moves from sector to sector in any one of eight headings around the compass dial. Movement is accelerated so that a 103 minute journey takes only about 30 sec-

onds. The commander drives and/or fights his tank from dawn to dusk each day with the number of moves determined by the time it's taken to execute prior moves. A summary of the unit's accomplishments with the points awarded for each sector secured or enemy destroyed is displayed at the end of each day-or after the tank gets knocked out. Upon entering the new sector (it appears that the tank actually reaches about the mid-point of the new sector), the tank stops and the sight reveals the terrain ahead. At this point the various crew members will call out their reactions to what's up ahead. If they appear to be asleep, the player can ask them for sightings by clicking on the various hot spots. Generally, they will remain quiet if there is nothing ahead.

If an enemy tank (there are no friendlies in this game) or anti-tank gun appears ahead, the commander must not waste time. That enemy will immediately begin to acquire the tank as its own target. Normally, the enemy gun is not facing toward the M4 and must turn toward it before firing. One can tell if the gun has turned sufficiently to fire by the appearance of small white dot (one must acquire a sighting ability in this game to spot a one pixel dot in a black and white screen) where the barrel of the gun would normally be. If the gun gets more than one shot at the tank, the tank will probably be killed. The crew, however, is remarkably lucky in getting out of the tank before it becomes a incinerator. Losing a number of tanks can get one court martialed or transferred to the infantry.

Although most of the screen is in color, the dominance of olive drab is not stunning, as it shouldn't be. The views through the sight and binoculars is strictly black and





white. While this scheme is acceptable, it does make the targets difficult to distinguish. Since most of the action takes place over the snow covered terrain of the Ardennes Forest sections of France, Belgium, and Germany and depicts camouflage vehicles, more color would be helpful. One must rely on the muzzle flashes of small arms to locate their positions.

The initial ammo load includes Armor Piercing (AP), High Explosive (HE), and White Phosphorus (WP) shells and about 5000 rounds for the machine gun. AP is used for tanks, personnel carriers, and some guns; HE for infantry and guns; and WP for smoke screens. One will soon wish for about 50 rounds of WP.

Some playing tips:

· Always load an AP round before

leaving a sector. If an enemy tank appears in the next sector, every minute will count.

- Always raise the turret two clicks before the initial shoot in a new sector; it appears to droop during the move.
- Take out the armor first; guns second; infantry and trucks last.
- Forget the "Forward to Hull Down" command; by the time you get positioned, the enemy gunners will have you zeroed in.
- If the enemy gets in a shot at you, load WP, fire, and bug out; the next shot will probably do you in.
- Use the recon unit, it only takes about 15 minutes.
- Don't forget that you can move diagonally; if recon reports enemy all around you, you might be able to sneak past by moving NE or SE.
- Write down your TAC ID number; you won't be able to get it later and you worked too hard to get it.
- Use artillery in sector reported to have AT guns.
- Use TAC air in sectors reported to have tanks and/or self-propelled guns. (Artillery and TAC air treat the player to a neat graphic sequences.)
- Artillery and TAC can cut down the odds against you in a new sector.
- Once an enemy tank turns toward you, forget it; use WP and bug out.

- After retreating, try re-entering the same sector from the same direction; the enemy may have moved off. Load WP just in case.
- If a crew member reports that the shells are bouncing off the target, fire WP and bug out.
- For infantry and light guns, range with HE and finish off with the machine gun.
- Apparently, AT guns can't shoot at you while your fire hits near them (too busy ducking, I suppose).
- If ordered to dig in and await an attack, you will not get to see the enemy except by their muzzle flashes; he will not see you unless you fire.

You will probably sit staring at your monitor for hours waiting for something to happen so just fire one round then fire WP and bug out to move on to the next turn. You really can't survive on the defensive; at least I couldn't. If anyone can figure out another strategy for this scenario, let me know.

Overall, I rate the simulation excellent, and superior to a previous tank simulation, Sands of Fire. I highly recommend it to any former (or present) miniature or board game enthusiast tired of calculations and dice rolling.

Published by: Deadly Games

Requires: Macintosh Plus or higher, 5 megs on hard drive after installation.



New Macintosh Files on the TCS

by Lawrence I. Charters

s of a few minutes past midnight on October 14, 1993, the Pi's computer bulletin board, the TCS (Telecommunications System) had 3,213 files, totaling 594,662,383 bytes. If a single TCS subscriber used their full 120 minutes of time each day, every day, downloading files at maximum speed, it would take them several centuries to get them all—since files appear to accumulate faster than people can remove them. Isn't the Information Age wonderful?

Of course, this instant digital wealth has also caused some alarm since, at first glance, it appears the "new" TCS is half-full after only 53 days of operation. The outlook seems grim: the TCS consists of a Mac IIfx file server connected to a billion byte hard drive used for storage. If the drive is half full in less than two months, is the end near?

Not exactly. Unlike the old TCS, the "new" TCS is nearly "infinitely" expandable. Through the magic of the file server's SCSI interface, up to 5 more hard drives can be connected to the present server, and if that isn't enough, another SCSI interface or two can be added to expand storage to really ridiculous extremes. Storage is not a problem.

Access, however, definitely is a problem. The TCS subscription fee does not generate enough money to do more than pay existing phone bills and fund routine repairs. Expanding the number of lines, and

buying new high-speed modems, requires additional revenue. Until "additional revenue" becomes a reality, take note:

- the busiest times for the TCS are from 4:30 p.m. to 1 a.m., 7 days a week.
- Sunday is the busiest day, period.
- lunch time is extremely busy. There's a potential Washington Post story there...

On the other hand, it is common to discover all the high-speed lines are busy, and all the regular lines are empty—at all hours of the day. If you have a high-speed modem and just have to use the high-speed lines in order to get maximum efficiency, consider this: getting a 2400 bps connection almost at will is far more "efficient" than not connecting at all at a higher speed.

And now for the disclaimer: this listing represent only a small portion of the library of files available for downloading. Call the Pi Office at 301-654-8060 for information on how to subscribe to the Washington Apple Pi Telecommunications System, the Pi's "24 hour a day General Meeting."

Area 2: TCS Help Files

TCS.FAQ: this text file contains the answers to 80% of users' questions about the new TCS, particularly in contrast to the old TCS.

GIFPREVIEW1.GIF to GIFPREVIEW9.GIF: series of catalogs (in GIF format) of some of the TCS GIF images

JPEGPREVIEW.GIF: catalog (in GIF format) of some TCS JPEG images. TCSFILES.TXT: complete TCS file list in a tab-delimited text file. The field names are, in order: Area, Number, Filename, Type, Bytes, Date, Time, Summary. This file is updated regularly.

Area 3: Apple System Software

EXM112.SEA: Apple Express Modem Version 1.1.2 update, an almost mandatory update for all Express Modem users.

LWUTIL7.4.1.SIT: Apple LaserWriter Utility 7.4.1 for downloading fonts semipermanently to your printer, toggling fine-print, changing resolution, etc.

TEACHTEXT72.SIT: TeachText 7.2, when used in conjunction with the Speech Manager/Macintalk Pro, will read your documents.

APPLESHARE3.SEA: patch to update AppleShare 3.0 to 3.0.3.

MACSBUG.6.2.2: Macintosh debugger for programmers. Archive contains both versions 6.2.2 and 6.3d4, which is required for the Centris models with the 68LC040.

DART1.5.3.SIT: not only extracts DiskCopy images to floppy, it can create its own compressed disk images. Version 1.5.3 adds Centris and Quadra -av compatibility.

LW.811.SIT: LaserWriter version 8.1.1. SYUPD2.01.SIT: Hardware System Update 2.01 is recommended for all users of System 7.1 no matter what model Mac you use. Fixes various hardware/ software flaws and adds a new version of HD SC setup plus the Disk First Aid from the Software Tools disk.

NETWORKSOFT.SIT: Network Software Installer v.1.4.1, adds AppleTalk 58.11, new Token Ring extensions and the other normal networking odds and ends. SFTWRUTILIT.SEA: Software Utility Update includes Disk First Aid 7.2, HD SC Setup 7.2.2 and MacCheck 1.04.

Area 6: Misc Documents

TAGLINES: lengthy collection of taglines from Fidonet and Usenet messages. WRISTS.PS.SIT: PostScript file from Adam and Tonya Engst (of Tidbits fame) detailing how to prevent carpal stress syndrome and other repetitive motion ailments.

US1990CENSU.TXT: summary of the U.S. 1990 census, in text format. M68060INFO.TXT: technical Summary of

forthcoming 68060.



- NATIONALPER.SIT: complete text of the National Performance Review.
- MANIF11.TXT: complete text of the Communist Manifesto, written in support of an uprising in Paris (which failed). The oft-quoted final passage reads: "Workers of the world, unite!" However, there is another sentence which is usually dropped: "Form credit unions, and then you'll be eligible for membership at Price Club!"
- NATINFOAGEN.SIT: National Information Initiative-An Agenda for Action, the result of Vice President Gore's push to develop "information superhighways" connecting every man, woman, child, etc., into a global information community. This is a formatted Microsoft Word document, converted from a WordPerfect 5.1 document.
- QURAN.ZIP: The Holy Qu'ran. Each book in a separate file.
- HEALTHPLAN.SIT: Clinton's Health Plan as detailed in his speech (and includes the speech itself).
- DSNSUMMARY.SIT: Deep Space Nine Episode summary up through 'Siege' in season 2 in Word format.

Area 7: GIF Graphics

- INSIDESHUTT.GIF: massive, detailed photo showing the pilot and co-pilot's positions inside the Space Shuttle. Lots and lots of buttons and switches for button and switch freaks.
- DEMI1.GIF: another in our, apparently, continuing series of photos of Demi Moore.
- DC.GIF: interesting view of the VA/DC/ MD area, shot from space, showing the Chesapeake and various rivers, plus the ridges from various mountains and hills.
- CHECKPOINTC.GIF: color photo of Checkpoint Charley, scene of spy swaps, refugees being smuggled to freedom, secrets being smuggled to the commies, backdrop to spy novels and movies, a hut constructed to low-bid specifications..
- BAYDOORS.GIF: the Shuttle shown from above, with the shuttle bay doors open and nice clouds far, far, far below.
- B5CHROME.GIF: Babylon-5, the fifth in a series of huge space craft? stations? built by a government that was stupid and kept on building them even after the first four were destroyed by unknown means. Babylon-5, a budget epic science fiction series coming to a channel near you.
- ATLANTIC.GIF: exaggerated relief map, done as a globe, centered on the Atlantic
- ASHLEYSUNSE.GIF: and I'm sure it is the sunset which will attract your

- attention, right?
- ASHLEYMONTA.GIF: I've been to Montana, and never seen nothin' like
- APPLEWIN.GIF: Windows background overlaid with an Apple theme. I'm gonna use this at work—it should irritate lots of people.
- ARCTICOC.GIF: exaggerated relief globe of Earth, centered on the Arctic Ocean.

Area 8: JPEG Graphics

LIGHTNINGSUNSET: lightning at sunset; amazing photography. AMOORPAR.JPG: richly detailed, 32-bit photo of a classical painting.

Area 11: Newton

- NEWTON1.04.SIT: Newton operating system upgrade to 1.04.
- AUTODICT1.1.SIT: automatically update your phone list without any manual
- NEWTONFUNCT.SIT: Mac desk accessory with all of Newt's functions listed.
- NEWTONTRANS.SIT: QuicKeys macro to update Newt's phone/addressbook by copying entries from Dynodex (or whatever) to the Connection kit.
- AHTZEE.SIT: Newt plays Yahtzee HOTBUTTONS.SIT: add a floating palette to Newt
- REBOOTER.SIT: reboot Newt quickly CHECKPLEASE.SIT: checkbook calculator for Newt.
- PERIODICTAB.SIT: Newt learns the Periodic Table of Elements....

Area 12: PowerPC

POWERPC.DEV.SIT: Apple's PowerPC White Paper—everything that you wanted to know about the PPC and more.

Area 13: DOS/Windows/OS2

- EXTPC.EXE: extract from CompactPRO Archives on a PC. MS-DOS 2.10 or higher required.
- MACSEE22.ZIP: a utility that will allow you to read/write 1.44 MB Macintosh floppy disks, SyQuest cartridges, and certain other disks on a PC (running MS-DOS or Windows).
- UNSIT11.EXE: unstuff Mac Stuffit archives. Version 1.1 adds support to extract from within MacBinary and AOL headers.

Area 21: Mac Essentials

STUFITX.307.SEA: Stuffit Expander 3.0.7; update to fix some bugs and synchronize revision numbers. SITLITE3.07.SEA: Stuffit Lite v.3.07;

- superb compression/decompression utility. Will make and extract any form of Stuffit file, plus it will also extract from Compact Pro (cpt) archives. Well worth the shareware fee. As seen on late night television and as recommended by the Mac File Penguin and his duckling.
- UNSTUFFIT.SEA: UnStuffit v.3.07; will decompress all Stuffit archives (SIT, S1T and SEG as shown in the TYPE field of File Descriptions) whereas Stuffit Expander will not handle SEGs (Stuffit Segmented Archives).

Area 22: Mac Applications

- STARATLAS08.SIT: atlas of the night skies complete with planets. Works with any Mac but really needs an 020+ and
- SKYCHART2000: a program for calculating and displaying the appearance of the night sky. It will run on any Macintosh with a math coprocessor.
- MACASTRO1.6.SIT: astronomy program that will work on any Mac from the Plus on up. Details 5000 star positions plus the planets at any point in time from any location.
- VDA142.SIT: VendorDA v1.42; listing of 911 Macintosh product vendors and their Main, Sales, & Tech Support/ FAX/ BBS phone numbers, with over 120 changes/updates since last release. Two versions: a color version for colorcapable Macs, and a B&W/monochrome version for Powerbooks and monochrome monitors.
- LOGOUT.SIT: provides a straightforward. and reliable means for keeping track of computer usage time, for billing or other purposes. LogOut has several unique features including the ability to know when you have stopped using the computer.
- QUICKBACK.1.8.5: a simple backup utility, featuring Finder-readable backups, backup of single folders and entire disks, etc.
- VCRPLS11.SIT: encode and decode VCR+ codes.
- DARTNET: DartNet v1.0 a Mac-based Neural Network Simulator for back propagation from Dartmouth College.
- ARSMAGNAII.SIT: neato anagram generator.

Note: the following nine archives decompress into 24 disk images, and these images can be used to install a complete copy of The Online Bible version 2.0.4. Since the archives are exceptionally large, and you will need three boxes of diskettes to create the (continued on page 43)

The Hotline service is only for members of the WAP. Please do not call after 9:30 pm or before 8:00 am.

Appl	e II/III	Peter Combes	(301) 251-6369	IIe Upgrade Morgan Jopling	(301) 721-7874
		Leon Raesly (days; 9-5)	(301) 599-7530	APW	(301) /21-/8/4
Apple	*	Pascal	(201) //5 1502	Andy Gavin	(703) 734-3049
GENERAL		Michael Hartman	(301) 445-1583	Leon Raesly (days; 9-5)	(301) 599-7530
Dave Harvey (days only)	(703) 578-4621	C and TML Pascal	(703) 750 0660	Deluxe Paint II	(301) 399-7330
Leon Raesly (days; 9-5)	(301) 599-7530	Harry Erwin (before 10 pm)	(703) 758-9660	Rich Sanders	(703) 450-4371
Ken De Vito	(703) 960-0786	ODEDATING OVOTERS		GS BASIC	(/03) 430-43/1
		OPERATING SYSTEMS		Barry Fox	(717) 566-6709
ACCOUNTING PACKA	GES	ProDOS 8 and 16		Multiscribe GS	(/1/) 300-0/09
BPI Programs		Barry Fox	(717) 566-6709		(301) 647-9192
Jaxon Brown	(301) 350-3283	Dan White	(301) 449-3322	Ray Settle	(301) 647-9192
3PI & Howardsoft (Tax)	(001) 0110	Print Shop		TELECOMMUNICATION	•
Otis Greever	(615) 638-1525	Thomas O'Hagan	(301) 593-9683	Dale Smith	(301) 762-5158
Pollars & \$ense	1-1-7			Allan Levy	(301) 762-3138
Barry Fox	(717) 566-6709	SPREADSHEETS		Bob Sherman	(305) 944-2111
Iome Accountant	(/1// 500 0/0)	General		TCS Help	(303) 344-2111
Leon Raesly (days; 9-5)	(301) 599-7530	Walt Francis	(202) 966-5742	Dale Smith	(301) 762-5158
Quicken	(301) 333 1330	MagicCalc/SuperCalc2.0		Nancy Seferian	(202) 333-0126
Gary Hayman	(301) 345-3230	Leon Raesly (days; 9-5)	(301) 599-7530		
pple SSC	(301) 343-3230	Telecommunications		Paul Schlosser MouseTalk	(301) 831-9166
• •	(301) 951-5294	Dale Smith	(301) 762-5158		(301) 762-5158
ernie Benson	(301) 931-3294	Allan Levy	(301) 340-7839	Dale Smith	
ppleWorks	(702) 060 0706	Ken De Vito	(703) 960-0786	Ray Settle	(301) 647-9192
Ken DeVito	(703) 960-0786	Dan White	(301) 449-3322	TimeOut Series & Utilities:	
Ray Settle	(301) 647-9192	TimeOut Series	(501) 113 5522	Ray Settle	(301) 647-9192
Harry Erwin (before 10 pm)	(703) 758-9660	Morgan Jopling	1(301) 721-7874	Barry Fox	(717) 566-6709
Gary Hayman	(301) 345-3230	Utilities:ProSel	1(501) /21-/0/4	816 Paint/Writ'rs Ch.El	ASSESSMENT OF THE PROPERTY OF THE PARTY OF T
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Bill Campbell	(301) 498-6380	Barry Fox	(717) 566-6709	Apple II Hardware Epson pr	
ppleWorks Database		00000 DI ATEODIA TO	NOI ATION	Guy Durant	(202) 363-0366
Roger Burt	(301) 424-6927	CROSS-PLATFORM TRA		Apple II laser printing	
Morgan Jopling	1 (301) 721-7874	MS/DOS-Apple-Mac Transf		Bob Sherman	1(305) 944-2111
Milt Goldsamt	(301) 649-2768	Ken De Vito	(703) 960-0786		
Dan White	(301) 449-3322			Apple III	
oun winte	(501) 115 5522	WORD PROCESSORS		General	
COMMUNICATIONS		General		Jim Jutzin	(703) 790-1509
ProTerm		Walt Francis	(202) 966-5742	Dave Ottalini (9-10:30 pm)	(301) 681-6136
	(301) 340-7839	Apple Writer II		3 Easy Pieces	
Allan Levy	(301) 647-9192	Dianne Lorenz	(301) 530-7881	Robert Howe	(916) 626-8198
Ray Settle	(301) 04/-9192	Leon Raesly (days; 9-5)	(301) 599-7530	David/Joan Jernigan (before 9 p	om) (703) 822-5137
alk is Cheap/Pt. to Pt.	(717) 5// (700	AppleWorks GS		Steve Truax	(304)-267-6429
Barry Fox	(717) 566-6709	Roger Burt	(301) 424-6927	Word Juggler	
DataBases		A.D. (Bill) Geiger	(703) 237-3614	Tom Linders	(408) 741-100
OBMaster, Pro IIe		Andy Gavin	(703) 734-3049	J. Carey McGleish (evenings)	(313) 332-8830
lob Sherman	1 (305) 944-2111	Letter & Simply Perf	N. 256 (1.522) 5.7325	Pascal	
Base II		Leon Raesly (days, 9-5)	(301) 599-7530	Dr. Al Bloom	(703) 951-2025
John Staples	(703) 255-6955	Mouse Write	(501) 555 7550	Apple Speller	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Base II&III,Data Perfect.	Db Master-PRO	Barry Fox	(717) 566-6709	Robert Howe	(916) 626-8198
Leon Raesly (days; 9-5)	(301) 599-7530		(/1/) 300-0/03	AppleWriter	(510) 020 0150
Profiler 3.0		Publish-It!	(201) 2/5 2220	Eric Sheard	(908) 782-6492
Barry Fox	(717) 566-6709	Gary Hayman	(301) 345-3230		(908) /82-0492
		Ray Settle	(301) 647-9192	Stemspeller	(204) 267 642
HARD DISKS		ScreenWriter II	CONTRACTOR OF THE CONTRACTOR	Steve Truax	(304)-267-6429
CMC (not CMS)		Peter Combes	(301) 251-6369	Beagle E	Ruddiae
Barry Fox	(717) 566-6709	Gene Carter	(202) 363-2342	Deagle L	Juuules
Corvus & Omninet	(/1/) 300 0/02	Word Perfect		MARYLAND	
om Vier (12N-6PM)	(703) 860-4810	James Edwards	(301) 585-3002	Ray Settle (Annapolis)	(301) 647-9192
Corvus	(703) 000-4010	Henry Donahoe	(202) 298-9107	Scott Galbraith (Frederick)	(301) 865-3035
	(301) 500 7530	Word Star		W. T. Cook (Columbia)	(301) 995-0352
	(301) 599-7530	Art Wilson	(301) 774-8043		(301) 345-3230
eon Raesly (days; 9-5)				Gary Hayman (Greenbelt)	
eon Raesly (days: 9-5)	((15) (20 : 22		C+	Lee Raesly (Adelphi)	(301) 599-7530
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Leon Raesly (days: 9-5) Sider Otis Greever LANGUAGES General Dan White AppleSoft		Neil Laubenthal	(703) 691-1360	Don Avery (Bethesda/DC)	(301) 540-1070 (202) 362-1783 (703) 960-0786 (703) 691-1360

December 1993

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	51/4 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Mac Program- mers SIG DTP SIG	Columbia 2 Slice Game SIG	3	WAP 4 Garage Sale Annapolis Slice
5	6 PI SIG	7 TeleComm SIG	DB SIG WAP BoD	9 Stock SIG	10	
12	13 Intro to the Mac-Part 1	14	Writer's Deadline 15 Excel SIG UM SIG	16	17	18
19	20 Intro to the Mac-Part 2	21	Maintain- ing Your Mac	Editor's Deadline 23	24	Christmas Day 25
26	Intro to the Mac-Part 3 IIGS SIG - Va	28	29	30	31	

January 1994

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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2	3 PI SIG	4 TeleComm SIG	Mac Pro-5 grammers SIG DTP SIG	Columbia 6 Slice Game SIG	7	Annapolis 8 Slice Frederick Slice
9	Intro to the Mac-Part 1	11	DB SIG WAP BoD	13 Stock SIG	14	15
16	Writer's Deadline 17 Intro to the Mac-Part 2	18	19 Excel SIG HyperTalk SIG	20	21	WAP 22 General Meeting AW SIG
23	Intro to the Mac-Part 3 IIGS SIG -NIH	Editor's Deadline 25	Maintain- ing Your Mac	27	28	29

Meeting Notices

Unless otherwise noted, call the SIG chairs or Slice officers for meeting information. A list of the SIG and Slice chairs is on page 4 of every Journal. Calendar events in italics are tutorials, workshops, or seminars.

Annapolis Slice

2nd Saturday; 9:30 AM; Severna Park Library on McKinsey Rd (off Rt 2), Severna Park, MD. Answering Machine: (410) 923-6748

CrabApple BBS: (410) 553-6929

Apple IIGS SIG

Monday after the WAP General Meeting;; 7:00 PM;, McLean Govt. Center, McLean, VA (even months) and NIH (Bldg 31, C Wing, 6th Floor, Conference Rm 9), Bethesda, MD (odd months).

Apple III SIG

Quarterly on 2nd Saturday; 10:00 AM; WAP Office.

AppleWorks SIG

8:15 AM on WAP General Meeting Saturday, at meeting site.

Columbia Slice

1st Thurday; 7:00 PM. Call for location. BBS (410) 964-3706.

DataBases (Mac) SIG

2nd Wednesday; 7:15 PM; Computer Science Corporation, 3160 Fairview Park Drive, Merrifield, VA (Just inside the Beltway at the rt 50 junction).

DeskTop Publishing (DTP) SIG

1st Wednesday; 7:30 PM; PEPCO Auditorium, 1900 Pennsylvania Ave. NW, DC.

Information: Barbara Schull (301) 589-5337.

Excel SIG

3rd Wednesday; 7:30 PM; WAP office.

Frederick Slice

December meeting cancelled due to the Garage Sale. General meeting time, 2nd Saturday; 10:00 AM; United Methodist Church; 22 Main Street in Walkersville.

Game SIG

1st Thursday; 7:30 PM; WAP office.

HyperTalk SIG

Meets bi-monthly on the 3rd Wednesday of the odd numbered months (i.e., January, March, May, July, September and November) at the Fairlington Community Center, 3300 South Stafford St., Arlington, VA at 7:30 pm.

Mac Programmers

1st Wednesday; 7:30 PM; WAP office.

NoVa Education (Ed) SIG

Last Wednesday; 7:30 PM; Walnut Hill Ctr., Va..

Programmer's Interface(PI) SIG

1st Monday (except Mon. holidays). Call.

QuickTime SIG

Every other month; 7:30 PM; WAP Office.

Stock SIG

2nd Thursday; 7:30 PM; WAP office.

Telecomm SIG

2nd Wednesday; 7:30 PM; WAP office.

UltraMacros SIG

Monthly meetings at various locations and on various dates. Call Gary Hayman, (301) 345-3230, for meeting details.

WAP Garage Sale

June and December.

WAP General Meeting

4th Saturday; 9:00 AM; Northern Virginia Community College, Annandale Campus, Community Cultural Center Auditorium.

Women's SIG

Usually held every quarter on the fourth Thursday of the month at the Pi Office at 7:30 PM. Call SIG Chair, Nancy Seferian (202) 333-0126 for details.

Notice: Plans change! Anyone with calendar information please call the Calendar Editor, Bill Wydro (301) 299-5267, or Beth Medlin at the WAP office (301) 654-8060.

The Hotline service is only for members of the WAP. Please do not call after 9:30 pm or before 8:00 am.

Macintos	sh	Fortran Harry Erwin (before 10 pm)	(703) 758-9660	Bernie Benson MacProject	(301) 951-5294
CENERAL		Inside Mac	30 5/ 5/ 5/	Jay Lucas	(703) 751-3332
GENERAL	() (Jon Hardis	(301) 330-1422	Norbert Pink	(703) 759-9243
Tom Witte	(703) 683-5871	John Love	(703) 569-2294	HyperCard	
Jon Hardis	(301) 330-1422	Pascal	(, -0, ,,,,,,,,,	Rick Chapman	(301) 989-9708
Dan White	(301) 449-3322	Harry Erwin (before 10 pm)	(703) 758-9660	Tom Witte	
Art & Video		Michael Hartman	(301) 445-1583		(703) 683-5871
Nancy Seferian	(202) 333-0126		(301) 443-1303	HyperTalk	
Borland Products	(202) 555 5125	SMALLTALK-80	(202) 250 0660	John O'Reilly	(703) 204-9332
	(900) 926 4769	Harry Erwin (before 10 pm)	(703) 758-9660	Tom Witte	(703) 683-5871
Doug Ferris daytime only	(800) 826-4768			File Transfer	
DATABASE BROODAMS		SPREADSHEETS & CHA	ARTS	Mort Greene	(703) 522-8743
DATABASE PROGRAMS		General		Backfax	
Fourth Dimension		David Morganstein	(301) 972-4263	Mort Greene	(703) 522-8743
Bob Pulgino	(301) 474-0634	Bob Pulgino	(301) 474-0634		(703) 322-0743
Peter Yared	(301) 564-1560			HyperCard Scripting	(702) (27 2021
ileMaker Pro	**************************************	Tom Cavanaugh	(301) 627-8889	Jamie Kirschenbaum (evenings)	(703) 437-3921
Tom Parrish	(301) 654-8784	Excel	(221) 222 (25)	Richard Kozloski	(703) 352-1523
		David Morganstein	(301) 972-4263	SoundEdit	
Mort Greene	(703) 522-8743	Mark Pankin	(703) 524-0937	Jamie Kirschenbaum (evenings)	(703) 437-3921
Foxbase	Maria de la compansión	Jim Graham	(703) 751-4386		
Cick Shaddock	(202) 829-4444	Dick Byrd	(703) 978-3440	MAC DISKETERIA LIBRA	RV
Helix		Bob Pulgino	(301) 474-0634		
im Barry to midnight	(703) 662-0640			Dave Weikert	(301) 963-0063
Harvey Levine	(301) 299-9380	Tom Cavanaugh	(301) 627-8889		
AS-File	(301) 277 7300	Paula Shuck (before 10 pm)	(301) 740-5255	Gener	al
	(201) 720 1007	Kirsten Sitnick	(301) 750-7206	A TOTAL TOTAL CONTRACTOR OF THE PARTY OF THE	
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OverVue		Kirsten Sitnick	(301) 750-7206	John Wiegley (after 2:15)	(703) 437-1808
T.Tom DeMay, Jr.	(301) 461-1798		_		(/03) 43/-1000
		TELECOMMUNICATION	S	IBM	
om Parrish	(301) 654-8784	General		Leon Raesly	(301) 599-7530
ro-Cite		Allan Levy	(301) 340-7839	Math-OR Applns	
Elizabeth Mangan	(703) 750-2710	CompuServe	(501) 510 7055	Mark Pankin	(703) 524-0937
		Michael Subelsky	(201) 0/0 0202	Modems-General	0.302.503.303
ESKTOP PUBLISHING		Michael Subelsky	(301) 949-0203		(201) 240 7020
General				Allan Levy	(301) 340-7839
	(201) (55 0075	WORD PROCESSORS		Hayes Smartmodem	
ay Rohr	(301) 655-0875	Microsoft Word		Bernie Benson	(301) 951-5294
reddi Galloway (V/TTY)	(410) 268-5793	Harris Silverstone	(301) 435-3582	Practical Peripherals	
ReadySetGo		Tom Cavanaugh	(301) 627-8889	Allan Levy	(301) 340-7839
im Graham	(703) 751-4386				(301) 340-7033
reddi Galloway (V/TTY)	(410) 268-5793	Freddi Galloway (V/TTY)	(410) 268-5793	PrInters-General	(202) 266 57/2
ageMaker	(110) 200 3/35	Kirsten Sitnick	(301) 750-7206	Walt Francis	(202) 966-5742
	(702) 522 07/2	ThinkTank-More		Leon Raesly	(301) 599-7530
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		Tim Childers	(301) 997-9317		(201) 072 /2/2
RAPHICS			(301) 997-9317	David Morganstein	(301) 972-4263
General		Microsoft Works		Stock Market	
	(301) 779-8271	Amy Billingsley	(301) 622-2203	Robert Wood	(703) 893-9591
ill Baldridge		WordPerfect—Mac		MS/DOS	
ay Rohr	(301) 655-0875	Curt Harpold	(202) 547-8272	Tom Cavanaugh	(703) 627-8889
dobe Illustrator			1/		(/03) 02/-0009
ing Wong	(703) 803-9109	MISCELLANEOUS		Dvorak Keyboard	(202) 2/1 2/1
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om Parrish	(301) 654-8784	riease mnit can	is to reasonable evening and	weekend nours and INEVER after	or m.
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Tom Berilla	(301) 434-3256	Dick Grosbier (Frederick)	898-5461 A2, GS, Mac		865-3035 A2, G
Tom Parrish	(301) 654-8784				
ohn Spencer	(301) 730-1084	Harold Polk (Frederick)	662-6399 A2		739-6030 M
	(301) /30-1004	Tony Svajlenka (Frederick)	694-6209 A2	Ken Carter	834-6515 A2. C
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ideoWorks	(103) 122-0/43		21-8157 MacIIsi		
	(702) 500 07/0		56-6557 Mac+	Apple II	
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			74-6062 MacII,Scanner	Seth Mize (Glen Burnie) 410-766-	
ROGRAMMING			51-6997 MacII,CRABBS BBS	Louise Tanney 410-647-	0875 IIGS, AW
Ada				Helen Hamerstrom 410-647-	1720 IIGS, IIe, DTP, HS
Harry Erwin (before 10 pm)	(703) 758-9660		23-3415 MacIIsi, Canvas	Manse Brouseau 410-757-	5215 IIc,AW
	(703) 730-3000		73-7140 Mac Telecomm	Bill Derouin 410-647-	
	(702) 750 0660	Theressa MacGregor (Odenson) 410-55	51-5913 PowerBook, DOS	Dick Stewart (Milleswille) 410-987-	
Harry Erwin (before 10 pm)	(703) 758-9660	Dick Stewart (Millersville) 410-9	87-2057 Mac+	DICK DICWALL (MINESWINE) 710°707°	2021



New Macintosh Files on the TCS

(continued from page 38)

required disks, most users will probably find it easier to get the complete disk set, ready to install, from the Pi disk library.

- BHS.BHM.1.3.SIT: Hebrew Texts for Online Bible v.2.04.
- CXREF1.1.SIT: cross References for the Online Bible
- KJV.RSV.SIT: The Bible text for the 1769 Authorized Version, commonly known as the King James Version.
- LEXICONS.SIT: Greek and Hebrew Lexicons for On. Bible
- PNT.SIT: People's New Testament for Online Bible
- TCR.SIT: Thompson Chain References for Online Bible
- TRBYZN26.SIT: Greek files for the Online
- TSK.SIT: Treasury of Scripture Knowledge for Online Bible.
- ONLINEBIBLE.SIT: the Online Bible Application, version 2.0.4.

Area 23: Mac Utilities

- STARTREKCLO.SIT: Star Trek: TNG style clock. Cleverly done; looks like it would be right at home on the Enterprise.
- NET.TIME.20.SIT: Network Time v.2.0, a utility to sync all of a network's Macs to a central time server.
- HEXEDIT103.SIT: FreeWare equivalent of ResEdit's Hex Editor, but for data forks.
- FLAMEFILE.SIT: utility for permanently erasing files (including DoD-compliant triple pass) and zeroing out' drives.
- MISCSCRIPTS.SIT: some simple AppleScript scripts from AOL. One will move items dropped on it to the Apple Menu Items folder. The other two are templates—one for performing a repetitive task every x minutes, another for performing a finder task on whatever is dropped on it.
- PHONEBOOKPL.SIT: extended phonebook for FaxSTF that includes a bigger list and more options.
- XDIFF1.0.SIT: utility from NCSA to compare two text files and to output the differences to a third file.
- CHUNKJOINER.SIT: drag-n-drop utility to concatenate the contents of any files' data forks (i.e., text files) dropped upon
- BYEBYE.SIT: utility that drops AppleShare clients from the network after a specified period of inactivity.

Area 24: Mac Extensions

- KEYBOARDRES.SIT: keyboard resources for every language known to the Macintosh world.
- AD.JASIK.2.5.4: After Dark module does not do much to "save" the screen, but will display the familiar environment of The Debugger from Jasik Designs, so that you can always appear to be hard at work debugging.
- SHARINGINTHEDAR: "Sharing in the Dark" is a shareware module that allows anyone using System 7 File Sharing and After Dark to automatically control the amount of CPU time allocated to File Sharing depending upon the state of the screen saver.
- WITHAVIEW7.SIT: allows the user to easily change the view in a Finder window from 'by icon' (or 'by small icon') to by name' (and conversely) by simply clicking in the appropriate part of the Finder Window.
- ZIPPLE1.7.SIT: a CDEV which places an animated image of your choice over the title of the Apple, Balloon Help or Application menu. Allows editing and creation of your own animated images.
- PRINTCHOICE.SIT: choose between printers (faxmodems too) in the Apple menu, without having to open the Chooser.
- SUS.PICK.SIT: pick in advance which (of many) startup screens you'd like to have loaded at the next boot.
- PEEPINGTOM1.SIT: track the amount of time you use particular programs and how much process time they grab. Saves data to a log file.
- STAPLER1.1.SIT: keep an application and associated documents 'stapled' together so they can be opened en masse.
- ADFISH2.SIT: more After Dark fish-but this aquarium also has sharks, turtles, fish that swim in more than one dimension and more.
- ZIPMOVIES.SIT: a dozen (or thereabouts) animated 'movies' for Zipple. There's a rotating Coke can, a Mac on fire, a Mac with 'Pong' playing on the screen, and more.
- AD.MEMORIES: After Dark module which displays random text strings found in your computer.
- AD.PAWPAW.1.3B3: After Dark module which shows footprints of animals and people walking across your screen. NICESTOPSHUTDWN:
- NiceStopShutDown v1.0 is meant for school computer labs, where the computers have numerous users during the day. If deters students from turning the Mac off, so that it doesn't go through an off/on power cycle.
- TALKING.CLOCK.2: Talking Clock Pro

- v2.0b2 comes in two parts: a system extension (faceless background task) that speaks the time every hour on the hour, and an ordinary application that you use to configure the extension, much like a control panel. The small application can also optionally show one or more clocks in a window. It requires the Speech Manager (Macintalk Pro).
- SYMBIONTS.2.2: an extension and related control panel that monitor the startup process. Symbionts displays the name and memory usage of each system extension, even those that don't normally reveal themselves.
- DECOR1.1.SIT: control panel that allows you to specify the PICT or StartupScreen file that you want as your backdrop.
- NTP.SIT: Network Time Protocol (NTP) client and server software for synchronizing clocks over a network.
- ECLIPSE2.0.CPT: version 2 of Andrew Welch's tiny screen saver (uses ~5k of memory).

Area 25: Mac Font

- LEFTYCAS.CPT: Lefty Casual is a slightly sloppy, but very convincing handwriting emulation font.
- KASHMIR.SIT: TrueType face patterned after Led Zeppelin's Houses of the Holy cover script.
- RED.LETTER: novelty font made of hammers and sickles, which will really impress your Congressman the next time you want to express your opinion.
- ARCHITECT.1.3: a font that simulates hand printing of the type typically done by architects. It was inspired by Adobe's font Tekton.
- BLACK.CHANCERY: Black Chancery (Extended) is a medieval-looking font, in both TrueType and PostScript formats.
- CAROLESCHUNK: really gross font in which every character is made up of a head spewing "chunks" out of its mouth to form letters.
- CAVEMAN: TrueType font that looks like chiseled stone.
- CRILLEE: similar to the font used for the credits of Star Trek: The Next Generation. Both TrueType and PostScript versions are included.
- CYRILLIC.FONTS: set of Cyrillic (Russian) TrueType Fonts.
- MARKERFELTW.CPT: TrueType font looks like a wide felt-tip marker.
- MARKERFELTT.CPT: TrueType font looks like a thin felt-tip marker.
- DAVYS.RIBBONS: Davy's Ribbons, font on a flowing ribbon.
- ENYA: TrueType font was inspired by the writing on the album Watermark by Enya. (I think it looks like writing on a



- beach with a stick.)
- FLINTSTONE: TrueType font Flintstone. It looks like it sounds: blocky and 'primitive', like crudely chiseled stone.
- GENOA: a whimsical display font, in both TrueType and PostScript versions, similar to the Venice font that came with the Mac.
- GRAPHIC.LIGHT: a tall, decorative font from the now-defunct Baltimore Type Foundry. Both TrueType and PostScript versions are included.
- GROENING: based upon the now-famous handwriting of "Simpsons" creator Matt Groening, cartoonist of "Life in Hell." TrueType, uppercase only.
- HILVERSUM: Eric Schiller writes,
 "Hilversum is a freeware version of my
 chess font Tilburg, which will be
 distributed by Chess Laboratories when
 it is finished. Still, I have used
 Hilversum (under the Tilburg name) to
 produce camera ready copy for published books (I have written over 50
 books on chess). It is freeware, but I
 hope that users will upgrade to Tilburg
 when it is ready."
- JAPANESE.CALI: files for Japanese Katakana and Hiragana fonts. Bitmapped fonts, TrueType and Type 1 Postscript fonts are provided. Characters are in calligraphic style.
- LASSUS: TrueType music font.

 LITTLE.GIDDING: TrueType font with three categories of images: 1) Christian symbols-mostly various crosses, but also with a selection of Trinitarian & Christological images, 2) Regular polygons, solid & hollow, and 3) Stars formed from regular polygons.
- TRUEEDIT177.SIT: TrueType font editor from Apple.
- PARS.ZIBA.DRAFT: Persian (Farsi) font created by someone in Australia. Both TrueType and PostScript versions are included.

Area 26: Mac Sound

- BADGES.SIT: Badges? We don't need no stinkin' badges!
- MANDARIN.SIT: demo of a teaching tool for teaching Mandarin, this small application says two phrases.
- OMMMM.SIT: make your computer go "Om" at random. This is a great way to terrorize your fellow workers, and computer repair people. On the other hand, you may find it just what you need to reach that final pinnacle of perfection and absolute grace.
- GORESTOPTEN.SIT: Vice President Gore explains the top ten reasons for being Vice President; a System 7 sound file.
- APOCNOW.SIT: System 7 sound file with a real neat stereo effect: if you have a

- Mac which supports stereo sound and you have stereo speakers, you'll hear the helicopter rotors move from left to right.
- RANMANIBUNOOP: massive sound file containing the entire opening theme to a Japanese children's TV program. Has a really nice beat. True, you won't understand a word of the lyrics, but this will help you better understand Japanese culture—where the best-selling records are all in English, and none of the consumers can understand what they say, either.
- DX7LIBRARIA.SIT: sample library for Yamaha DX/7 samples/voices. Store up to 32 to replace your DX/7's normal voices.
- PLAYERPROBE.SIT: beta version of Player Pro, which plays MOD, sound and MIDI files, and allows you to edit MOD files, view them in all kinds of different ways, and lots of other neat things.

Area 27: Mac Graphic Images

- BESTOFBCSAR.SIT: Best of Boston
 Computer Society Clipart, collection of
 black and white MacPaint clip art
 PEANUT12.SIT: icons of the Peanuts
 characters, in b&w and color.
- KIMURASPPAT.SIT: superb oversized color desktop pattern resources, with a strong Japanese theme.
- ZIPPYPICTUR.SIT: varied collection of 1920's-style clipart, in EPS (Encapsulated PostScript).
- ESCHERSFISH.SIT: recreation of Escher classic in MacDraw; this was a *lot* of work.
- ESCHERSWORD.SIT: a PostScript program embedded in Microsoft Word to recreate a classic Escher work.

Area 28: Mac Graphic Utils

- ARTABROT.SIT: Mandelbrot fractal generator for AV Macs only as this program uses the DSP (Digital Signal Processor).
- MATTPNT.193.SIT: color paint application.
- SPINNINGGLO.SIT: great collection of globes of Earth, with two QuickTime movies of a spinning Earth, two applications for drawing the Earth, and a whole bunch of custom icons.
- SPRKLE16.SIT: MPEG Video player. Also converts MPEG movies to QuickTime format.

Area 29: Mac Telecomm

FETCH.2.1.1: for Macs on the Internet, this is a must have application. It can be modestly described as an application to do FTP transfers to/from remote hosts.

- However, it is intuitively Macish in operation, it comes preconfigured for the major Mac FTP archives on the Internet, it understands all common compression and BinHex standards, it's fast, and it's well written.
- TURBOGOPHER107: if you have MacTCP and are connected to the Internet, this is a must have application. Gopher is one of the emerging standards to publish and browse information on the Internet: text, files, indexes, directories, pictures, etc.
- ZTERM.FAQ.1.3: information and answers to the Frequently Asked Questions (FAQs) about ZTerm 0.9.
- INTERSLIP.1.0: freeware SLIP (Serial Line IP) driver for dial-up access to the Internet (requires lots of other stuff, too)
- NCSAMOSAIC2.SIT: NCSA Mosaic is an enabling technology that allows the user to easily access networked information from all over the world with the click of a button. Retrieve text, images, movies, animations, sound and scientific data from the Internet via Gopher, WAIS, World Wide Web, FTP, Usenet News, Telnet, and Archie.
- EASY.TRANSFER21: an application that allows users to exchange files between Macintosh computers on the Internet (or any TCP/IP network).
- ASYNC.PEEK: an RS-232 line monitor and tester.

Area 31: Mac Product Support

- QUARKSTARSS.SIT: Quark XPress Xtension which allows you to add stars and stripes to jazz up your layout.
- AD2.0XUPDATE.CP: updates any version of After Dark 2.0 to 2.0x.
- AUTODOUBLER.SIT: update AutoDoubler 2.0xy to v.2.02.
- MWUP1.1V5.SIT: updates any prior version of MacWrite II to 1.1v5.
- GC0803.SIT: updated MacWrite II filter for Word 5.x from Microsoft; fixes many bugs.
- SUITCASE2.1.4UP: update Suitcase to v2.1.4.
- ACCESSPC201.SIT: update Access PC from 2.0 to 2.01.
- SYM.C.6.01.CPT: update Symantec C++ 6 to 6.01.
- CPLUSMPW601.SIT: update Symantec C++ for MPW to v.6.01.
- THINKC6.0.1.CPT: update Think C to v.6.01.
- DELUXE3X.37.SEA: updates any version of Stuffit Deluxe (and related components) to v.3.07 and Stuffit SpaceSaver to 1.06.
- FULLWRITE17CONV: updates FullWrite 1.5s or 1.6(p1) to FullWrite 1.7.



Area 32: Mac Games

BOLO.0.992, BOLO.MAPS, BOLO.MAP.EDITOR, BOLOSTAR.CPT, BOLO.FAQ, INDY1.4D.SIT: everything you need to play a networkable tank game, including maps, map editors, an autopilot and the game itself.

FS.ATC.201.SIT: Air Traffic Control for Flight Simulator

SHATTERBALL.SIT: 3-d 'Breakout' type of game.

CAROTTO 104.SIT: program from France that allows you to build a racing track and race against others with your cars. It comes with several tracks ready to race.

MAELSTRM131.SIT: Maelstrom 1.31. Andrew Welch's Asteroids-like (but much more sophisticated) game.

NET.OTHELLO.112: networked version of the Othello board game.

PENTOMINOES.121: board game where you must fit 12 pieces (of five squares each) into a variety of boards with no pieces overlapping.

RESCUE.1.51: latest version of the realtime, multi-window Star Trek action game based in The Next Generation universe.

Area 33: Mac Education

FLASHCARD.CPT: a repetitive-enforcement learning aid, designed to be similar to those decks of flashcards used to teach mathematics and other skills to children.

CWADMIN.DAT.SIT: passel of Clarisworks 2.0 databases for the teacher/administrator. Grades, budget, discipline records, more.

CLOUD.ALTITUTE: calculates the probable altitude and types of clouds given a day's temperature and dew point (these may be found on your local newscast or newspaper).

GRADEBOOK.1.4: lets teachers keep track of student's grades.

Area 34: Mac Hypermedia

KIDSCANSAVETH: Kids Can Save the Earth. This massive archive contains nearly 3 megabytes of tightly integrated HyperCard stacks containing sound, music, pictures and commentary on the environment, created by a group of children with the aid and assistance of several Washington Apple Pi members. The stacks date back to HyperCard 1.5; you don't need HyperCard 2.0 to use the package (but it works, too).

HYPERFROG: remember the IIgs commercial where the girl refused to dissect the frog in Biology class, except in software on her IIgs? Well, here's the Mac version.

SPEAKTEXT.SIT: XFCN that allows access to the Speech Manager/ PlainTalk combo.

CELTICMUSEU.SIT: wonderful museum of Cletic history, culture, literature, etc. in a HyperCard stack.

BARNEY.SIT: What Barney is Really Up To. Not for Barney-age children!

POORNEWTON1.SIT: Poor Man's Newton is a stack that does most of the things that the Newton Message Pad does at considerably less cost (provided you already own a Macintosh).

ROCKYHORROR.SIT: stack with some digitized images and sounds from the Rocky Horror Picture Show.

ZIPCODES.SIT: all the 5 digit zip codes in the country.

WHALES.SIT: stack dedicated to the understanding and preservation of whales.

DINOSAURS.SIT: lots of dinosaur images in this HyperCard stack.

ISLAMICHIST.SIT: stack of Islamic

BICYCLEGEARCALC: helps design bicycle gears; copes with 8 rear cogs, displays gears numerically and graphically.

POWERNOTES.2.0: stack designed to be an electronic notebook for students and researchers, on a PowerBook or other Mac with a screen size of 640 x 400 or larger.

DARTMOUTH.XCMDS: famed Dartmouth XCMD set, v 4.0.3

SBPERSONALI.SIT: parody of the Meyer-Briggs personality test stack.

Area 35: Mac Multimedia/QT

CLEAROUTTHE.SIT: Clint Eastwood enters a bar and orders anyone who doesn't want to get dead to "clear out the back." Ranks right up there with Kevin Costner, in "Silverado," having a gunfight with two gunmen at the same time-firing around a corner. Almost as good as Kevin Kline, in the same movie, having a gunfight while wearing underwear-and assembling hispistol.

NEWTONDEMO.SIT: stand-alone animation shows the Newton in action.

JULYCOLOR.SIT: clip done by NOAA to illustrate the ebb and flow of currents in the Monterey Bay National Marine Sanctuary.

BLIZZARD.SIT: The Blizzard of the Century, QuickTime clip composed of NOAA satellite images showing the "Storm of the Century" as it was created from three different weather fronts which collided into one hummer of a storm. This was a milestone event: the Weather Service predicted the storm a

week in advance, and gave detailed predictions of how bad it would be-and were right on the money, thanks to computers, satellites, and advanced mathematics.

ATLASBLOOPER: an Atlas rocket takes an interesting route to the heavens.

ANDRETTICRASH: Mario Andretti destroys a car worth far more than vours or mine.

DOUBLEY.SIT: in this exciting, and really strange, clip, entirely computer created (from the sounds to the pictures), our hero, an odd wheeled device, runs into The Wall, attracting the attention of Wall Security.

HAROLDSDATE.SIT: a classic tale of today: Harold, young man about town, super cool, educated, tries to pick up someone. This entire movie was filmed on location using objects and backgrounds composed entirely on a Macintosh.

UFO.SIT: actual footage of a UFO in flight! Funny!

THESECRETRE.SIT: what happens when you play with your Mac too often and too

HYPERCUBERM.SIT: watch this for a few minutes and your mind will turn to yogurt.

NEWTON.SIT: Apple Newton TV commercial. I expected an English scholar sitting under a tree with MessagePads falling on his head.

BLOODSHOTDO.SIT: really well done bloodshot eyes stare out at you and blink. Great way to unnerve your coworkers.

STRIP.SIT: brief clip (pun intended) showing an exotic dancer during a visit to Geraldo's TV show.

Area 36: Mac Information

WORDMACDIGE.SIT: Word-Mac Digest #100-178. Word-Mac Digest is a moderated news group conducted as a series of questions and answers sent across the Internet concerning Microsoft Word.

WORDMAC.SIT: Word-Mac digest volumes 190-206. In text format. TIDBITS #192 to TIDBITS # 197 (Sept. 6 to Oct. 11, 1993): the latest news and gossip on the world of Macs and related matters, in electronic format.

SF171SP.SIT, SF171SMARTF.SIT, SF171DRAW.SIT, SF171.SIT: Standard Form 171, Application for Federal Employment, in SuperPaint 2.0, Claris SmartForm, MacDraw and MacDraw II format.

Area 37: Mac Programming UCBLOGO.SIT: public domain LOGO



from UC at Berkeley. Compatible with the DOS and UNIX versions of UCBLOGO.

MOPS231.SEA: Mac Mops FORTH development system.

LOGO.2.1: the Logo programming language (educational, for children) implemented within HyperCard.

XLISPMAC..2.1E2: public-domain version of the Lisp package.

ABZMON.SIT: TMON-like debugger with a graphical interface.

FILE.DROPPER: THINK C 6.0 library that implements an application that you can drop files or folders onto to do batch operations.

C..PROG.ERRATA: errata for "The C++ Programming Language (Second edition)" by Bjarne Stroustrup.

DDP.SOCKET.LIST: source code for an AppleTalk DDP socket listener. This code listens for datagrams arriving on multiple user-specified sockets.

Area 38: Mac Technical

MAC.IBM.COMPARE: technical comparison of Mac & Intel line

REPLACE.EXIST: when you try to save a file over an existing file, you get a dialog asking "Replace Existing <filename>?" If you wish to get rid of that dialog, or at least change the default button, this document tells several ways to do it with ResEdit.

A New Space is Needed for the Office

Four years ago, Washington Apple Pi entered into what has turned out to be a very expensive lease for the office suite we now occupy in Bethesda, Maryland. There is one year remaining.

The facility was poorly designed for our needs then and has not aged gracefully. The classroom is too small, the air conditioning is shut off at 7:00 PM (just when evening classes are to begin), the cooling for our electronic equipment has to be constantly supplemented, and the poorly designed remainder gives us lots of closets and little usable working area. It is time for us to decide what we want to do.

Obviously we need all the things our existing location denies us: full control of the heating/ cooling system; a large and medium classroom; ground level access or elevator service; near Metro and major arterials; parking; and a Nick's equivalent.

The bulk of our regional membership lives in an arc from Route 66 and the Beltway around to New Hampshire Avenue and the Beltway.

There are lots of options to be explored; but we want to hear from you before we proceed further. Here are some of the things we

-No walk-in office. Run the mail order business from a post office box and rent classrooms and an auditorium for all public activities.

 Lease another traditional office, a warehouse which we could remodel, a townhouse, or ????

 Share/sublease with another public service organization

-Other: think about other options!!!

Right now, almost \$50,000 goes to rent each year. Just think of all the things we could do if some of that money was available for new programs. Here is my request to you: if you are at all concerned about that type of facility we get, be it an office, warehouse, or townhouse, etc, or you are concerned as to where the office is located, now is the time to get involved. First, think through the issue, then write to the office with your view on how we should proceed. If you are on the TCS, use Open Forum [Conference 1, Board 28].

-Lorin Evans



Notes from the **Apple II Vice President**

by Joan Jernigan

he September meeting of the Apple II group was well attended. 20 people signed the roster. If you didn't sign the sheet, I appologize for not mentioning you here, and I will try to make the sign-in sheet more visible in the future.

Ron & Max Evry were there with their collective expertise. Andy & Aaron Wallo were another father/ son team present. John Fuller, George Griffin, John Karpowicz, Ernie Sowada, Tom Vier, Chuck Merenda, Ken DeVito, Bill Wydro, Frank Zappacosta, Erik Moga, James Irick, and Joe (didn't get the last name), and Bill Geiger rounded out the group of participants. Grace Gallagher did a wonderful job as chief presenter. Husband Dave was invaluable as technical support. I just enjoyed the fruits of so many

volunteer hands putting on a productive, sharing meeting.

We started by looking at a promised CAD program by Kitchen Sink. The program turned out to be designed for use by an engineer, not the typical user, so we tabled the demonstration for another meeting. We all enjoyed viewing several new MECC programs. MECC is a company in Minnesota that creates great educational programs for schools. Although all AppleII members are not teachers, we are all either parents, grandparents, students, or lovers of games, so we all enjoyed viewing these games and simulations. Arizona Mix is a simulation of an archaeological dig. Dueling Digits and Arithmatrix are math games that involve extensive thinking skills. A good time was had by all. Dave and Beth kept us honest by reminding us to break down prior to the bewitching hour of 11:30 a.m.

Several of us topped off the meeting with lunch at Fudruckers. Maybe we can work our way through the area restaurants in subsequent months.

The October meeting was the Newton Road Show. Since Newton is neither Macintosh nor Apple II. we all stayed on and enjoyed the presentation. We are hoping to get AppleWorks 4.0 for the November meeting. If we can't get it in time, we will again look at AccuDraw from Kitchen Sink, and other topics held over from previous meetings.

If you are willing and able to help with a program in the coming months, please let me know. Dave and I share a TCS account, so send your comments to us there or on the Internet I am jierniga@mwc.k12ed.edu.

I'm looking forward to hearing from you.

AppleWorks 4.0 **Demonstration**

There will be a demonstration of AppleWorks 4.0 at our November meeting. There's a new date—November 20th.

Software Solutions II (SSII)

is offering significant discounts on some of their software. This offer is available through the publisher.



Apple II **Byts and Pyces**

by Gary Hayman

his is a regular monthly column which includes Apple II information of the hints, techniques, suggestions, helps, information, news, etc. genre. Information which may not, in itself, warrant a separate article in the Journal but would, nevertheless, be of interest to Apple II readers. You are asked to submit your hints, ideas and suggestions to me for monthly organization and publishing. You may do it via the TCS or direct mail to me at 8255 Canning Terrace, Greenbelt, Maryland 20770. Telephone calls to (301) 345-3230. Please note that this column is often submitted for publication 45 to 75 days prior to its appearance in print.

Where To Place Hierarchic

[From Lunatic on GEnie] It's a good idea to make sure that Tool.Setup, TS2, TS3, Resource.MGR are always the first files in your System. Setup folder. If you're going to be moving Hierarchic around at all in the directory order. make sure it comes after those files.

Bunker Changing Platforms

Sad News (in September). One of my favorite Apple II authors is changing platforms. He is being very generous and is sharing his excellent programs with Apple II users. Look on the TCS for the files that he mentions. Karl Bunker writes:

Over the next few days, I'm going to be uploading freeware updates to my major shareware pro-

grams. This includes Quit-To, File-A-Trix. FloorTiles. Ant Wars and ShutDown Reminder. This means that these programs will henceforth be available for free, with no obligation or request to pay me anything.

The reason I'm doing this is that I'm winding up my involvement with the Apple II as I move on to Mac programming. Releasing these programs as freeware is both a parting gesture of generosity, and a way for me to weasel out of any obligation to continue to provide Apple II user support. I will continue to check into this Topic for a short while, and will do my best to answer any mail/e-mail questions regarding my A2 programs. I just won't be maintaining my database of registered users, won't send my disk of goodies to paying customers, and won't be producing any more updates.

I don't suppose I have to explain the basics of why I'm leaving Apple II programming. It would be nice if I could continue to produce for both the Mac and the Apple II, but I don't have enough time or brains to spare for that. It's going to take all my resources of both just to catch up and keep up with developments in the Mac world.

It's been fun, it's been rewarding (mostly emotionally), and it's been —well — lots of things. I wish I could shake hands with all my paying customers, and thank each one in person. In lieu of that, I'll say it here:

Thanks a zillion, and good bye.

Give Him The Boot

Chuck Garrett asked, on GEnie, "Is it possible to boot directly to an 8 bit selector and choose from several applications such as Proterm 3, Print Shop GS, etc., without booting into GS/OS?"

Dan Crutcher (of macros fame) answered "Sure is, and that's exactly the way I've done it for years. Here's how:

- Copy the file "P8" from your System folder to the root directory of your boot disk. Be sure you _copy_ the file, so that P8 is still in the System folder as well.
- 2. Use any capable file utility program to rename the file "ProDOS" in your root directory (this is the "fake" ProDOS that is only 2K) to "Launch.GSOS" (or whatever name you want to give it).
- Rename the file "P8" that you copied to your root directory (not the one in the System folder) to "ProDOS".
- Sort your boot-disk root directory (ProSel and a few other utilities will do this) so that your program selector is the first ".System" file in that directory. In my case, this is the 8-bit PROSEL.SYSTEM program.
- Reboot. You should be (instantaneously) in your 8-bit program selector.

"Assuming you use ProSel-8 as your program selector, you would set up launch entries for all your 8bit programs, like AppleWorks, ProTerm, etc. and you would also set up an entry (I call mine "GS/ OS") to launch the "Launch.GSOS" file in your root directory. That will "boot-up" GS/OS just the same as your current setup does it automatically. I'm sure other program selectors will let you do the same thing."

Bryan Zak of SoftDisk added, "Here's the deal: the way the Apple



II boots is this. Blocks 0 and 1 contain special "boot" code that look for a file named ProDOS at the root level of the disk being booted.

"On 8-bit Apple IIs, this "ProDOS" is almost always ProDOS 8. This is not always the case though.

"When booting GS System software, the ProDOS is actually a small little program that knows how to start up GS/OS — that's all it does. Under GS/OS the "real" ProDOS 8 is kept in a file named "P8" in the System folder.

"P8 is the "real" ProDOS 8 and can be renamed to "ProDOS" and moved to the root of any disk and the disk will then boot to ProDOS 8.

[Lunatic again (Yes that is his real name)] "Renaming the small GS/OS "ProDOS" file to something like "Launch.GSOS" is not a very good idea. On many systems GS/OS will not load properly if you launch that file FROM ProDOS 8—it would have to be loaded from a full reboot. With System 6.0.1 you really have no reason to rename that small "ProDOS" file and copy P8 out into the main directory, anyway. You can do the same thing simply by hitting the "8" key as you boot. All you really need to do is this one step:

[4. Sort your boot-disk root directory (ProSel and a few other utilities will do this) so that your program selector is the first ".System" file in that directory. In my case, this is the 8-bit PROSEL.SYSTEM program.]

"Then, when you hit "8" while booting, ProDOS 8 will be loaded and you'll go straight into the first ".System" file in your root directory (usually it's BASIC.System, but you can make it anything)."

Apple II Future

Morgan Davis, renown for his ProLine software, is talking about Apple II future stating, "Apple hasn't been involved in actively support-

ing the Apple II since 1986 when the last real engineering was done to solidify the IIGS design. Ever since then, Apple's given very little attention to the Apple II series, compared to the Macintosh. The time to give up on Apple Computer was about eight years ago.

"However, Apple computer is not what makes Apple II computing what it is. It's the developers and third-party companies that have made the Apple II a venerable and productive machine today. We're just lucky that we continue to get new operating system software every now and then from Apple. I don't feel that the future of the Apple II even depends on that.

"Don't give up on the Apple II developers, which is what you're really doing. If the remaining Apple II users replaced their machines with PCs, it wouldn't hurt Apple at all, they wouldn't even notice. Unfortunately, the migration would completely decimate the Apple II developers who would surely suffer from it."

More Apple Comments

[Again, from Lunatic] "The "visionary" aspect of Apple Computer has always been taking an existing technology and implementing it in a consumer product, though. Just like Ford invented the Model-T, not the automobile, Apple didn't actually invent the personal computer. they invented the Apple II. They didn't invent disk I/O, they invented an affordable disk I/O device (the Disk II). They didn't invent the GUI, they invented the Lisa/Macintosh GUI (the first mass-market, popular GUI). Likewise, they didn't invent the mouse, laser printers, the SCSI interface, SIMM sockets, 3.5" floppy drives, or many other things that are now taken for granted with 90% of the new personal computers sold today. They did, however, use them first on widely available popular personal computers. So Apple didn't invent the PDA, so what? The Newton still looks to be the Model-T of the future PDA world. Apple got into the true laptop arena late, but boy those PowerBooks sure look nice compared to the MS-DOS/Windows laptops currently available, don't they? Nice enough that even a lot of DOS diehards bought them.

Apple's never been an "inventing" company. They make a lot of great actual products out of the raw clay (ideas) from others, though. That's how they are "visionary." It may just be that now with so many other potters at their own wheels, the products of any one potter are much less distinct and unique. Plus it's so much more cutthroat now that everyone's trying to find out what everyone else is doing, and beat them to market. Even without spying on each other, everyone is trying to find ways to come up with the same result, and naturally more than one company is likely to follow the same path, independently.

Apple II Material Available

Gena Saikin shares, "One more feather in the cap of schools that stick with Apple will be a great amount of Apple II resource material available through Eisenhower National Clearinghouse (ENC) destined to go online sometime in October or November.

"This ENC will consist of a large database and library of educational resource material for science and math, and I understand a smaller library of other educational materials unrelated to science/math. Much work is being done on this project by Eric Bush of Kitchen Sink Software.

"As has been mentioned, there is so much more Apple II software available for education in the lower grades, than the MS-DOS platform. I truly believe that schools that are



going to switch to another platform, are simply wanting to be on the "cutting edge" of technology and want to "keep up with the Joneses" as it were. Unfortunately, it saddens me when I see districts struggling just to keep a decent teaching staff onboard, and then spending needless dollars for something they think will bring them out of the "dark ages" - apparently persuaded by heaven knows who that the Apple II platform IS in the dark ages…

"But, it's hard trying to tell a district that is "wooed" by purveyors of "cutting edge technology" that their "old trusty Apples" are just as valuable and just as viable now as they were 10 years ago! - even more so! It all comes down to the "Hatfield and McCoy" type feud that is going on between computer platforms - none more prominent than that between IBM and Apple II..."

Printer Advice

"ShareWare Solution II"'s Joe Kohn comments re: a printer question, "About the Okidata OL400e, I erred on the side of caution. It appears that \$499 is the most that printer costs. I have seen ads for it for as little as \$475. Keep in mind that the Okidata is a different type of printer than a true laser printer. Rather than using lasers, it uses LED's (in a similar manner as the Quickie). A year ago, when I was researching low cost laser printers, I read a number of articles about the different technologies, and no where did I ever read that laser technology was better or superior to LED technology. It's just a different method to achieve the same results.

But, if shopping around for a new printer, I do maintain that it is very important to visit stores and test drive several different printers. After all, spending \$500 is a major investment, and you need to be happy with your purchase. Visit different stores and compare sample print outs, then make your decision which printer you want, then pick up a Computer Shopper to compare prices. That way, you'll be happy with whatever you purchase.

I was right about a laser printer war! I just read that HP is going to stop using Canon engines and build their own laser printers. That will result in lower prices. Who knows...maybe laser printers will be \$300 in a year?

An Option to Command or a Closed Apple to Open Late

Some authors use Open and Closed Apple terminology; some Option and Command; some both. Jerry Cline of Intrec (think ProTerm) writes:

"Our reasoning for using the term COMMAND and OPTION kevs are:

- <> The Apple Computer Syle Manual makes a strong request for developers to use the terms COM-MAND key in place of "Open Apple" and OPTION in place of CLOSED or SOLID Apple in their respective user manuals. And to use the COM-MAND and OPTION terminology after an explanation of the change.
- <> The Closed Apple key has not been present in the later Apple II computer family machines, it was replaced with the OPTION key.
- <> Our plans have always included a Macintosh (and a PC) version of ProTERM, and of course Macintosh terminology does not include "Open Apple" but does include COMMAND & OPTION. We decided the terminology change transition was favorable to our future development We would not be saying Open Apple key in one version and Command key in another. We also felt an early transition would make it easier for us, and potential ProTERM Mac customers presently using ProTERM A2. We

have not made reference to the ALT key yet, but its coming. B-K)

When users call for Tech Support, we usually listen for the terminology they are used to using, Open, Solid or Closed Apple, Open, Solid, Closed or Solid Triangle (Laser 128) or Command, Option preferences and use "their" language during the call. We have made a conscious effort to change though."

Which Version

Beverly Cadieux, publisher of "Texas II", was answering Lloyd Devries question concerning the new AppleWorks and UltraMacros versions. There is a lot of confusion on this one.

"The bottom line, Lloyd, is that you are (or at least, will be) right. AppleWorks 3.0 and 4.0 cannot share any files because the Appleworks system files and all of the segments are drastically changed. So when it comes to running both versions side by side, you are going to have two complete versions when AW 4.0 comes out. "One of the things you can do right now to prepare for that is to update 3.1 macros to UltraMacros 4.2. Macros written under UltraMacros 4.2 will work "as is" with AppleWorks 4.0, unless they access keypresses which have changed (a minor point*). Task files which you used under either 3.1 or 4.2 will have to be recompiled when the 4.3 compiler comes out because a few of the commands have changed internally. If you use task files written by others, you need to find out if they are being updated, and how they will be available. "(* I recommend updating to 4.2 everything having to do with files and Main Menu selections - such as adding files to the desktop - now. Leave anything that accesses the Other Activities Menu and Standard Settings until later.) "Another reason for running two versions is if you



must keep Data Bases which will be loaded by other users who have AW 3.0 only. For the most part, 4.0 WP's and SS's can be re-loaded into AW 3.0 (new 4.0 features are ignored). Databases can't. "If you are not an UltraMacros programmer (or dabbler), you can still be a "Player" under AppleWorks 4.0. This means that you will have a default macro set, which will allow you to speed up simple jobs, like creating a new AWP, ADB, or ASP file. You can run other people's macros from the TimeOut menu (up to now these have usually been fancier macros. but even simple ones can be launched from the TimeOut menu). "However, since you've probably spent a little time over the past 5 years developing a default macro set of your own, you'll want to install it under 4.0 in place of the default "Player" set. For this you need the UltraMacros 4.3 Compiler and Options.

"Some of the chores formerly done by macros can be accomplished in other ways with AW 4.0. Many commands, such as ejecting a disk, are now built-in. Others, such as auto-typing your name and address in a Word Processor file in various formats (Uppercase, Caps-only, with Returns, with commas), can be done via a Glossary instead of a macro. It's a lot of fun to figure these things out. There will be no shortage of good ideas for you to try... you might be so busy with all the new features, you'll forget you even have macros. You'll also find that going back to 3.0 for any reason at all is a big letdown, because it immediately lacks some of the 4.0 features that you'll come to like and use (such as the presence of Disk and File utilities)."

Copy II Plus Hard **On Hard Drives**

[Lunatic] "The problem with Copy II Plus is that it doesn't check the storage Type of files when copying — it just assumes that all files have a data fork and nothing else. I'm sure it also uses direct block reads and writes, with the end result being that when you tell it to copy a file with a resource fork, it looks at where the data fork is and copies that block by block, totally ignoring the resource fork. Luckily, the blocks used by the data in a resource fork are marked as "used" in the volume allocation map, so it won't copy any data fork-only files over on top of them. I suspect that its"zero disk blocks" function doesn't respect those "used" blocks, though (since it can't see what file uses them, it'd kill them), so that could possibly zap your files that have resource forks.

"In the end, I (like many others) just say don't use Copy II Plus on a IIGS (unless you're trying to back up copy protected software, or are working with DOS 3.3). There are simply too many ways that you could accidentally damage or destroy important files."

[Gary Utter adds] "Using the "undelete" function of Copy II+ is one of the known ways to make your hard drive disappear. Sometimes, when you use that option, C2+, for an unknown reason, will trash block 0 and/or block 1 of your hard drive. This is a Bad Thing.

"This refers to Copy 2+ v9.0, by the way (the most current version, so far as I know). Older versions don't do this, but they still shouldn't be used on or around a GSOS hard drive. The program is flaky, it is not really meant to work on hard drives. (It doesn't know, or care, that a HD is not a floppy.)

"Actually, I have Copy 2 installed on my hard drive, and I run it from there, but I only use it on floppies. I never use it on the hard drive, for anything. (In fact, come to think of it, I haven't used Copy 2 at ALL, haven't even launched it, in at least 2 years.)"

He Still Uses His GS

According to Gary Utter, "I'm on my fourth Mac. I have tons of high dollar, high performance software, and every toy that I could want (except a good laser printer and maybe a tape backup), and I STILL do better than 90% of my work on the GS. I originally got the Mac because I needed a second terminal to do my automated online stuff while I did my real work on the GS. I didn't think that it made sense to buy another GS when I had an opportunity to expand my horizons. and I think that was an appropriate decision. Still it took me a year and a half, 4 Macs, and thousands of dollars to get a Mac system that can perform in the same ballpark with the GS, and the GS will still whip its butt when it comes to speed and ease of use."

Terminal in the Modem

Recently there was some 'deep' discussion concerning telecommunication signals interfacing between computer hardware, computer software, and modem hardware. An informed, but unknown to me, author (Sorry) was responding to a message thread on this subject and penned the following educational piece.

"The modem is a box that accepts "AT" commands, but it's the interface that gets the commands to the modem. And it's the firmware that lets Applesoft send and receive the commands.

"I don't know if there's an easy way to explain the latter, but let's try this: Applesoft uses the monitor programs (firmware) built into the Apple, and the monitor programs really only know one place to send user output (the display screen) and one place to read user input (the



keyboard).

"To allow for alternative input/ output devices in the peripheral slots, the monitor includes the ability (supported by Applesoft) to change the location of the program(s) that output is sent or input is gathered from. Notice that since the Apple runs these programs, they have to reside in the Apple's memory. (That is, they can't reside in a selfcontained box like a modem.)

"The way this is done is by allowing each peripheral card to have a tiny slice of the Apple's memory for its specific program, which is normally contained on a memory chip similar to the BASIC and monitor ROMs in your Apple. The chip is on the card, and when you plug the card in the chip is "mapped" into the Apple's memory and the programs on it become available. The monitor (and Applesoft) can then be told to use the card's programs to send and receive data (this, if you haven't figured it out by now, is what "PR#" and "IN#" do).

"In this particular case, when we say "dumb terminal" program we are talking about the most basic ability of the card's firmware to allow diverting the input/output flow between Applesoft and the card to connect it between the display screen and the card. (That is, Applesoft no longer receives the input so you don't see '?SYNTAX ER-ROR', and your keyboard input is routed past Applesoft to the card so you just type 'Hello', not 'PRINT "HELLO".)

"Okay, are we straight on what the "dumb terminal" is?:) (For want of a better definition, it's the part that allows making the keyboard and screen appear to be connected directly to the communications port, bypassing Applesoft. You can have more features, but that basic input/ output capability is the root.)

"Many serial communications

interfaces have some sort of "dumb terminal" built-in. The Apple Super Serial card does, and so do the IIgs and IIc serial ports. But rip the ROM chip off a Super Serial card and the terminal is "gone", yet the modem hardware is still intact (and can, in fact, still be used to communicate with an external device if a suitable program is available in the Apple II memory, probably loaded from disk). As an example, my Epic internal modem has no (Apple II "mapped") firmware and therefore no "dumb terminal" capability, but is still perfectly usable with many software programs, including all the "AT" functions (the software just loads its own program to talk to the modem hardware). "PR#2" gets you "NO DEVICE CONNECTED" (from ProDOS BASIC), though; it can't find the required "programs" to talk to, so it doesn't think there's a modem interface there.

"The Hayes Micromodem, by the way, incorporates the modem and the serial interface (and firmware) on one card. That's why someone might think the "modem" has the terminal program in it, because the tendency is to refer to the integrated modem/serial card as only a "modem".

"Smart" modems accept commands from the dumb terminal and interpret them for their own use. In fact, they contain their own "terminal" function that allows them to work their own serial interface so they can send messages back like "CONNECT" as if they were a remote computer. And that's exactly how the computer sees them; it sends 'AT DT555-FAKE' to what it thinks is a "remote computer" and the "remote computer" dials up and connects to another remote computer, then more or less "hides" except for the modem function (translating between phone line data and computer data).

"And, yes, you do run the mo-

dem using nothing but "AT" commands, plus the escape ("plus plus plus") sequence...except as far as the handshaking hardware goes (and even that is "AT" configurable).

"However ... if you rip the (external) "smart" modems off two computers and connect them with a null modem cable, the "dumb terminal" programs can still be invoked to let the systems "type" back and forth. Obviously, the program isn't in the cable. :)

"RE things like downloading: that's actually a bit beyond what a "dumb terminal" is considered to do (that is, actually storing data, even in BASIC strings, is a step up). It's possible to do, but not very practical. For one thing, I don't think Applesoft can keep up with anything much past 300 baud, if that. For another, you'd need to "bootstrap" the process in 2-3 steps to get to even a minimally capable communications program; the time invested in learning (or explaining) how to do this and then implementing it is impractical versus buying an inexpensive but fully functional communications package (like Talk is Cheap, to pick one of the lowestcost ones I know of)."

"Someone else might rather spend 10+ hours 'futzing' with this as opposed to spending \$40+ on a program. If your time is not more valuable than \$4/hour, I have to ask why you have/use a computer in the first place."

Why Would You Want to **Sell Your IIGS?**

Jav Curtis answered a claim that a complete new computer system could be purchased for \$400

"\$400 does seem a bit low for a complete system. However, the way GS stuff is selling right now, as a starting offer it's about right. In my locale, complete systems (some fully decked out) are going for \$550 to



\$600. This is hardly a GS system's functional value, however.

"My advice to anyone thinking about selling their GS is: (A) Take your time, and part it out. You'll make more on it, but you'll have to wait for your money. Or, (B) Keep Your GS! As a functional tool, it's worth much, much more than the \$500 to \$600 you'll get for it (if you get any offers at all).

"[Mac people consider it junk] Grrrrr! Heck, the dern thing's got a 24-bit-wide data bus, DMA, fully addressable 8MB RAM capability, 4096 colors, full OS with the friendliest, object-oriented, graphic-based user interface you'll ever see on any machine, including a Mac. It's got TrueType, multitasking, aliasing and file compression extensions... With an RF card and Zip it'll literally run rings around any 386/16...or more than 90% of the DOS boxes in use today, to say nothing of Mac Classics, LCs and many IIs.

"DOS still hasn't effectively broken the 640k RAM barrier, not even DOS 6.0, (btw)... and never will. While Windows may look pretty, it runs on DOS, and the majority of the << real>> work gets done in DOS sessions, anyway. Windows is a very poor, unfriendly, system-jamming imitation of the Apple user interface, which does little more than steal your RAM and your \$\$\$\$. While Macs have a friendly, pleasing interface, most of them can't expand, are often subjectively slower than an unaccelerated GS, or any GS with RF card for that matter. None have a character-based user interface option except for the LC in 8-bit emulation (which, btw, is a joke standing next to a GS running the same software).

"The GS is still a superior machine to most of the computers in use. Why sell it, when most people don't realize how good it is and aren't willing to pay what it is worth as a

tool? Don't get caught up in glitter and hype, or be panicked by the fact that Apple has stopped selling the GS. Make hard, objective comparisons before you buy or sell. Consider your needs, and consider the fact that eventually the GS may be worth a lot more money, market-wise. Anything less than that may be a waste of your dollars and your sense. :)"

Zip Card Cables

Ron Royer questions, "How long can we expect our standard issue cables and pins to last on a Zip card?"

Bill Shuff replies, "That is difficult to answer. Some people never get flaky behavior from their Zip and others see it soon after it is installed. I would guess that it would be several months on the average before problems might start to show up. Moisture, corrosion, and poor connections can be effected by many things such as how often you plug things into the CPU socket, whether your finger brushed the pins, and the humidity in your home and how much money you give to charity. Some people have told me that pressing on, or removing and reseating, their cable connection fixes things for as long as six months. Also, don't forget that the connections of the cable to the connectors are not soldered. They are all press-fit or insulation displacement type connections. Poor connections there can cause the same problems as the pin to socket connections. I had problems with a TWGS cable long ago that disappeared when I soldered all of the connections of the cable wires to the CPU connector."

The author is currently Chairman of the AppleWorks and Apple IIGS Special Interests Groups and is the organizer of the new UltraMacros SIG. He is published frequently in the Journal of the Washington Apple

Pi. He is also a Beagle-Quality "Buddy", a Seven Hills "Partner" and a TimeWorks "Ambassador" for the WAP. His latest software programs, THE MAGIC NEWS GROUP READER, THE MAGIC FILE CABINET and MAGICAL MACROS - THE ABRACADABRA COLLECTION are presently selling internationally.



On the Trail of the Apple III

by David Ottalini Apple III SIG Co-Chairman

Happy Holidays!

Once again, it's time to sum up our year together as members of a very select group, the Apple III community. All I have to say is-what a year it's been!

Our most important project in 1993 was, of course, the development of a fund to spur new software (and hardware) projects for our SARA. It took some time, but our first effort has been a rousing success. Working with On Three's Bob Consorti, we have underwritten and Bob has produced "BOS3" (Bob's Operating System), the first new upgrade to our Apple III OS in some 10 years.

Those of you who contributed, individually as well as WAP and ATUNC, have helped to ensure that we will continue to get useful service from our IIIs through the end of the century (and beyond!). Hopefully, we'll be able to build on this success with future projects.

Honor Roll

Here's our list of individuals who have contributed to the SDF so far this year (in no particular or-Grace Gallagher, Paul Campbell, Aneita Campbell, Eric Sheard, Dave and Joan Jernigan, Ivan Munson, David Rutenberg, Dave Ottalini, Anonymous, John Lomartire, John and Barbara Dudman, Burr Patterson Jr., Ed Becker, George Blosser, Robert Tatom, and Steve Truax. If I missed

anyone, I apologize, we'll list you next month! Many, many thanks also to the WAP BOD and to Tom Linders and Mary Berg of ATUNC.

It's still not too late to donate to the fund, by the way. We have a number of other projects in mind, and the more money we have in hand, the more we'll be able to accomplish. This is a real situation where you can and do make the difference! Donations should be made out to WAP with a note that it goes to the Apple III SDF.

That Said...

I am proud to announce that the 1.0 version of BOS is now available and ready for sale!!! Thanks to the arrangement we made with Bob Consorti, WAP purchased 30 copies of the program from him in advance. That is, we sent him \$1500.00 and he has now decided to charge \$50.00 (OK-\$49.95) per copy (yes, I rounded it off for ease of computing!).

Those 30 copies are now available for sale from the WAP office. As our way of saying thank you, we will offer the program at a 10% off discount to all WAP and ATUNC members (and to any non-members who donated funds to the SDF) during December only. Proof of membership (or of a donation) must be presented at time of purchase.

All copies still remaining as of January 1, 1994 will be sold for \$49.95 each plus tax (and shipping/

handling if necessary). All funds from BOS sales (save taxes of course) will go right back into the SDF fund so that we may continue with new projects.

And what if we sell out? You'll still be able to purchase BOS through Bob Consorti's parents in California —their address is:

On Three c/o Joe Consorti 1174 Hickory Ave., Tehachapi, CA. 93561

SIG Meeting

We've decided to combine our final SIG meeting of the year with the December 11th Garage Sale. That way all our members from out of town can take advantage of the great sales, and still hobnob with fellow SARAsaurs. We won't have a "formal" meeting this time around but will have a table or two for IIIers to sell their goodies. We're also hoping to be able to present a demo of BOS as part of the seminars that the club plans to present.

The Garage Sale this year will be held from 9am to 2pm at the Allentown Plaza Shopping Mall, in Camp Springs, Maryland. See the map elsewhere in this Journal for information and directions.

Our first meeting of 1994, by the way will be back at the WAP Office-on Saturday, March 12th. As always, things get underway at 10am and we'll head for lunch sometime in the noon hour. Join us!

Oh Mighty SARA!

Our good friend Bob Sambolin, of Columbus Ohio remains a SARA Evangelist. He offered these thoughts recently on the IIIs Company, WAP BBS (301-593-0024):

Oh mighty SARA. The people who created you did not know the potential you had! The people that used you and changed when a new machine came along didn't know your capabilities. But those of us using you today know! And we're



willing to go further—to stay with you for a long time.

Our friend Paul Campbell has written about "The Irony of Things." I just received one of my many electronics magazines. Inside I saw an offer aimed at IBM or compatible users for a "VGA to TV Package." It's a converter that will allow the user to display computer generated text, graphics, or games on a regular TV set. It can also be connected to a VCR to record the computer's output. The price? \$400.00!

Where have I seen this before? OH! Now I remember. It's in the manuals for my 10 year old Apple III. And all it costs for our SARA to hook into a VCR (and thus into the TV) is an inexpensive cable. The irony of things!

System Utilities Tip

You may well know about the up-arrow feature of System Utilities which will help you put together the pathname of a file. But I learned a new trick the other day thanks to an old "III Dimension's" Magazine:

Let's assume we have worked our way thought the UTILITY disk to the point where we need to enter the pathname. Since we know it is on our Profile, we enter [.Profile] and press the "up arrow" key. The listing of the highest level of subdirectories will be displayed. Among them, you will find "machinery".

Since this is probably the heading we want, use the "right-arrow" key to select it (in the window). NOW COMES THE DIFFERENCE. Rather than pressing the <RE-TURN> key we press the <ENTER> key. If you look at the pathname you will see that it has changed to [.Profile/Machinery]. By pressing the "uparrow" key you will now display a listing of the next level.

After hi-lighting the last file name with the "right-arrow" key, press <RETURN> instead of <EN-

TER> to indicate that this is the full pathname. You have now found and selected the pathname all in one operation!

Apple III Forever

Back in May of 1985, ATUNC's Wayne Schotten wrote a column called "Apple III Forever" in which he proposed ways to make sure we can continue to use our SARAs for a long time to come. He wrote at the time:

I have used (the III) continuously and profitably in my business from the day I first turned it on. Every hour I've spent in learning to operate it, in learning to use applications software, and in learning to write my own programs has been returned to me many, many times over.

Switching to any other machine seems surely a retrogressive move. The III is a serious, no nonsense computer system, a powerful tool for building mental muscle. The potential for the III has barely been tapped, and may be the perfect choice for someone who wants to be creative with computing.

Schotten made these suggestions for preserving the III:

- 1) Gather and preserve whatever documentation can be had for hardware and software from both Apple and outside vendors. (Note: Apple has every manual on microfilm and, for a cost, may be able to print you a
- 2) Gather and preserve spare parts, even defective equipment may someday prove valuable if repaired.
- 3) Identify and garner cooperation from those who know the inner workings of the III.
- 4) Copy and safeguard both floppies and manuals.

And he made these suggestions about supporting the III:

1) Maintain good contact with Apple, after all we are business users and still potential customers.

(Note: as mentioned last month. Apple seems to be making an attempt to provide Apple III support again).

- 2) Encourage by communication and purchases from peripheral manufacturers such as On III and
- 3) Buy Apple stock. Even one share gets you into the stockholders' meetings. What a noise we could make en masse!
- 4) Those of us so inclined should actively develop our own software. I've been enjoying success in writing and using my own programs. I've also been converting some Apple I programs and intend to build a library of public domain software. I'm more than willing to share.

I'm not sure if Wayne still owns a III, but if he could see what we've done with our SDF and the development of BOS for the III. I'm sure he'd be proud!

Who Once Owned or Used...

An Apple III? How about: Herbie Hancock (to compose music), Richard Hart (a network journalist), George C. Scott (in a movie), Burlington Industries, the Oakland Coliseum. Even "The Greatest American Hero" on TV once used one to plot his triumphs. And you thought the only famous users were Dave and Joan Jernigan....

Finally

I want to wish you all the merriest of holidays and happiest of new years. This SIG would really not be here without your continued support in any number of ways. I hope you'll make a New Year's Resolution to attend at least one of our meetings, write an article or just call and touch bases this next year. Paul and I care about your thoughts and comments-especially when they deal with where you'd like to see us take SARA in 1994.



Apple III Resources

- -Bob Consorti- (617)-731-0662 -On Three c/o Joe Consorti-
- (805)-822-8580
- -Sun Remarketing-(800)-821-3221
- -Tom Linders-(408)-741-1001
- **—W.M.Enterprizes** (301)-268-4242
- -Apple II Software Newsletter— (800)-776-2333
- -Apple User Group Connection—(800)-538-9696 ext. 500
- -Apple User Assistance-(800)-767-2775



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A BOS Primer

by Bob Consorti On Three, Inc.

(WAP III SIG Note: Who better to explain what BOS is and how it works than our own SIG member—and programmer—Bob Consorti? The following information is taken from his Users Guide for BOS-Bob's Operating System for the Apple III).

What is BOS?

BOS is "Bob's Operating System" for the Apple III. It has been designed to help you use your Apple III more effectively by bringing some of the features of the newer style computers to the venerable old Apple III. BOS provides a built-in program switcher, disk caching, print spooling, a screen saver, automatic uncopyprotection of Apple Writer (2.0 and before). VisiCalc and Advanced VisiCalc, startup and individual program password protection. It also allows you to set a program to automatically run upon booting your Apple III.

- BOS is fully compatible with programs requiring SOS 1.3 and 1.3(S). It works with the Desktop Manager and other popular programs designed for the Apple III.
- BOS has improved memory management routines to make available more memory for many of your programs. In some instances, up to 31.75K more memory than Selector or Catalyst.
- BOS is self-installing. If you are installing it on a system that previously held Selector, you will not have to reinstall any of your programs. If you're using

- Catalyst you should backup your files and reformat your hard disk to setup for installing BOS.
- Since you may have a larger number of programs than could be displayed on a single menu, BOS provides up to 4 different menus to accommodate up to 180 different programs.
- Complete help files are available from the BOS Program Switcher with just the press of two keys.
- BOS comprises over 60,000 lines of source code and 2.4 million typed characters!

BOS Advanced Techniques

BOS has a special feature to help you gain the largest amount of free memory for your programs by eliminating the memory fragmentation effect. This feature will only work with some programs but it is useful for squeezing the last byte of memory from the Apple III. SOS, Catalsyt and Selector all load interpreter programs in the highest available bank in memory. This can result in memory fragmentation.... BOS allows you to force the interpreter to be loaded into bank 0. This results in a worst (or best depending on how you look at it) case scenario of gaining up to 31.75K of memory lost due to the fragmentation effect. Not all

programs will work with this option which is why it isn't the way BOS switches to all interpreters.

Any program that requires graphics can't be run from bank 0 since that's where graphics memory is located. All Pascal programs refuse to run from bank 0. Basic programs that don't use graphics work perfectly from bank 0. 3EZ Pieces and VisiCalc work nicely when run from bank 0 but Advanced VC locks the system up if you try and run it from bank 0. Apple Writer 4 won't work from bank 0, nor will Go Back. DDFF3 will. The easiest way to see if a program will run using this option is to try it as you can't damage anything by trying.

BOS Technical Details

For compatibility with the majority of Apple III programs many of the internal locations inside BOS are the same as SOS 1.3 and SOS 1.3(S). BOS provides a number of enhancements over the earlier versions of SOS:

BOS takes the highest available bank of memory and reserves it to hold the program switcher, cache, spool and screen blanking handlers. Drivers are loaded in the next bank down in memory. During the startup process, the event queue is disabled until after BOS sets up the cache. This allows drivers like .DESKTOPMANAGER to load in after the cache, speeding its loading time and for drivers such as the .RAM driver to be able to obtain the memory that it needs to operate without interfering with the cache manager.

Note that if you are using the .RAM driver, you should first setup any disk cache that you want to use, then check the memory usage from the BOS Program Switcher main menu and then set up the ramdisk below the memory the cache manager uses. Otherwise there will



be a conflict and the RAM driver will not be able to operate properly.

The BOS initialization code also checks for and patches the .DESKTOPMANAGER driver so it doesn't 'step on' memory reserved for disk caching.

BOS Utilities

The BOS Utilities Program allows you to change your menu, setup the disk caching and spooling configurations, install BOS on your hard disk, select and change the passwords and adjust the screen blanking options. It is quite a complex part of the entire BOS package.

Disk Caching

One of the advanced features that BOS provides your Apple III is the ability to keep frequently accessed information on your hard disk in the memory of your Apple III. Instead of having to go back to the hard disk each time it needs this information, BOS looks up the information in memory inside your Apple III. The occurs much faster than the information could be looked up on your hard disk, speeding access and general program use and it saves wear and tear on your hard disk because it doesn't have to continually go back to the hard disk.

BOS can cache up to 11 nonremovable block devices (disk drives). The SOS/BOS limit of block devices is 12 but the system will always have at least the built-in disk driver (.D1) which is a removable disk. The reason BOS can't cache removable disks is that there isn't a reliable way of detecting when a disk in a Disk III drive has been switched, thus resulting in the possibility that BOS could have incorrect information in the cache and could potentially damage the information on your disks. Because BOS will only cache non-removable devices this is never a concern.

BOS allows you to not cache a disk, cache the main directory only or cache the main directory and all subdirectories that contain files. (You can also do another form of the cache) which should only be used if you have recently backed up your hard disk with the Go Back hard backup/restore utility, formatted it and then did a full volume restoration.

Spooling Utilities

One of the advanced features that BOS provides your Apple III is the ability to quickly 'spool' information to be printed to a file on disk and then send it to your printer while you are doing other things with your Apple III. Thus, you could spool a 50 page report and instead of waiting hours for it to print before you could use your Apple III, you could be back working in minutes.

How do you actually spool? The answer is simple. On your BOS Startup disk, in the SOS. Driver file is a driver named .SPOOL. In your programs, when you want to spool print, print to this device and BOS will take care of spooling it to disk and route it to the selected printers while you are using your Apple III for more productive things. Note that some programs like that the printer device name be .PRINTER> IF you have such a program, use the System Configuration Program to rename the .SPOOL driver to .PRINTER and then rename the printer driver you want the spooler to send the spooled information to a different device name.

One of the powerful spooler options is the ability to edit the spooler queue. The spooler can handle up to 26 documents at a time. You may one day find yourself spooling a large number of documents and decide that you really want to see the last one you

spooled before the others. Since you can edit the spooler queue you can have that document print out first or change the order of printing of any documents in the queue.

Password Options

You can set BOS up to ask for a startup password to prevent unauthorized users from starting your system and individual passwords to protect 'sensitive' programs that you want to limit access to. This can be accomplished in the BOS Utilities Menu...

When startup passwords in ON and you have entered a password, BOS will ask you to type the password before it displays the BOS Program Switcher menu the first time. While typing in the password upon startup the characters you type will not be echoed to the screen so nobody can 'steal' your password by looking over your shoulder.

If you have program passwords enabled, BOS will ask for the password (if you have entered one) before switching to the program. Again, while typing in the program password, the characters you type will not be echoed to the screen. Note that you can have a different password for each program for the ultimate in protection (or confusion as the case may be!)

Screen Blanking

Yet another of the powerful options that BOS brings to your Apple III is the ability to 'blank' your screen to prevent phosphor burn-in that will cause 'ghosting' of images on your screen. Many of the newer computers have sophisticated screen blankers/savers and with BOS your Apple III now has the same capabilities.

(Screen blanking is only available while the BOS Program Switcher is being displayed. If you are using a different program, there



is no way for BOS to know when to blank the screen. Screen blanking requires that your III have a clock chip for optimum use.)

You can have BOS blank the screen after a set period of inactivity (30 to 65520 seconds) or on command by pressing Open Apple + 'B' while the BOS Program Switcher menu is being displayed. You can also have

BOS randomly run one of the available screen blanking utilities or have BOS run the one you select. This is all set up in the BOS Blanker Options of the BOS Utilities program.

You can have up to 26 different assembly language screen blankers and up to 26 Business Basic screen blankers.

What About My Timeouts?

by Gary Hayman

ell the long awaited AppleWorks 4.0 is almost at my doorstep. The promised October 1st, then October 15th date has passed. The next target date, November 1st is upon us and I am checking my mailbox on an hourly basis.

One of the BIG questions concerns the TimeOut Additives that individuals presently use with their current AppleWorks 3.0. Since the new AppleWorks will have some of additives 'built-in', what is really needed with the new program. Which of the other additives can I use as soon as AWKS4.0 arrives. Which will I need to update? Which will I update later; which will be obsolete and which will be in as state of limbo.

No sooner than I thought of these questions, the Master Macro Teacher, WILL NELKEN provided the 'current' answer. He reported that on the new AppleWorks disk is an Updater file that includes some

of the information. Other pieces of information he collected from someone named RANDY BRANDT. Here is the listing that he posted on GEnie:

These TimeOut applications are converted by TimeOut Updater: (minimum version numbers are shown)

Calculator Grammar v1.02 (RB sez any version) Graph Measurement Converter v2.0 Page Preview (any version) SideSpread Super-Fonts v3.0 (no mail merge yet, but everything else works) SuperForms Thesaurus v2.0 Ultra Compiler v2.2 Ultra Options v3.0 Ultra Mac2Menu v1.1

These TimeOut applications work without any changes:

ASCII Values BasicCat Desktop Sorter DHGR Viewer Envelope Addresser Notepad Printer Manager Puzzle Screen Printer any screens created by TimeOut Help Screens

We expect these TimeOut applications to be converted shortly:

Analyst (wp) Analyzer (ss) Area Codes Block Copy (ss) Calculator+ Copy Block (wp) CR Stripper Direc-Tree File Librarian Glossary Help Screens Indexer Line Sorter Measurements MultiPrint Program Selector QuickStyles QuickTabs ReportWriter Rows <--> Cols Super Find SuperFiller Table of Contents TeleComm UltraLock Word Count

These TimeOut applications are obsolete and won't be converted:

AWP to TXT Bell Changer Category Search CelLink Clipboard Viewer Clock Data Converter Directory Manager Disk Tester Easy Launch FileMaster FormulaToValue Mark Merge MenuMaker Path-Master Pathologist Print60 Publisher Menu QuickColumns QuickSpell Screen Out Task Launcher Text-Loader+ Triple Clipboard Triple Desktop UM Tokens Vital Stats

We're not yet sure what will happen with these applications:

Calendar Case Converter Cell-Mover Dialer File Encrypter File Search File Status FileLister File-Viewer Stop Watches

[RANDY BRANDT is the author of AppleWorks 4.0 and a 'thousand' other things that make our AppleWorks Classic life easier]



Macintosh Disketeria

by Dave Weikert

Whoops!

If you were confused because the front matter in my monthly column did not match the disk descriptions last month, you were not alone. I usually complete the disk descriptions first and then duplicate the article including the front 'boilerplate' as a start for next month's article. I then update the front matter and the disk order form and compress them and upload the article to the TCS for the Journal editor. Unfortunately, I compressed and uploaded the duplicate rather than the correct article thus resulting in the mix-up. Since my column was past deadline when submitted, the error was not caught in the editorial review process. Such is life. I have included the introductory text of last month's Fun & Games disk series in this month's column.

New Disks

There are 26 new disks this month; five PostScript Fonts series, 13 TrueType Fonts series, five Apple System Software disks and a three disk set of PostScript Printer Descriptions (PPDs). Descriptions of the files on the new and revised disks are included below.

Holiday Specials

With the Holiday season and Garage Sale approaching, it is time again to offer our Disketeria Holiday Specials—our special pricing for disk purchases. For the month of December, disks will be \$3.50 each instead of \$4.00; if you buy five or more disks, the price drops to \$3.00 per disk. Remember to include postage of \$1.00

per disk (up to five disks maximum) if you are buying by mail.

Disketeria ValuPaks

We have recently developed some special sets of disks that we call Disketeria Value Paks. We got the idea for this from the Best of the Pi disk series which have been popular with our members. The files on the Value Pak disks are all compressed so that each disk has more value. Value Paks are available for the LaserWriter Fonts, TrueType Fonts and Fun and Games series. The PostScript Fonts Value Paks are described below. We expect to issue most future Value Paks in five and ten disk sets.

PostScript Fonts

Disk series 6.XX now extends through Mac Disk #6.19B with the addition of five disks this month. These five disks are available as a set—PS Value Pak 2—for \$10 as well as individually. The original set of 14 disks of PS Type 1 fonts is available as PS Value Pak 1 for \$30. Descriptions of the new files are included below.

PostScript font folders contain of at least two elements; a printer font that can be downloaded to the PS printer and a screen font. Most PS printers come with 11 "families" of printer fonts (35 "fonts") already permanently installed in the PS printer ROM. To use these built in fonts, you only need to have the corresponding PS screen fonts such as Times, Helvetica, Courier, etc., in your normal system.

If, however, you wish to use some of the thousands of other available PS fonts, you have to have both a printer font in your System Folder plus a screen font which you can view on your screen. The PS fonts provided on these disks will have at least one printer font and one screen font. The method of installing fonts has changed as Apple has released newer operating systems. System 6.0.8 and earlier are handled one way. System 7.0 variants another and System 7.1 and later still another.

For System 6.0.8 and earlier. place the printer file in the System folder. Install the screen font file in your System file using the Font/DA mover. Instructions for using Font/ DA Mover are provided in Apple documentation.

For Systems 7.0 and 7.0.1 drag the screen font and printer font onto the System folder and follow instructions. The screen font will be installed in the System file and the printer font will be installed in the Extensions folder.

For System 7.1 and later, there is a Fonts folder that holds both the PS font and the screen font. You may drag them there directly or drag the screen font and printer font onto the System folder and follow instructions. All of the fonts on these disks are provided in the Adobe Type 1 format. Type 1 PostScript language outline fonts are interpreted by Adobe Type Manager (ATM) and smoothly reproduced on your screen and on the printed page regardless of size. ATM also enables inexpensive printers to print PostScript language fonts that appear crisp and smooth.

TrueType Fonts

Disk series 7.XX has been completely revised and reissued as 7.XXA. Fonts in the old series have been compressed and included on Disks #7.01A through 7.09A which are now available as TT Value Pak 1 for \$20. Four new disks of fonts have been added to the collection which now extends from Mac Disk #7.10A



through #7.13A; these four disks are available as TT Value Pack 2 for \$10 and individually at the regular price. Descriptions of the new files are included below. A list of fonts included in Mac Disks #7.01A through #7.09A is also included.

TrueType is Apple's outline font technology. These fonts look good regardless of whether they are displayed on the screen or printed on a dot matrix, ink jet or laser printer. Designed to eliminate the 'jaggies' they are a worthwhile addition to many user's hard disk. They also take a lot less room than all of the different sizes of bit-mapped (Image-Writer) fonts previously required for good appearance. Many PostScript fonts have been converted to the TrueType format and you can expect to see more and more in the future.

System 7 and later recognize TrueType fonts without any action on your part other than dragging the suitcase to the System folder. You may also use TrueType fonts with Systems 6.0.5, 6.0.7 and 6.0.8 if you install the two Apple True Type disks: TrueType Fonts and Software and TrueType Printing Tools. The Fonts and Software disk includes the required font suitcase, the Font/DA Mover and the INIT for the System folder. The Printing Tools disk has all of the necessary drivers for Apple's laser and impact printers.

We generally recommend that you not mix PostScript and True-Type fonts of the same family. For example, do not include both Post-Script Helvetica screen and printer fonts and TrueType Helyetica in the same System folder. You should select one or the other depending on your printer configuration.

Fun & Games

We added seven disks to our Fun & Games series last month; this is the introduction that should have accompanied last month's Disketeria article.

Mac Disks #22.04 through #22.10 are new this month. Most of the programs are new, a few are revisions of files previously in the Disketeria. The games are a grab-bag of arcade action, card, board and strategy games; all designed to enhance your motor skills and increase your reasoning skills (Yeah, right!).

With the holidays approaching, you may be interested in buying the whole Fun & Games series for gift giving. To facilitate this, we are offering a holiday special—the complete set of ten disks for only \$25. All of the games in this series are compressed so that we can include more games on each disk. The first three disks include compression with Compact Pro: the remaining ones are compressed with Stuffit Deluxe and are in selfextracting format. Instructions for expanding the files are included in the Program Notes on each disk (MacWrite format).

Apple System Software

There are five new disks with Apple System Software this month. They include the System Updater 2.0.1 (for System 7.1), LaserWriter 8 Install (which installs LW driver 8.1.1), Software Utility Update 1.0.1, Express Modem Disk (version 1.1.2) and the Network Software Installer (version 1.4) disk.

System Updater 2.0.1 is the equivalent of the System Tune-up for 7.0/7.01 and replaces the Hardware System Updater previously issued. System Updater 2.0.1 is a must-have disk for anybody running System 7.1. It updates System 7.1 to correct programming errors and adds additional functional capabilities including a new Sound Manager.

LaserWriter 8 Install allows you to install the LaserWriter 8.1.1 driver and associated files. This driver offers improved PostScript printing, advanced paper-handling capabilities, customizable printer resources that support your printer's specific features and options, full support of PostScript Level 1 and Level 2 and enhanced Printing and Page Setup options. It is a 'must-have' disk for PostScript Level 2 printers and should give enhanced performance when printing to older PostScript Level 1 printers.

The Software Utility Update Version 1.0.1 includes the current versions of Disk First Aid and HD SC Setup. It also includes MacCheck a new diagnostic program from Apple. These programs help find and fix problems on the Macintosh and it's disks.

PostScript Printer Descriptions

There are three new disks with PostScript Printer Descriptions (PPDs) this month to go with the new LaserWriter driver disk. This is a very special set assembled by Jon Hardis. Jon expended considerable effort gathering, compiling, comparing, renaming, organizing, and checking the PPD files in this collection. Thanks, Jon.

What are PPD files? PPD files provide specific information about the features and characteristics of each PostScript printer to the newer PostScript printer drivers—specifically the LaserWriter 8.0 printer driver and later. Put another way, the so-called "LaserWriter" print driver can be used for any PostScript printer, either a LaserWriter from Apple or another model from another manufacturer, provided that you have a "PostScript Printer Description" (PPD) file for that printer.

About Shareware Requests

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DISK #6.15B — PS 15 POSTSCRIPT FONTS

- UnStuffItTM 3.0.7.sea: By Raymond Lau and Aladdin Systems, Inc. Decompress (unstuff) archive files created with StuffIt Classic, Stuffit Lite and StuffIt Deluxe programs. Easy to install, just double click and follow the directions. Read Me First is in text format.
- Adrielle E-Light PS f.sit: By Jason Vance. A Type 1 san-serif display font consisting of a full set of capital and small capital letters. No punctuation or numbers, but there are numerous kerned pairs. Read ME is in text format.
- Adventurer PS f.sit: By Rob Birnholz. This Type 1 all caps display font was inspired by "Raiders of the Lost Ark." Adventurer Font-Read Me! is in text format.
- Aneirin PS f.sit: By Dave Nalle, Ragnarok. A Type 1 specialty font that consists of all cap with a medieval look. READ ME! and SFL Catalog are in text format. Shareware \$5.
- Athletic PS f.sit: By Edward A. Leach. A Type 1 specialty font with very bold letters with fat square serifs. It looks best in larger point sizes and is great for the 'college sweatshirt look.' This font is all caps only, with a few other characters (period, comma, hyphen, quotes, etc.). Athletic ReadMe is in text format. Shareware \$10.
- BannAReg PS f.sit: By Douglas W. St.Clair. A
 Type 1 display typeface that creates banners
 (BannA Banner with a Bawston accent). It
 includes the capital letters A to Z, an apostrophe
 S ('S), and the left and right ends of the banner.
 READ ME BannA V1.0 is in text format.
 Shareware \$5.
- Black Chancery Extended PS f.sit: A medievallooking Type 1 font with a full set of upper and lower case characters. No author or shareware information on this download from Sumex.
- BlackHawk PS f.sit: By John Singer. A Type 1 all caps display font that evokes the image of an old west 'wanted poster.' The typeface also includes numbers and some punctuation. BlackHawk READ ME! and Comments about BlackHawk Type 1 are in TeachText format. Shareware \$5.
- Cable Dingbats 4.0 PS f.sit: By Prografx. A Type 1 font that contains logos from many popular US Cable Television and Broadcast networks including our local Washington, DC channels. Please remember that they are copyrighted by those networks. These logos are provided for your private use only. About Cable Dingbats 4.0 is in text format. Postcardware.
- Cairo PS f.sit: By Clark T. Riley. A Type 1 version of the original whimsical 'picture' font that came with the original 128K Macs and was dropped somewhere along the line as Apple grew up. You can create trains and city

- skylines and other neat things using individual or multiple characters from this font. Looks best in 24 point size. Read Me Cairo is in text format.
- <u>Caliph PS f.sit:</u> By Dave Nalle, Ragnarok. A Type 1 specialty font that consists of a full set of upper and lower case letters with a medieval or mid-eastern look. READ ME! and SFL Catalog are in text format. Shareware \$5.
- Chaillot PS f.sit: By Dave Nalle, Ragnarok. A
 Type 1 specialty font that includes only upper
 case letters with a medieval look. READ ME!
 and SFL Catalog are in text format. Shareware

 \$5.
- Circular/Weimar/Eden PS f.sit; By Josh Feldman. All are Type 1 specialty fonts. Circular has a funky, modern look that works well in larger sizes. Eden is an angular serif face from the 1920's that replicates the original metal type including its imperfections. Weimar is inspired by letter forms from the early expressionistic period of the Bauhaus. The Bauhaus lowercase letter set contains slight variations from the uppercase set—this is a very spastic looking face. Fonts Read Me is in PICT format—who knows why—you may open it from within TeachText. Shareware \$15.

DISK #6.16B — PS 16 POSTSCRIPT FONTS

UnStuffIt™ 3.0.7.sea:

- Cheneau PS f.sit: By Dan Carr. A Type 1 roman font with a number of f ligatures. This one looks good set as body text or display. Documentation for Cheneau is in text format. Shareware \$15.
- ChessWriter 4.1 PS/TT f.sit: By William R. Orton, III. The ChessWriter application permits you to easily create chess board configurations and move notation. Four Type 1 fonts showing all the chess pieces are included. The shareware package expires 12/31/93 and appeared to conflict with at least one of my installed extensions. Shareware \$40.
- Comp PS f.sit: By Jason Vance. This Type 1 font may be used to create 'comps' or design concepts where you want the viewer to see the design and not be distracted by specific text. Read ME is in text format.
- EclecticOne PS f.sit: By Brian Sooy. A Type 1 font designed to give easy access to a number of commonly used elements, including right and left horizontal "pyramid" arrows; recycled and recyclable windows, some alternative trademark, copyright and registered symbols; and different elements to create a variety of borders. It also includes clock faces showing all the different hours in quarter-hour segments. Eclectic Read me is in text format. Shareware —\$11.95.

Espheres v2.0 PS f.sit: By Eclipse Publishing,

- Limited. A Type 1 Upper and Lower Caps font with some symbols, punctuation and numbers. It is a mod, 1950s, 'Jetsons' style font—kind of bubble-shaped—intended as a display font only. ESpheres 2.0 Documentation. TT is in text format. Shareware \$3 to \$7.
- FineLine v3.1 PS f.sit; By Eclipse Publishing, Limited. A Type 1 with upper and lower cases, all punctuation marks, composite characters and numbers. It also includes some symbols and mathematical signs. As the name implies, the FineLine characters are very lightweight. FineLine 3.1 Documentation.TT is in text format. Shareware \$3 to \$7.
- Floydian PS f.sit; By Jeff Tesch. A Type 1 font based on the style in which the title of Pink Floyd's "The Wall" was written on the cover of the album. Read Meis in text format. Shareware -\$10.

DISK #6.17B — PS 17 POSTSCRIPT FONTS

UnStuffIt™ 3.0.7.sea:

- Enochia PS f.sit: By AUM Publications. A Type 1 specialty font in the language used by the entities of Dr. John Dee as dictated to him by Sir Edward Kelly in the 1500's. Read Me Pees, Pees, Read Me! is in Word format. Shareware \$10.
- Fiorenza PS f.sit: By Dave Nalle, Ragnarok. A Type 1 specialty font that consists of upper and lower case letters with a medieval handwritten look. READ ME! and SFL Catalog are in text format. Shareware \$5.
- Futhark PS f.sit: By Dave Nalle, Ragnarok. A
 Type 1 specialty font with a non-English
 alphabet. Please don't ask how you would use
 this—I don't speak or write Futhark. READ
 ME! and SFL Catalog are in text format.
 Shareware \$5.
- Gadzoox PS f.sit: By Marty Robinson and Chuck Crews. A Type 1 all capitals display font with no kerning. Comments about Gadzoox and Gadzoox! Read This! are in Teach Text format.
- Genoa PS f.sit: By Alan Townsend. A Type 1 whimsical display font in both Roman and Italic faces. It is similar to the Venice font that came with the Mac. Genoaltalic Read Me and GenoaRoman Read Me are in text format.
- German Rune PS f.sir; By AUM Publications. A
 Type 1 specialty font which depicts ancient
 Germanic Runes of which many have been
 studying and wearing of late. The runes
 correspond with their English keyboard
 equivalents and are all in the Caps mode. Read
 Me Germanrune documents are in Word
 format. Shareware \$10.
- GoudyMedieval PS f.sit: A Type 1 whimsical font of unknown origin from the Info-Mac archives. This one has an old world appearance.

- Gravicon PS f.sit: By Tom C. Lai. A Type 1 heavy weight modern display font, based on a stencil theme. It is fairly futuristic looking (think of those sci-fi wall stencils). GraviconTM Readme is in text format. Shareware - \$15.
- GREEK PS f.sit: By David Lumerman. A Type 1 specialty font for 'greeking' text for use in 'comps' or design layouts. Use it where you want the viewer to pay attention to the design concept rather than the words, greek read me is in text format. Shareware - \$5.
- Heidelberg PS f.sit: By Bill Horton. A Type 1 calligraphic style font that simulates actual pen or quill hand writing. The letter forms are rather open and wide and look good in body and display use. READ ME.txt is in text
- Herald PS f.sit: By Dave Nalle, Ragnarok. A Type 1 specialty font that consists of medieval heraldry characters—you know, the shields or coats-of-arms with animals and other symbols of family geneology. READ ME is in text format. Shareware - \$5.
- <u>JacksonvilleOldStyle PS f.sit</u>: A Type 1 slightly cursive serif font that may be used for body or display. From the Info-Mac archives, original author unknown.
- <u>Iongeleur PS f.sit:</u> By Dave Nalle, Ragnarok. A Type 1 specialty font that consists of illuminated letters available on the caps keys only . READ ME is in double clickable application format. Shareware - \$5.

DISK #6.18B --- PS 18 POSTSCRIPT FONTS

UnStuffItTM 3.0.7.sea:

- HiraGana PS f.sit: By Kevin Hartig. A Type 1 Japanese Hiragana font with characters in a calligraphic style. README is in text format. Shareware - \$10 (for both HiraGana and KataKana.
- Hotshot PS f.sit: By Walter Kafton-Minkel. A Type 1 display font based on scans from a 1930s sign-painting manual. This bold sanserif typeface looks best at 18 points and larger. HotshotReadme is in text format.
- Jugend PS f.sit: By Dave Nalle, Ragnarok. A Type 1 specialty font that consists of illuminated letters available on the caps keys only . READ ME is in text format. Shareware - \$5.
- Karate PS f.sit: A Type 1 display font that has a bold brush stroke oriental look.
- KataKana PS f.sit: By Kevin Hartig. A Type 1 Japanese Katakana font with characters in a calligraphic style. README is in text format. Shareware - \$10 (for both HiraGana and KataKana).
- Katherine PS f.sit: By Don Miller. A Type 1 font fashioned after the printing in the comic strip CATHY by Cathy Guisewite. All characters are uppercase and if you press the shift key the

- characters become bold. There are no numbers and not all characters are present in this typeface. READ ME is in text format.
- Kelmscott PS f.sit: By Dave Nalle, Ragnarok. A Type 1 specialty font that consists of upper and lower case letters with a medieval handwritten look. READ ME! and SFL Catalog are in text format. Shareware - \$5.
- MarkerFeltThin v2 PS f.sit: By Pat Snyder. A Type 1 display font with the appearance of a thin felt-tip marker. The font includes upper and lower case characters as well as number, punctuation and special symbols. ReadMe...MarkerFeltThin is in text format. Shareware - \$10.
- MarkerFeltWide v2 PS f.sit: By Pat Snyder. A font with the appearance of a wide felt-tip marker. The font includes upper and lower case characters as well as number, punctuation and special symbols. ReadMe...MarkerFeltWide is in text format. Shareware - \$11.
- MarkerFinePoint PS f.sit; By Pat Snyder. A font with the appearance of a fine-tip marker. The font includes upper and lower case characters as well as number, punctuation and special symbols. ReadMe...MarkerFinePoint is in text format. Shareware - \$12.
- Marydale PS f.sit: By Brian Willson. A Type 1 informal display font based on hand-lettering as in Adobe Tekton with personality. The extensively kerned character set includes upperand lowercase, numerals, punctuation, and a few surprises. Marydale<T1>.ReadMe is in text format. Shareware - \$10.
- ParkHaven PS f.sit: By Francis X. 'Butch' Mahoney, Jr. A script font usable for display or body text. Not Type 1. Shareware - \$20.
- PostNet! v2.0 PS f.sit: By Computer Freelance. A Type 1 font that lets you print POSTNET bar coding on your mail. Bar coded bulk mail is eligible for postage discounts and is processed more quickly. You may use this font with any database; a FileMaker Pro template is included with this package. PostNet! User Docs is in double clickable DOCMaker application format. Shareware - \$30
- Publius PS f.sit: By Dave Nalle, Ragnarok. A Type 1 font with a medieval look. It appears suitable for display or body text. catalog.asc and READ ME! are in text format. Shareware
- Ravenna PS f.sit: By Dave Nalle, Ragnarok. A Type 1 font with a medieval look, A relatively bold letter form, it appears more suitable for display than for body text. READ ME! is in text format. Shareware - \$5.

DISK #6.19B --- PS 19 POSTSCRIPT FONTS UnStuffItTM 3.0.7.sea:

- PigNose PS f.sit: A Type 1 modern san-serif font with thin lines and small caps. From the Info-Mac archives, author unknown.
- RedLetter PS f.sit: By Robert Schenk. A Type 1 novelty font made of hammers and sickles, which will really impress your Congressman the next time you want to express your opinion. readme.txt is in text format.
- Rockmaker PS f.sit: By David Rakowski. A Type 1 font with characters that look like they consist of rough, broad paintbrush strokes such as you might find on a sign painted on a piece of wood in a Western frontier town. The font it is based on is called 'Trading Post.' This font is all caps, plus numbers and punctuation. Read me Rockmaker is in text format.
- RupertoCarola PS f.sit: By Ramón G Castañeda. A Type 1 decorative non-flowing script font that is a further development of the "Heidelberg" typeface . This face works best when used sparingly, not for long texts. Heidelberg read me.txt and Read Me First RuperCar.txt are in text format.
- SaloonExt PS f.sit: By Robert Schenk. A Type 1 font Saloon is a Western style, all-cap, semibrush sans-serif font. readme.txt is in text format.
- Samson PS f.sit: By Patricia Lillie. A Type 1 narrow, bold display face with upper and lower case letters, punctuation, basic symbols and some upper case alternates. The letters are rectangular and tightly spaced. Read Me is in Teach Text format. Shareware - \$8.
- Sassy PS f.sit; By Scott K. Yoshinaga. A Type 1 handwriting type font that may be used to simulate handwriting in body text or as a display face. READ ME! is in Word format.
- Styletto v2.2 PS f.sit: By Eclipse Publishing, Limited. A Type 1 font reminiscent of ITC Novarese. Ablend of an Optima-like base with finely pointed serifs. Includes upper and lower cases, all punctuation marks, composite characters, numbers and some symbols. Styletto, 2.2 Documentation.TT is in text format. Shareware - \$3 to \$7.
- SycamoreSans PS f.sit; By Sam Wang, A Type 1 face based on a 1930s draftsman's typeface. Demoware that is complete except for the boxed-in caps, fractions and most punctuation marks. SycamoreSans ReadMe is in TeachText format. Shareware - \$10.
- WoolvBully PS f.sit: By Russell G. Taber. A Type 1 display face with heavy, fuzzy and wavy letter forms. Includes upper land lowercase letters, numbers and punctuation and many kerning pairs. READ ME (WoolyBully) is in TeachText format. Shareware - \$10.
- Zachary PS f.sit: By Edward A. Leach. A Type 1 font designed to look as if it were written by a small child. Includes a complete double set of each capital letter, each lower case letter, and

each number so you may make documents looks more like hand printing. Zachary ReadMe is in text format. Shareware – \$10.

DISK #7.01A — TT 1 TRUETYPE FONTS

Includes the fonts Aarcover, AdineKirnberg-Script, Albatross, Alexandria, Animal Dingbats, Ann-Stone, Architect, Ashley, AtticAntique, Averoigne, Beffle, Bizarro, Black Chancery, BlackForest, BluePrintBold, BODIDLYbold, BowLegs, Capel-Y-FFin, Caraway Bold, CartWright and Crillee.

DISK #7.02A — TT 2 TRUETYPE FONTS

Includes the fonts ClassDingbats, Cyrillic, Davys Dingbats and Davys Other Dingbats.

Disk #7.03A — TT 3 TrueType Fonts

Includes the fonts Davys Ribbons, DavysBigKeyCaps, DavysKeyCaps, Diner, Display1 (Crackling Fire, ParisMetro, Showboat, Starburst and Tribeca), Display2 (Polo Semiscript, Pixie, Rudelsberg and Zaleski Caps), Dobkin, DownWind, Dubiel and Dupuy.

DISK #7.04A — TT 4 TRUETYPE FONTS

Includes the fonts Dragonwick, EileenCaps, ElizAnn, Elzevier-Caps, EraserDust, Fleurons, FoxTrotMedium, Furioso Titling, Gallaudet, Garton, Gessele-Script, GoudyHundred.

DISK #7.05A — TT 5 TRUETYPE FONTS

Includes the fonts Graphic Light, Griffin Dingbats, Groening, Harrington, Harting II, Headhunter, Holtzschue, HorstCaps, IanBent, Informal Oblique, InkaBod, InstantLogos, Int'l Symbols and Jumble.

DISK #7.06A — TT 6 TRUETYPE FONTS

Includes the fonts Judas, KochRoman, Koshgarian-Light, Kramer, LaserLondon, Lassus, Lemiesz & Salter, Lilith-Heavy, Lilith-Initials, Lilith-Light, Lintsec, Logger, LoopDeLoop, Maginot, Manhatten (Upper East Side, Upper West Side1, Lower East Side and Lower West Side), Mazama and Medusa.

DISK #7.07A — TT 7 TRUETYPE FONTS

Includes the fonts Mappity, Middleton, Mira, Multiform, Nauert, NeuSansBlackPro, NewRixFancy, NixonInChina, NuSymbol v1.01, OSWALDblack, OxNard, Phonetic-Alphabet, Pointage, PregQuail, PremiumThin v2.0, RabbitEars and Rechtman.

DISK #7.08A — TT 8 TRUETYPE FONTS

Includes the fonts PenPal 1.3.1, Rak Student (Benjamin Caps, Carrick Caps, Green Caps, Horst Caps, Kinigstein Kaps, Konanur Kaps, Lee Caps, Reynolds Caps and Varah Caps), Relief Deco, ReliefPak (WhatARelief, ReliefInReverse and RoundedRelief), Rothman, Rudelsberg 2, SafariDemo, SaintFrancis, Saloon, Shohl-Fold and Shrapnel.

DISK #7.09A — TT 9 TRUETYPE FONTS

Includes the fonts Semitic Translit, Sillycon Valley, Sinaiticus, Spatz, StFrancis Caps, Temple, Tengwar-Gandalf, Thomas, Times Ital&Mirror, TNG Monitors, Tone And Debs, Trains, Uechi-Gothic, UPCA, Visage, Wedgie, Wharmby, Will-Harris, Windsor Demi and Zallman Caps.

DISK #7.10A — TT 10 TRUETYPE FONTS

UnStuffItTM 3.0.7:

Andesite TT f.sit: By James M. Harris. A display typeface based on Letraset's PLAZA (formerly PLAYBOY). This font has uppercase characters, numerals, punctuation, and accent marks only. There are numerous alternate swash characters for most of the characters. Read Me—Andesite is in text format. Shareware - \$25.

AnedocteCaps 1.0 TT f.sit: By Giuseppe Levi.
Aan old-looking, fluent and elegant font. It looks better when used at 48 points or more.
Anedocte.txt is in text format and Comments about AnedocteCaps10.s is in TeachText

Aneirin TT f.sit; By Dave Nalle, Ragnarok. A specialty font that consists of all cap with a medieval look. READ ME! and SFL Catalog are in text format. Shareware - \$5.

Architect 1.3 TT f.sit: By Hank Gillette. Architect simulates hand printing of the type typically done by architects. It was inspired by Adobe's font Tekton. It has a full set of letters, numbers, and punctuation, and quite a few extra characters. Architect Read Me and Generic READ ME - True Type font are in MacWrite format.

Athletic TT f.sit; By Edward A. Leach. A specialty font with very bold letters with fat square serifs. It looks best in larger point sizes and is great for the 'college sweatshirt look.' This font is all caps only, with a few other characters (period, comma, hyphen, quotes, etc.). Athletic ReadMe is in text format. Shareware - \$10.

BalletEngraved TT f.sit: By FontBank. A display font with a very attractive art-deco look. This is a commercial grade font provided free by FontBank as a sample of their wares.

BalletEngraved.doc is in text format.

Bellerose TT f.sit: By James M. Harris. An avant garde, sans-serif, thin-line font. Downloaded from the Info-Mac archives. Bellerose.doc is in text format. Although no shareware amount is stated in the documentation but he has requested \$20 payment for some of his other efforts.

Black Chancery Extended TT...sit: A medievallooking Type 1 font with a full set of upper and lower case characters. No author or shareware information on this download from Info-Mac archives at Sumex. Generic READ ME -TrueType font is in text format.

BlackHawk TT f.sit; By John Singer. An all caps display font that evokes the image of an old west 'wanted poster.' The typeface also includes numbers and some punctuation. BlackHawk - READ ME! and Comments about BlackHawk TT.sit are in TeachText format. Shareware - \$5.

BorzoiReader TT f.sit: By Philip Noguchi. A whimsical TrueType font that looks good for display and for limited use as body text. It has a full character set. BORZOI.DOC is in text format.

BrassfieldTT f.sir: By Jim Pearson. An interesting sans serif font, very useful, and very well kerned (over 400 pairs). It serves well in formal and informal use. It has a full character set. README is in text format. Shareware - \$5.

Brushstroke TT f.sit: By Kevin Willis. A paint brush display typeface useful for headlines and flyers. It has a full set of upper and lowercase characters as well as numbers and several special characters, such a copyright, registration, trade mark, and sterling. READ ME @ NOTE is in text format.

Cable Dingbats TT f.sit: By Gene Cowan. A font that contains logos from many popular US Cable Television and Broadcast networks including our local Washington, DC channels. Please remember that they are copyrighted by those networks. These logos are provided for your private use only. Cable Dingbats Docs Text is in text format. Shareware – \$25.

<u>Caliph TT f.sir</u>: By Dave Nalle, Ragnarok. A specialty font that consists of a full set of upper and lower case letters with a medieval or mideastern look. READ ME! and SFL Catalog are in text format. Shareware – \$5.

Caveman TT f.sit: By Jim Morton and Pop Void. A font that looks like chiseled stone. Like it sounds, it is blocky and 'primitive'. It is an all-caps type font, with numbers. Caveman (About), Caveman.doc and READMEFIRST!! are in text format.

Chaillot TT f.sit: By Dave Nalle, Ragnarok. A specialty font that includes only upper case letters with a medieval look. READ ME! and SFL Catalog are in text format. Shareware – \$5.

- Chicago Symbols TT f.sit: A font of four wellknown characters in the Chicago font that are otherwise hard to enter at the keyboard: the splat (the cloverleaf, command symbol), closed diamond, check mark, and closed apple.
- Civitype TT f.sit: By Stephen G. Moye. A German Art Noveau script font with upper and lower case letters, numbers and most common punctuation. Useful for display and for limited use as body text in applications such as invitations, calling cards, etc. Civitype Public Domain History is in Teach Text format.
- Duncan TT f.sit: By Edward A. Leach. A tall sharp, pointed looking font based loosely on the title screen from the Highlander television series. All caps, with punctuation, and numbers. Duncan ReadMe is in text format. Shareware \$10.
- Eglantine TT f.sit: By Dave Nalle, Ragnarok. A display font that consists of a full set of upper and lower case letters. READ ME! is in double-clickable DOCMaker application format. Shareware \$5.
- Enya TT f.sit: By Mike Zillion. A font inspired by the writing on the album Watermark by Enya. About Enya is in text format. Postcardware.
- Faganplate TT f.sit: By Steven M. Fagan. A font with rather large serifs that looks attractive as body text or set as display. Read Me!! is in text format.
- Fiorenza TT f.sit: By Dave Nalle, Ragnarok. A specialty font that consists of upper and lower case letters with a medieval handwritten look. READ ME! and SFL Catalog are in text format. Shareware \$5.
- Flintstone TT f.sit: By Peter S. Bryant. An all caps display font. It is rather angular and rough edged looking; as if chipped from stone. Flintstone.doc is in text format. Shareware \$5.
- Franks TT f.sit: By Edward Leach. A display face that looks like it was made with hot dogs. It's fat, rounded, sans serifs, and contains many kerned pairs and lots of punctuation. The lower case characters are smaller versions of the upper case. FRANK README is in text format. Shareware \$10.
- Furisampleoso TT f.sit: By Glenn Fleishman. A font executed as part of a project in graphic design by the author. The original face was designed in the 1930s by Berthold Wolpe under the name Albertus for the Monotype Corp. The Prisoner TV series used Furioso for all of its signage. Furioso Info & Registration and Furioso (About) are in text format. Shareware \$12 gets you the missing letters.

DISK #7.11A — TT 11
TRUETYPE FONTS
UnStuffltTM 3.0.7:

- Furioso Titling TT f.sit; By Glenn Fleishman. A font executed as part of a project in graphic design by the author. The original face was designed in the 1930s by Berthold Wolpe under the name Albertus for the Monotype Corp. The Prisoner TV series used Furioso for all of its signage. Furioso Info & Registration and Furioso Titling (About) are in text format. Shareware \$12 gets you the lower case letters.
- Future TT f.sit; An artist's extrapolation of the OCR (optical character recognition, i.e., computerized) font used at the bottom of bank checks. The original author is unknown. Future (About) is in text format.
- Gadzoox TT f.sit: By Marty Robinson and Chuck Crews. An all capitals display font with no kerning. Comments about Gadzoox and Gadzoox! Read This! are in Teach Text format; GadzooxBold.pict is in Teach Text format.
- Genoa TT f.sit: By Alan Townsend. A whimsical display font in both roman and italic. It is similar to the Venice font that came with the Mac. Generic READ ME True Type font, Genoaltalic Read Me and GenoaRoman Read Me are in text format.
- Golgotha TT f.sit: By Dave Nalle, Ragnarok. A specialty display font that evokes the feel of Halloween. This sample includes only the capital letters. READ.ME! is in text format. Shareware \$5.
- Goodfellow TT f.sit: By Dave Nalle, Ragnarok.
 A specialty display font with upper and lower case letters. READ ME! is in double-clickable DOCMaker application format.
- GoudyMedieval TT f.sir: A whimsical font of unknown origin from the Info-Mac archives. This one has an old world appearance.
- Granite Sans TT f.sit: A display font that came to us from the Info Mac archives without documentation. The lower case characters with descenders (such as 'g' and 'p') are reduced in height compared with other lower case letter forms.
- Gravicon TT f.sit: By Tom C. Lai. A heavy weight modern display font, based on a stencil theme. It is fairly futuristic looking (think of those sci-fi wall stencils). GraviconTM Readme is in text format. Shareware \$15.
- Greeting 1.5 TT f.sit: By Sam Wang. A font that looks like stylish hand printing; it includes upper and lower case and punctuation. ReadMe is in text format. Shareware \$5.
- Handwriting TT f.sit: By Sam Wang. A scriptlike font that replicates handwriting. This one has some nice flourishes and has a mixture of cursive and printed letters that works well. ReadMe is in text format. Shareware – \$10.
- Heidelberg TT f.sit; By Bill Horton. A calligraphic style font that simulates actual pen or quill hand writing. The letter forms are rather open and wide and look good in body and display

- use. Generic READ ME TrueType font, Heidelberg (About) and READ ME.txt are in text format.
- Herald TT f.sit: By Dave Nalle, Ragnarok. A specialty font that consists of medieval heraldry characters—you know, the shields or coats-of-arms with animals and other symbols of family geneology. READ.ME is in text format. Shareware \$5.
- <u>Hilversum TT f.sit</u>: By Eric Schiller. A specialty font; this is a freeware version of the author's chess font Tilburg. Hilversum.doc is in text format.
- HiraGana TT f.sit: By Kevin Hartig. A Japanese Hiragana font with characters in a calligraphic style. README is in text format. Shareware \$10 (for both HiraGana and KataKana.
- Jongeleur TT f.sit: By Dave Nalle, Ragnarok. A specialty font that consists of illuminated letters available on the caps keys only . READ ME is in double clickable application format. Shareware \$5.
- <u>Jugend TT f.sit</u>: By Dave Nalle, Ragnarok. A specialty font that consists of illuminated letters available on the caps keys only . **READ ME** is in text format. *Shareware* \$5.

DISK #7.12A — TT 12 TRUETYPE FONTS

UnStuffItTM 3.0.7:

- JacksonvilleOldStyle TT f.sit: A slightly cursive seriph font that may be used for body or display. From the Info-Mac archives, original author unknown. Generic READ ME TrueType font and JacksonvilleOldStyle (About) are in text format.
- Kashmir TT f.sit: By Brian Davies. A face patterned after Led Zeppelin's Houses of the Holy cover script. Also includes the 'ZOSO' characters from Zep's fourth album. Nifty Stuff is in text format.
- KataKana TT f.sit: By Kevin Hartig. A Japanese Katakana font with characters in a calligraphic style. README is in text format. Shareware -\$10 (for both HiraGana and KataKana).
- Kelmscott TT f.sit: By Dave Nalle, Ragnarok. A specialty font that consists of upper and lower characters and punctuation with a medieval handwritten look. READ ME! and SFL Catalog are in text format. Shareware \$5.
- Kennon TT f.sit: By Jim Pearson. A stylish serif font, very useful, and very well kerned (over 400 pairs). It serves well in formal and informal use. Shareware \$5.
- Klinzhai TT f.sit: By Lawrence M. Schoen. Klinzhai, supposedly the word for Klingon in the Klingon language is not a Roman, or any other Earthly alphabet font. If you like Star Trek, have fun with it. Klinzhai Doc (TT) is in double clickable DOCMaker application format. Shareware \$5.

- KochRoman TT f.sit: By Stephen Moye. A rendering of a beautiful typeface drawn by Rudolf Koch in 1922 for Klingspor. It is known as "Koch Antiqua" or "Locarno" or "Eve." The font includes upper and lower case, numbers and some punctuation. About KochRoman is in text format.
- LampoonBrush 2.0 TT f.sit; By Sam Wang. A script font that appears to be created with a brush. ReadMe is in text format. Shareware -
- LittleGidding TT f.sit: By A. K. M. Adam. A font of Christian religious symbols; it is named after the religious community founded by Nicholas Ferrar. It includes three categories of images: 1) Christian symbols, 2) Regular polygons, solid & hollow, and 3) Stars formed from regular polygons. Litgid.doc is in text format. Shareware - \$10 (Free for personal use).
- MarkerFeltThin v2 TT f.sit: A By Pat Snyder. A display font with the appearance of a thin felttip marker. The font includes upper and lower case characters as well as number, punctuation and symbols. special ReadMe...MarkerFeltThin is in text format. Shareware - \$10.
- MarkerFeltWide v2 TT f.sit: By Pat Snyder. A font with the appearance of a wide felt-tip marker. The font includes upper and lower case characters as well as number, punctuation special symbols. ReadMe...MarkerFeltWide is in text format. Shareware - \$11.
- MarkerFinePoint TT f.sit: By Pat Snyder. A font with the appearance of a fine-tip marker. The font includes upper and lower case characters as well as number, punctuation and special symbols. ReadMe...MarkerFinePoint is in text format. Shareware - \$12.
- Marydale TT f.sit: By Brian Willson. An informal display font based on hand-lettering as in Adobe Tekton with personality. The extensively kerned characterset includes upperand lowercase, numerals, punctuation, and a few surprises. Marydale<TT>.ReadMe is in text format. Shareware - \$10.
- Movies TT f.sit: By Edward A. Leach. very condensed, very tall font like that used for credits in motion picture advertisements. It is more effective than simply scaling type horizontally. All caps, with punctuation. Movies ReadMe is in text format. Shareware
- ParkHaven TT f.sit: By Francis X. 'Butch' Mahoney, Jr. A script font usable for display or body text. ParkHaven (About) and Read Me, Please! are in text format.
- Pars Ziba PS/TT f.sit: By Tooraj Enayati. A Persian font in both Type 1 and TrueType formats. Pars Ziba (About) is in text format

- and Read Me First is in TeachText format.
- Phaedrus TT f.sit: By Philip Noguchi. An attractive serif font in both roman and oblique styles useful for body text. Includes upper and lower case letters, numbers and punctuation. Phaedrus (About) and PHAEDRUS.DOC are in text format.
- PigNose TT f.sit: A modern san-serif font with thin lines and small caps. From the Info-Mac archives, author unknown. Generic READ ME - TrueType font and PigNose (About) are in text format.
- Potsdam TT f.sit: By Dave Nalle, Ragnarok. A specialty font with ornate loops on some of the letter forms; best used for display. Includes upper and lower case CATALOG2.ASC and READ .ME are in text format.

DISK #7.13A --- TT 13 TRUETYPE FONTS

UnStuffItTM 3.0.7:

- Prisma TT f.sit: By West Paces Publishing. A display font with bold letter forms, Includes large and small caps letters. Prisma (About) and Prisma.doc are in text format. Shareware - \$5.
- Publius TT f.sit: By Dave Nalle, Ragnarok. A font with a medieval look. It appears suitable for display or body text. catalog.asc and READ ME! are in text format. Shareware - \$5.
- Ravenna TT f.sit: By Dave Nalle, Ragnarok. A font with a medieval look. A relatively bold letter form, it appears more suitable for display than for body text. READ ME! is in text format. Shareware - \$5.
- RedLetter TT f.sit: By Robert Schenk. A novelty font made of hammers and sickles, which will really impress your Congressman the next time you want to express your opinion. readme.txt is in text format.
- Rickshaw 1.00 TT f.sit; By Peter S. Bryant. A typeface designed to look like the typeface found on many Chinese menus. It is a complete typeface, consisting of upper and lower case, special characters, numbers and diacriticals. Rickshaw Read Me is in text format. Shareware -\$10.
- RoodCAPS TT f.sit: By David Rood. A bold, eccentric, curvy display typeface for headlines, ads and casual design. No lowercase and few ligatures. Rood.doc is in text format. Shareware -\$1 or more.
- RUBICON Modern TT f.sit: By Rubicon Computer Labs. There are three fonts in this folder—Classic, IsoType and Nova. Classic is a serif text face, Nova is a san-serif text face and IsoType is a serif typewriter face. They are all complete faces with upper and lower case letters, numbers and punctuation and extensive FILE_ID.DIZ, kerning pairs.

- REGISTER.DOC, TrueType.DOC and VENDOR.DOC are in text format. Shareware _ \$40.
- Samson TT f.sit: By Patriciaa Lillie. A narrow, bold display face in roman and oblique styles. They include upper and lower case letters, punctuation, basic symbols and alternates for some upper case letters. Read Me is in TeachText format. Shareware - \$8.
- SapirSans TT f.sit: By Eric Schiller. A specialty font that combines the International Phonetic Alphabet with symbols for syntax and phonology. Intended as a temporary solution for linguists until other fonts are available. SapirSans.doc is in text format.
- SavesAndSales TT f.sit: By Pat Snyder. Aspecialty font that prints the word Save or Sale in a variety of graphic designs when you type one character. Includes 26 designs for each and the necessary heavy numbers, punctuation and symbols. SavesAndSales ReadMe is in TeachText format. Shareware - \$13.
- Sedimentary/Arrow TT f.sit: By Robert R. Remy. Two specialty fonts-Sedimentary and Arrow-which are useful for geologists. Read Me First and Sedimentary/Arrow (About) are in text format; SuperPaint documents in Read Me Second folder give the keyboard equivalents of each font.
- SmileyFace TT f.sit: By Jonathan Macagba. A specialty font that lets you enter 'smiley faces' in your documents without lifting a pen. Over 60 characters filled with happy, sad, angry, confused, and silly faces. About Smiley Face. txt is in text format. Shareware - \$5.
- SnyderSpeed Brush 3 TT f.sit: By Pat Snyder. A display/headline font duplicating the spontaneous, hand-lettered, brush-stroke used by commercial artists and sign painters to create eye-catching copy for signs, banners, posters, window or show card displays etc. ReadMe...SnyderSpeed is in text format. Shareware – \$15.
- Stargorod TT f.sit: By A. Tsvetkov. A simple and elegant Russian font, based on text fonts used at the beginning of the century. Stargorod.blurb is in text format.
- StarsAndStripes TT f.sit: By Pat Snyder. An all caps display font which gives typed copy a patriotic look. Use for eye-catching, year round notices, headlines and ad display to convey Yankee-doodle, patriotic messages. StarsAndStripes ReadMe is in text format. Shareware - \$9.
- Tech Phonetic TT f.sit: By Rob Kassel. An IPA (phonetic symbol) specialty font based on GoudyOldstyle. It is designed to represent anything the IPA can, but not necessarily in all the ways IPA can. Generic READ ME -TrueType font, Read Me! and TechPhonetic (About) are in text format.

TechGrapha TT f.sit: By Rob Kassel. A specialty font containing symbols useful for plotting data in programs like DeltaGraph. All of the basic symbols are constructed to cover equal area. The center of each character is the alignment point for that symbol. TechGrapha (About) is in text format and TechGrapha -Read Me is in TeachText format.

Thomas TT f.sit: By David Dowe. A slightly antique looking book face best shown in 9 or 10 points but perfectly suitable for larger display uses. The face is based on Caxton -a font named after William Caxton, the printer/ publisher who first published Chaucer's works. This is a work in process, missing all of the accented upper case letters and many special characters. Read Me is in MacWrite format and Thomas (About) is in text format.

ToulouseLautrec TT f.sit: By Butch Mahoney. A display or specialty art-nouveau font that evokes the Moulin Rouge. Butch Mahoney Docs and ToulouseLautrec (About) are in text format. Shareware - \$15.

Townsend TT f.sit: By Sidney Bowhill. A font based on Tuscan Egyptian, a wood type font collected by Rob Roy Kelly in his book "Wood Type Alphabets" (Dover Pictorial Archive Series, 1977). The font dates from the Hamilton Co. in the 1880s. Townsend Readme is in text format. Shareware - \$5.

Zachary TT f.sit: By Edward A. Leach. A font designed to look as if it were written by a small child. Includes a complete double set of each capital letter, each lower case letter, and each number so you may make documents looks more like hand printing. Zachary ReadMe is in text format. Shareware - \$10.

DISK #PPD.01 PS PRINTER DESCRIPTIONS

This disk includes self-extracting PPD files for printers from Adobe Systems (brand cartridge for H-P printers), Apple Computer, Compaq Computer, GCC, Hewlett-Packard, IBM/ Lexmark, NEC, NeXT, QMS and Texas Instruments.

DISK #PPD.02 **PS PRINTER DESCRIPTIONS**

This disk includes self-extracting PPD files for printers from AST, Canon, DataProducts, Digital Equipment Corp., Epson, Fujitsu, Gestetner, Oce, Oki, Qume, Panasonic (Matsushita), Ricoh, Scantext, Schlumberger, Shinko, Tektronix, Unisys and Xerox.

DISK #PPD.03 PS PRINTER DESCRIPTIONS

This disk includes self-extracting PPD files for printers from Agfa (& Matrix & Compugraphic), Autologic (APS), Bull, Monotype, Linotronic and Verityper.

Disk #SU 2.0.1-1.44M System Update 2.0.1

Control Panels f: PowerBook Display 1.0.4, AutoRemounter 1.2, Express Modem 1.1.2, Memory 7.1.1, PowerBook 7.1.3 and Sound

Extensions f: 720K Floppy Disk Formatter 1.0, Express Modem Tool 1.1.2, Hardware System Update 2.0.1, Record Button 1.0 and Sound Manager 3.0.

System Update 2.0.1 Read Me, Installer 3.4, Installer Script 2.0.1 and TeachText 7.1.

System Enablers f: System Enabler 131 1.0.3 and System Enabler 401 1.0.5.

System Resources f: Keyboard Resources 1.0 and Serial Resources.

Utilities f: Apple HD SC Setup 7.2.2 and Disk First Aid 7.2.

Disk #LW.80-1.44M LSRWRTR 8.0 INSTALL

Installer 3.4, and Installer Script 1.1, Read Me and TeachText 1.2.

Printing Tools: Backgrounder 1.3, Laser Prep 7.2, LaserWriter 8.cmp, PrintMonitor 7.1.cmp, PrintMonitor.cmp., LaserWriter Utility 7.6.1 and Printer Descriptions containing descriptions for the current and past line of Apple PostScript printers (LW, LW Plus, IINT, IINTX, IIf, IIg, Pers NT, Pers NTR, Select 360, Pro 600, Pro 630, Pro 810 and Pro 810f).

DISK #SUU SOFTWARE UTILITY UPDATE

MacCheckTM f: MacCheckTM 1.0.4, MacCheck™ dataFile 1.0.4, MacCheck™ Read Me. MacCheckTM User Guide.msWrd and MacCheckTM User Guide.mwII.

System Utility Update Read Me and Teach Text

Utilities f: Apple HD SC Setup 7.2.2 and Disk First Aid 7.2.

DISK #SS.EXPMODEM EXPRESS MODEM

This disk supports Apple's Express Modem for the PowerBook series of notebook computers.

Express Modem ReadMe, Installer 3.4 and Installer Script 1.1.2.

Express Fax Folder: Fax Cover Folder with Fax Cover 1.2, Sample and Standard; Fax Extension 1.12, Fax Sender 1.2, Fax Terminal 1.2, Fax Viewer 1.3 and My first fax.

Express Modem Folder: Express Modem 1.1.2, Express Modem Tool 1.1.2, PowerBook 7.1.3 and System Enabler 111 1.0.2.

Modem Documents: AppleLink 9600 US Access, Express Modem 14400 1.0, Express Modem AT Cmds and Express Modem CCL 1.0.

DISK #NI.14 Network Styre Installer 1.4

Installer 3.4.4, Network Software Script 1.4, TeachText 1.2 and ReadMe.

AppleTalk Files: A/Rose 1.2, AppleTalk 58.1, Archive.as, EtherTalk Phase 2 2.5.4, EtherTalk Prep 1.0.4, Network 3.0.2, Network Resources 1.4, Responder 2.0.4, Token Ring 1.0.1, TokenTalk Phase 2 2.5.4 and TokenTalk Prep 2.5.2.

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Nacintosh Library Order Form

	Programme Control of Appendix			
Pi Library	6.14B - PS 14	Miscellaneous	16.13D - SU 13	6.0.5 - 4 disks;
0.01 - C 01	6.15B - PS 15	10.01A - M 1	16.14D - SU 14	\$12
Files	6.16B - PS 16	10.02A - M 2	16.15D - SU 15	6.0.7 - 4 disks;
0.02 - C 02	6.17B - PS 17		16.16D - SU 16	
Sampler	6.18B - PS 18	Paintings (MacPnt)	16.17D - SU 17	6.0.8 - 4 disks;
0.03 - C 03	6.19B - PS 19	5 disk set: \$15	16.18D - SU 18	
MemDir	0.102 1010	11.01 - P 1	10 10D OII 10	7.0 - 8 disks; \$20
0.04 - C 04	TrueType Fonts	— 11.02 - P 2	16.19D - SU 19 16.20D - SU 20	7.0.1 - 6 disks;
Catalog	7.01A -TT 1	11.03 - P 3	16.21D - SU 21	\$20 (‡)
0.05 - C 05	7.02A -TT 2	— 11.04 - P 4	16.22D - SU 22	Sys 7/7.0.1 Tune-
PS.Catalog	7.03A -TT 3	— 11.05 - P 5	16.23D - SU 23	Up \$3
20.00000	7.04A -TT 4		16.24D - SU 24	Sys 7.1 Sys
Anti-Virus Utilities	7.05A -TT 5	Digitized Sounds	16.25D - SU 25	Update 2.0.1 \$3
1.01G - AV 1	7.06A -TT 6	9 disk set; \$27	10.200 - 00 20	(‡)
1.02J - AV 2	7.07A -TT 7	12.01B - S 1	Word Processing	Sys Utility
1.03J - AV 3	7.08A -TT 8	12.02B - S 2	Utils	Update 1.0.1 \$3
		12.03B - S 3	5 disk set; \$15	(‡)
Desk Accessories		12.04B - S 4	17.01B - WP 1	QuickTime 1.0 -
14 disk set; \$42	7.11A -TT 11	12.05B - S 5	17.02B - WP 2	2 disks; \$6
2.01D - DAs 1	7.12A -TT 12	12.06B - S 6	17.03B - WP 3	QuickTime 1.6 -
2.02D - DAs 2	7.13A -TT 13	12.07B - S 7	17.04B - WP 4	1 disk; \$3
2.03D - DAs 3	/.1011 11 15	12.08B - S 8	17.05B - WP 5	Laser Wrtr 8.1.1
2.04D - DAs 4	Graphics	12.09B - S 9	11.00B - W1 0	Laser wrth 6.1.1
2.05D - DAs 5	6 disk set; \$18		Adobe Screen Fonts	Laser Wrtr 8.0 -
2.06D - DAs 6	8.01 - G 1	Telecommunications	18.01A - AF 1	
2.07D - DAs 7	8.02 - G 2	13.01B - T 1	18.02A - AF 2	2 disks; \$6
2.08D - DAs 8	8.03 - G 3	13.02B - T 2		Sys Network
2.09D - DAs 9	8.04 - G 4	13.03B - T 3	Fun & Games Series	Installer \$3
2.10D - DAs 10	8.05 - G 5	_	22.01 - F/G 1	TrueType - 2
2.11D - DAs 11	8.06 - G 6	Programmer/Hacker	22.02 - F/G 2	disks; \$6
2.12D - DAs 12	0.00 0 0	14.01A - PH 1	22.03 - F/G 3	Basic Con Set
2.13D - DAs 13	INITs & cdevs	14.02A - PH 2	22.04 - F/G 4	1.1.1 - 1 disk; \$3
2.14D - DAs 14	27 disk set; \$81		22.05 - F/G 5	Express Modem -
	9.01B - I/C 1	Miscellaneous Utils	22.06 - F/G 6	1 disk; \$3 (‡)
F Keys (Function	9.02B - I/C 2	9 disk set; \$27	22.07 - F/G 7	CD ROM Setup -
Keys)	9.03B - I/C 3	15.01B - MU 1	22.08 - F/G 8	1 disk; \$3
4.01A - FKs 1	9.04B - I/C 4	15.02B - MU 2	22.09 - F/G 9	Comm 1 (CTB) -
4.02A - FKs 2	9.05B - I/C 5	15.03B - MU 3	22.10 - F/G 10	1 disk; \$3
	9.06B - I/C 6	15.04B - MU 4		LW PPDs - 3
ImageWriter Fonts	9.07B - I/C 7	15.05B - MU 5	Disketeria ValuPaks	disks; \$9
5.01A - IW 1	9.08B - I/C 8	15.06B - MU 6	(†)	
5.02A - IW 2	9.09B - I/C 9	15.07B - MU 7	Best of Pi, 15	HyperCard Update
5.03A - IW 3	9.10B - I/C 10	15.08B - MU 8	disks; \$30	1.2.5 - 3 disk set;
5.04A - IW 4	9.11B - I/C 11	15.09B - MU 9	PS Fonts 1, 14	\$9
	9.12B - I/C 12	O	disks; \$30	2.0 - 5 disk set;
PostScript Fonts	9.13B - I/C 13	System Utilities	PS Fonts 2, 5	\$15
6.01B - PS 1	9.14B - I/C 14	25 disk set; \$75	disks; \$10	413
6.02B - PS 2	9.15B - I/C 15	16.01D - SU 1	TT Fonts 1, 9	(†) all files com-
6.03B - PS 3	9.16B - I/C 16	16.02D - SU 2	disks; \$20	pressed (except
6.04B - PS 4	9.17B - I/C 17	16.03D - SU 3	TT Fonts 2, 4	LW 8.1.1 &
6.05B - PS 5	9.18B - I/C 18	16.04D - SU 4	disks; \$10	PPDs)
6.06B - PS 6	9.19B - I/C 19	16.05D - SU 5	Fun/Games 1, 10	
6.07B - PS 7	9.20B - I/C 20	16.06D - SU 6	disks; \$25	(‡) on 1.44 Meg diskette
6.08B - PS 8	9.22B - I/C 22	16.07D - SU 7	LW 8.1.1 & PPDs	uiskette
6.09B - PS 9	9.23B - I/C 23	16.08D - SU 8	- 4 disks; \$10	Holiday Specials
6.10B - PS 10	9.24B - I/C 24	16.09D - SU 9	•	(good thru 1/15/94)
6.11B - PS 11	9.25B - I/C 25	16.10D - SU 10	System Software	
6.12B - PS 12	9.26B - I/C 26	16.11D - SU 11	6.0.3 - 4 disks;	All disks \$3.50
6.13B - PS 13	9.27B - I/C 27	16.12D - SU 12	\$12	each, \$3.00 for five
				or more.

HyperCard Upgrade requires HyperCard proof of purchase; any of original disk, first page of manual, receipt or previous HyperCard Upgrade disk.

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Mail this form with Disk Library Washington Apple P 7910 Woodmont Ave Bethesda, Maryland	ri enue, Suit		Are you a member of Washington All payments must be in U.S. funds Non-members add \$3.00 per disk to	s drawn against U.S. banking ins	
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Apple Disk Library

by John B. Ruffatto

elcome to the Apple Disk Library section of the Journal, as you can see there is always room for improvement. In this issue there are now Disk Order Forms for the Apple II, Apple IIGS, and the Apple III. The librarians would like to receive comments pro and con to the new set-up versus the old listing format. Direct your comments to me via the Washington Apple Pi office and I will try to respond them.

I would also desire your comments in regard to Public Domain software you would like to see included in our Disk Libraries. Since we no longer publish the titles of the disks in the library, it is advisable to order the Disk Library Catalog Disks for the machine you are using.

Each month we will endeavor to provide information on new additions to the libraries or feature disks currently in the libraries. Some of the disks in the Apple Disk libraries contain SHAREWARE. If you use any Shareware program, please send the shareware fee to the author. By submitting the fee we encourage the author(s) to develop more software.

Special Note: All Apple II, Apple III, and Apple IIgs Catalog Disks may be exchanged for most current edition of the Disk Catalog series—free of charge - if exchanged at the office. For exchanges by mail, please be

BEST OF TELECOMMUNICATIONS

The software on this disk have been compressed with the program "GSHK". This allowed me to place more software on this disk than would normally fit on a 800k floppy disk. To use the software on this disk, you must first un-compress the software with GSHK. The application GSHK can be found on the "Best of Telecommunications" Disk.

IN THE /TELECOMM/GSHK.v1.1/ FOLDER:

This is version 1.1 of the IIgs file archiving utility, GSHK (GS/ShrinkIt). This is the complete update pack including GSHK, its docs, Icons, and a form for bug reports. GSHK will handle SIT, ARC, ZOO, and compress (unix) files as well as all the kinds of Apple II archives. GSHK v1.1 can make Self-Extracting Archives (.SEA files), it's faster compressing, faster decompressing, and easier to use.

This is a MUST HAVE bug fix update (with some additional features) to GSHK. There was a MAJOR archive corrupting bug in prior versions of GS/ShrinkIt which would strike under certain circumstances and make archives you created inaccessible. For this reason, this is a MUST HAVE!! This version is an update to address a problem with the extraction routines that caused extraction to fail sometimes. A number of other lesser bugs have also been fixed, including some System 6 issues. This is also a fix for a serious bug in v1.0.5 that could

affect archives of extended files with option lists made from a ProDOS volume. The archives would be untouchable.

In the /TeleComm/TeleComm.Files/folder:

Angel0.81b.SHK:

This file utility, written by Tony Marques of AGATE fame, renames files, creates directories, views text files, locks/unlocks files, and calculates CRC's. It also decompresses ZIP 2.04, LHA, ARC, ZOO 2.10, Unix .Z (only up to 13 bits), and SHK archives. Remarkably complete for its small size. Novices will find the interface friendly despite a large amount of debugging information being displayed, and many "hidden" features referenced.

AutoUnSHK11.SHK:

This is Auto-UnShrinkIt version 1.1—it's primary mission in life is to just extract stuff from all sorts of archives. It also has an archive "scavnge" feature which will look through a damaged archive and try to extract whatever is still good. This version fixes a minor bug which could change the current output to inverse.

If you have an Echo or SlotBuster card, auto-unshrink will make use of the card and speak as it works. This is part of a bug-fix set, the unshrink routines have had a problem that caused extraction to fail fixed along with a number of lesser bug fixes. This program is

Freeware. By Andy Nicholas.

crlf3.SHK:

CRLF3 version 1.0 is a desktop program for converting text files. It will convert text files to Apple, MS-DOS, and Unix Formats. FreeWare.

GenTerm3.31.SHK:

GenericTerm version 3.31 by David D. Miller is a SHR-based ProDOS 8 ANSI terminal emulator. Supports the full IBM character set, all of which can be typed via special keyboard codes. Full-color ANSI with boldface and reverse. No file transfers, no scrollback, no frills, but what it does it does well.

Version 3.2 fixed some bugs in the port driver while version 3.31 is a SYS file and fixes several bugs. The author makes some unfortunate generalizations about modem cables in the documentation, but follow his instructions and you shouldn't have problems. The screen drawing is a little slow. This program IS shareware, \$5 fee.

GIFbeheader.SHK:

GIF is a machine-independent standard for storing and transmitting graphics files. There are some excellent GIF utilities available for the Apple IIgs which can display GIF files and translate them into standard IIgs graphics files.

Online Macintosh libraries often have an excellent selection of GIF files. When

you download one of these Mac GIFs to your Apple II, however, the file will have a "header" — a block of data attached to the front of the file intended for use by Mac telecommunications software. Before an Apple II GIF utility can recognize a file as being a GIF, it may be necessary to strip off this header. This is the job that GIF.Beheader does.

GScii2.31.SHK:

GScii+ will do binscii (decode and encode), binhex (just decode), uuencode, uudecode, and apack (both ways). This version fixed a problem starting up in an environment that didn't already have the StdFile tools started up.

GSVT.1.0.SHK:

GSVT Version 1.00 is a communications program (VT100 Emulator) for the Apple IIgs. The emulator incorporates a subset of the VT100/ANSI control sequences and is useful for communicating with VAX computers or other mainframes that can drive a VT100 terminal. GSVT maps the GS numeric keypad to emulate the VT100 keypad for editing using EDT or other special functions. Uses the super high resolution screen for displaying its characters.

HFSLink10b4.SHK:

HFSLink by Scott Blackman converts files from a Macintosh HFS volume into two ProDOS files: one for the data fork and one for the resource fork. Multiple file selection and directory conversion are supported. Conversion is supported for all HFS volumes from 800K 3.5" disks to 40 megabyte hard disks. Files and Directories selected undergo filename translation: all nonalphanumeric characters are replaced with periods ("."), and all lowercase characters are replaced with uppercase. Filenames are truncated at 15 characters if necessary. This program is FreeWare.

LF.Convert.SHK:

This is short little NDA that converts line feeds in texts files to carriage returns, thus making them readble. Many text files have line feeds at the end of each line, generally files from UNIX systems.

LHext2.1.SHK:

LHExt v2.1 by Atsushi Ushiroda is a Sys16 program which will extract lha and lzh compression formats. It is fairly slow, but it gets the job done, and it doesn't require Orca M 2.0. Source code is included. LHA Extractor can extract files from any LZH archives. Of cource, Amiga's Module files too. LHA Extractor is a Freeware program.

MegaTerm1.3.SHK:

MegaTerm is an ANSI terminal emulator program for ProDOS 8 which takes advantage of the Super Hi-Res screen to emulate color ANSI implementation of MS-DOS color text. Includes a font editor and instructions on finetuning the colors. Version 1.3 is much faster than previous versions, but doesn't contain any new features.

PMPunZip102.SHK:

PMPUnzip version 1.02 is a ZIP file extractor for the Apple IIGS by Paul Parkhurst, the author of ANSITerm. Version 1.02 fixes several problems with disk handling and user interface. This program will extract files stored in ZIP archives originating on the PC. It should work fine for any archive zipped with PKZIP version 1.1 or below. Shareware, \$15 fee.

SnowTerm205.SHK:

This is version 2.05 of the shareware VT100, VT52 communications program for the Apple IIGS computer. SnowTerm emulates the Digital Equipment (DEC) VT100 and VT52 terminals. SnowTerm runs in the super high resolution graphics mode of the Apple IIGS. It uses the graphics and color capabilities of the Apple IIGS to accurately emulate the VT100 terminal including: bold and blinking character attributes, the line drawing character set, and double high and double wide characters. Fixes a bug that would cause SnowTerm to hang occassionally.

Telcom0.28.SHK:

TelCom GS is a 16-bit, text-based communications program. While it is not yet a full fledged terminal emulator program, it does provide the most commonly used functions: YModem and XModem receive, XModem send, scrollback, dialing directory, and various emulations (VT100, VT52, Proterm Special). This program that can be run either from the desktop or from a shell such as GNO. By Jawaid Bazyar (one of the authors of GNO). Freeware.

UnZipIIe.SHK:

This is a self-contained extractor program for ZIP files, modeled after

ShrinkIt. It makes extensive use of MouseText. You can look at Zipped text files without actually unpacking them. Shareware.

ZLink.SHK:

Z-Link is a Telecommunications program for the Apple // by David Whitney. It includes everything you'd expect from a good modem program including a text capture buffer, robust terminal emulation, and split-screen person to person chat mode.

Z-Link can transmit and receive files using several protocols including XMODEM/Checksum, XMODEM/CRC-16, YMODEM/CRC-16, and YMODEM/Batch and it is compatable with Ascii Express: The Professional and MouseTalk. The program runs on an Apple //c, //c+, enhanced //e, or //GS under ProDOS 8. Apple //GS users can now push the baud rate up as high as 57,600 baud. Z-Link is shareware, \$25 fee.

Best of System Extensions

The software on this disk have been compressed with the program "GSHK". This allowed me to place more software on this disk than would normally fit on a 800k floppy disk. To use the software on this disk, you must first un-compress the software with GSHK. The application GSHK can be found on the "Best of Telecommunications" Disk.

In the/Sys.Exts/System.Exts/folder: AlrmClock21.SHK:

Alarm Clock NDA version 2.1 by Bill Tudor is an Apple IIgs NDA that can add a clock, complete with alarms and hourly chimes, to either your menu bar or a window on the desktop. Alarm Clock REQUIRES System 6.0 or greater! Includes a grandfather clock chime rSound. Shareware, \$10 fee.

Alter.v1.01.SHK:

Alter NDA v1.01 allows you to set the file type, aux type; and the characteristics of files controled by the access code byte. Specifically, you can lock a file against read, write, or destroy operations; and you can make a file invisible. Freeware by Mike Homiller.

BRAMcheck12.SHK:

BRAM.Checker v1.2 by Bill Tudor is an Apple IIgs Temporary Initialization

file (TIF) that checks the contents of the battery RAM present in an Apple IIgs for changes from an image that is saved to the disk. You will be notified at boot time of any changes to the battery ram since the last time you booted the computer. The program will inform you of the battery RAM locations that were changed, and give you the opportunity to restore the old values or continue booting with the new values. BRAM Checker is freeware.

CarpetBag.SHK:

CarpetBag version 2.41 is a Permanent INIT which installs a menubar clock and allows you to install NDAs and CDAs. It will also let you remove NDAs (but not CDAs) that IT has installed. Docs are included. This version is more bug free, the author hopes. Use only with System 5.0.2 or latter — may crash unpredictably with older System Software.

CDev.Alias.SHK:

CDev.Alias v1.0 by Bill Tudor is an NDA to put whatever CDevs you want access to from ANY desktop program via the Apple Menu. Docs and some examples are included in this file from GEnie, Shareware,

DeskColor31.SHK:

DeskColor Control Panel v3.1 is a Control Panel that allows you to change the color of the IIGS desktop from the old periwinkle blue to any pattern or to a picture. Whatever pattern or picture you choose or create becomes the new desktop the next time you power up the computer, close the Control Panel, or launch another application. There are three types of backgrounds: Pattern, Graphic, and None. The folder includes a selection of patterns/colors. By Dave Leffler. This product is classified "Jesus-A-ware". It is the equivalent of FreeWare.

DiskWitch31.SHK:

Disk Witch version 3.1.0 by Gary F. Desrochers. Disk Witch is a CDA which allows for the following file utilities to be performed: Directory Display; Change Attributes of files/directories; Deleting of files/directories: Renaming of files/directories/volumes; Formatting/Erasing Disks; Copying files; Making subdirectories; Reading text/ Appleworks/Teach files: Changing Prefix's. Shareware, \$10.00 fee.

Enable.CDAs.SHK:

Enable.CDAs (actually Built.in.CDAs) enables the two hidden built-in CDA's - Visit Monitor and Memory Peeker. It only works with ROM 03! It is a TIF file, so just put it in the /SYSTEM/ SYSTEM.SETUP/ folder on your startup disk and it will automatically run whenever you boot the disk. By Jav Krell.

FileATrix11.SHK:

This CDA (written by Karl Bunker, king of text-based file dialogs and author of Sneeze) performs many common disk operations in GS/OS, ProDOS 8 and ProDOS 16 alike. Features include: Catalog, Copy, Delete, Change Attributes, Rename, Create Folder, Format 800k Disk, and View File (text or AppleWorks WP, plus Teach files when in GS/OS only - ProDOS 8 can't access GS/OS Extended files.)

This version fixes a few bugs and includes a Print option to View File (text/ AWP/Teach). Move, Find File, and Set Preferences functions added. Files being viewed can now be searched for occurrences of a word or phrase.

FileMngr202.SHK:

This is File Manager 2.02, the latest version of the new desk accessory for the Apple IIGS which provides the user with a collection of highly useful file manipulation tools. This version fixes a bug that caused the Info module in version 2.01 to crash the system when used under System 6. Once it is installed, you will be able to perform the following operations from any standard desktop application using an intuitive, icon-based interface:

- view the contents of a disk or folder
- create new folders
- remove files and folders
- rename, move, and copy files and folders
- examine a file's size and calculate the contents of a folder
- examine and change a file or folder's file type, auxiliary type, and access attributes
- change the creation and modification time of a file or folder
- automatically search a disk or folder for a file
- view, search, and print any file
- initialize, erase, and rename disks

FileTools11.SHK:

FileTools version 1.1 - Floyd Zink's utility CDA. FileTools is a Classic Desk Accessory (CDA) for your Apple IIGS that performs the following functions: Displays the contents of a directory (Catalog): Copies files (extended files. those with resource forks, also); Allows you to set the default prefix; Displays & prints text files (Type); Deletes files; Renames files; Format disks; Create new directories: Edit filetype & auxtype. Standard file dialogues and everything else included. \$7/\$10 Shareware. FileTools requires Apple IIGS System Disk v5.0 or higher. You can not access this CDA while ProDOS 8 is active.

FinderView3.SHK:

FinderView v3.0 is a Finder extension (place it in *:system:system.setup or *:system:finderextras and reboot). There's the INIT, an Icons file, and docs. It will let you double click on most graphics and some animation files and view them from the Finder even in slide show mode. Requires System 6.0. ShareWare, \$10 fee.

Floptical11.SHK:

AE Floptical Driver v1.0.1. This driver supports the INSITE PERIPHERALS 1325 VM 20MB FLOPTICAL DRIVE. It requires the Apple SCSI Manager, and either an Apple High Speed SCSI card, or an Apple Rev C SCSI card. It has been tested with System 6.0 only, although it should work equally well with 5.0.x. Version 1.0.1 removes some last minute debug code that caused the driver to drop into the debugger on a format call.

FontDAInst2.SHK:

Version 2.0 of the wonderful Font/DA installer/deinstaller. This NDA allows you to install and remove Fonts and Desk Accessories (NDAs and CDAs) "on the fly" without rebooting. Shareware.

GreyScale.SHK:

GrevScale INIT v1.0 by Eric D. Shepherd. Use greyscale palette as default in desktop applications. This PIF intercepts the WindStartUp call and changes the standard palette to a greyscale palette identical to the one used by the Quickie scanner. This lets you use greyscale images for desktop pictures. Before changing the colors, it checks to see whether a 640 mode or 320 mode palette is necessary and installs the correct one.

Just copy the file "GreyScale" to the "System:System.Setup" folder on any bootable GS/OS disk. The next time you boot your system, you'll find the Finder comes up in lovely shades of grey, rather than the normal color set. This program is Freeware.

HotKeys1.1.SHK:

HotKeys v1.1 is a finder extension that adds hotkey capability to Finder 6.0 and later. It is shareware (\$10) by Bill Tudor. HotKeys are single-key keystrokes that perform some Finder function for you. You can decide which Finder functions will be performed with which keystrokes. This version adds some capabilities to the original version: SHIFT-<key> is supported now and additional action items may be selected including program launching and arbitrary folder opening.

Idol.v1.0.2.SHK:

IDOL version 1.0.2 is an temporary initization file (TIF) that allows you to install NDAs and CDAs during the boot process from disks other than your boot disk! It has been designed mostly for people that boot GS/OS via a floppy or a small hard drive. IDOL will allow you to have Desk Accessories (NDAs or CDAs) on external sources, and then load them for you during the boot process! You can have an unlimited number of external sources. IDOL only needs 5 blocks of disk space! Please read the documentation that is included. IDOL v1.0.2 is freeware. By Bryan Pietrzak.

InitMstr211.SHK:

This is Bill Tudor's InitMaster v2.1.1. InitMaster is a Finder Extension that allows you you to specify which Init files (temporary or permanent, i.e., TIF/PIF), desk accessories (NDA/CDA), Control Panels (CDV), File System Translators (FSTs), old-style Finder Icon Files (ICN), Device Drivers (DRV), or Finder Extras (load files in the "FinderExtras" folder) will be active the next time you boot the machine. Eliminates the need to access File Info for each file when you have many to do. Shareware, \$10 fee. This version fixes several bugs in v2.1.

Install.DA.SHK:

This program lets you install CDAs and

NDAs without having to reboot. You can have your DAs on a separate disk and load them as needed. Freeware.

JumboDesk21.SHK:

JumboDesk version 2.1 by Jason Simmons is an NDA that expands your desktop and lets you easily manage large numbers of windows. Simply move your mouse to an edge of the screen, and your desktop will scroll in the appropriate direction. JumboDesk can also use the numeric keypad as an alternate way of manipulating your desktop. Freeware.

Mailman 1.0.SHK:

Mailman v1.0 is a Finder extension by Lunatic Johnathan Bruce E'Sex. This is an extremely simple demonstration Finder extension that simply tells the system to play the "You Have Mail" (sbYouHaveMail) sound whenever a finderSaysHello code is received. Since the sbYouHaveMail sound is only really useful to people who are on networks, this sound is almost never used by most people, and is therefore the ideal sound for use by this extension. Freeware.

MakinCopies.SHK:

This small and clever Finder Extension recites Saturday Night Live ("Makin Copies") at the beginning of every copy operation.

MoreInfo1.2.SHK:

This is v1.2 of Bill Tudor's MoreInfo finder extension. It provides an enhanced File Icon Info display and permits editing many of the info items as well. It adds is a "More Info" option to the Finder's "Icon Info" menu item.

The "MoreInfo" window shows you and allows you to change: File type; Aux File Type; Creation Date; Modification Date; Read access; Write access; Delete access; Rename access; Invisible/Visible; Backup needed/not needed. SHIFT-INFO brings up the MoreInfo window. This version fixes some bugs and makes a number of changes (cosmetic and performance enhancing) from the prior version. Shareware, \$10 fee.

Nicon.v1.0.SHK:

NICON v1.0 by Jeff Dickson. Nicon lets you decide if the system startup icons for CDEVs and Finder-Extras will appear at boot time. This is very useful if you have a picture you like to show while booting without the icons' interference. Freeware.

No.2.FExt.SHK:

What does No. 2 from The Prisoner TV show say? After installing this extension, every time you select "Icon Info..." in Finder your computer will play the sound of No. 2 saying "We want information!" Freeware, by Lunatic E'Sex/LunaTechnology.

QuickLaunch.SHK:

QuickLaunch (INIT) v1.0 is a freeware finder extension from Seven Hills Software for System 6.0. It lets you put applications in the Extras menu in finder and even assign key equivalents for them. It is an INIT and goes in the *:system:system.setup folder of your boot disk. This is from the System 6 Golden Master CD from Apple Computer. Freeware. Documentation and Freeware notice in Help section.

QuitTo2.02.SHK:

Quit.To.CDA (vers. 2.02) is a CDA that lets you QUIT from one P8 or GS/OS application to another without going to Finder. It is a Classic Desk Accessory which allows you to jump directly from any application (either ProDOS 8 or GS/OS) to any other application without going back to the Finder (or other launcher).

It speeds up the transition, and I've not encountered any problems using it so far. It lets you create a runlist of common applications to run when you quit the current application. Documentation included. This release is a bugfix correction to v2.01. Quit-To by Karl Bunker is shareware, \$15.00 fee.

sDataPath.3.SHK:

Enhance standard Open File dialogs. Select a default path for each GS/OS application such that Open File dialogs will refer to the specified folder in any given application. Also move between frequently-used folders with a convenient pop-up menu in all Open dialogs. ShareWare, \$10 by Bill Tudor of nearby Burtonsville, MD. This version tracks recently-used paths and places them in the pop-up menu and corrects miscellaneous incompatibilities, including HyperCard GS and AppleWorks GS.

ShowMe1.0b3.SHK:

This is beta Release 3 of v1.0 of ShowMe!, a combination NDA/Finder Extension

for viewing many different graphic formats. It will display all types of graphics and can do a slide-show presentation of all such graphics to be found on a specified device or recursively within a specified directory branch. This NDA replaces the ShowPic v6.1 NDA. This release fixes some bugs and adds recursive capability. See the enclosed docs, Readme, and Version History files.

TeachRdr101.SHK:

TeachReader v1.0.1 is a Finder Extra (requires System 6.0) that can open multiple modeless windows for Teach, Text, and SRC files just be double-clicking on the icon in the finder. It makes life a whole lot easier! Also works in other desktop applications if you have OpenAny or File Extender NDAs. There are a number of bugs fixed in this version. ShareWare from Jupiter Systems.

TWGS.CDev27.SHK:

TransWarp GS Control Panel v2.7 is a Control Panel for controlling the Applied Engineering TransWarp GS accelerator board and allows you to change the speed of the TransWarp GS. It automatically sets the speed to TransWarp during the GS/OS boot. Set the speed with a popup menu. Just select the desired speed. The speed will also be displayed in Mhz. Works with all TWGS's. It goes in the CDEV folder inside the SYSTEM folder of your startup disk. By Dave Leffler. This product is classified "Jesus-Aware". It is the equivalent of Free Ware.

UltraBlank2.SHK:

UltraBlank Version 2.00. This program will blank the screen after a period of time where no keyboard, mouse, or joystick fire-button activity takes place. This length of time may be selected. UltraBlank can blank the screen while any GS/OS or ProDOS 8 program is running (as long as GS/OS was originally booted). The blanking will take place while the computer is in ANY video mode which is available on the GS (super hi-res, text, hi-res, etc.). The only requirement is that the program allow interrupts. While the computer is blanked, the currently running program will still continue to run. ShareWare.

WinFlate1.2.SHK:

This is version 1.2 of the WinFlate NDA,

which can shrink windows to reduce desktop clutter and restore them to their original size. v1.2 supports double-clicking as a means of shrinking a window and should not cause problems if a deflated Finder window is closed.

Best of Fonts - BitMapped - Disk 1

The software on this disk have been compressed with the program "GSHK". This allowed me to place more software on this disk than would normally fit on a 800k floppy disk. To use the software on this disk, you must first un-compress the software with GSHK. The application GSHK can be found on the "Best of Telecommunications" Disk.

The fonts that can be found on this disk are listed below. Included in this list are font names and point sizes.

Albuquerque 09 10 12 18 20 24, Alderney 09 10 12 14 18 20 24 28 36 48, Alice 09 12 18 24, Art Deco 09 12 18 24 36 48,

Art Nouveau 18 24 36, ASL Fingers 14 18 24 36 48, Athens 12 18 24 36 48 72, Atlantic City 36,

Avant Garde 10 12 14 18 24, Baraboo 36 48 72, Beverly Hills 09 10 12 14 18 20 24 28 36 48, Bill's Dingbats 30,

Black Chancery 28 56, Black Shadow 48, Bodoni 09 10 12 14 18 20 24, Bookman 09 10 12 14 18 24, Cairo 08 09 16 36,

Calligraphy 12 18 24 36 48, Camelot 12 24, Cavanaugh 18 36, Charleston 10 12 14 18 20 24 28, Chicago 09 12 14 18 24 36

48, Chicago Symbols 10 12 14 18 20 24 28 36 40 48, City 008 009 010 012 014 018 020 024 027 030 036 042 054 072 108.

Clairvaux 10 12 14 18 20 24 28 36 40, Columbia 09 10 12 14 18 20 24 27 30 36, Courier 008 009 010 012 014 016 018 020 024 027 028 030 036 042 048 054 072 108, and Cursive 12 24

Best of Fonts —BitMapped—Disk 2

The software on this disk have been compressed with the program "GSHK". This allowed me to place more software on this disk than would normally fit on a 800k floppy disk. To use the software on this disk, you must first un-compress the software with GSHK. The application GSHK can be found

on the "Best of Telecommunications" Disk.

The fonts that can be found on this disk are listed below. Included in this list are font names and point sizes.

Danish Deco 24 48, Deep Box 36, Demographics 36, Des Moines 10 12 20 24, Digital 24, Easystreet 09 10 12 18 20 24.

Edmonton 07 08 09 12 14 16 18 24 36 48 72, Egypt Alph 18, Electronic 12 24, Elvish 12, Eyes 018 036 072, Fancy Caps 72, Fantaste 18, Flintstone 12 24 48 72, Floor Plan 09 24, Florence 12 24, Galena 18 24 36, Gavarnie 09 10 12 18 20 24 36,

Geneva 03 04 05 06 07 08 09 10 11 12 14 16 18 20 22 24 28 36 48, Giants 18, Gratitude 09 10 12 14 18 20 24 28, Greek 10 12 20, Hebrew 12 18 24, Helvetica 08 09 10 12 14 18 24 27 30 36 42 54 72, Hollywood 12 18 24, IBM Klone 12 24,

Isengard 18, Itasca 24 36 48 72, John Morgan 18, London 18 24 36, Monaco 09 12 18 24, New Century Schoolbook 10 12 14 18 24, New Helvetica Narrow 10 12 14 18 24, New York 09 10 12 14 18 20 24 36, Old English 18 36, Palatino 10 12 14 18 24, Shaston 16, Symbol 09 12 18 24, Taliesin 18, Times 008 009 010 012 014 016 018 024 027 030 036 042 048 054 072 108,

Toyland1 36, Toyland2 36, Venice 12 14 24 28, Vines 24, White Shadow 48, Zapf Chancery 10 12 14 18 24, and Zapf Dingbats 10 12 14 18 24

Best of Games—Disk 1

The software on this disk have been compressed with the program "GSHK". This allowed me to place more software on this disk than would normally fit on a 800k floppy disk. To use the software on this disk, you must first un-compress the software with GSHK. The application GSHK can be found on the "Best of Telecommunications" Disk.

In the /Games.01/Games/ folder: Backgammon.SHK:

GS Backgammon Version 1.1. Version 1.1 of GS Backgammon includes an improved computer opponent and all known bugs in version 1.0 have been fixed. The computer player will give you a hard time if you think you can win.

Select "Help..." from the "Game" menu to see the game instructions. These instructions provide details on the play of GS Backgammon (how to move etc.) and assume the player already knows the rules of backgammon. If you need help on the rules, refer to "Hoyle" or any standard game reference. By Phil Doto. The game runs under GS/OS.

BattleShip.SHK:

This game is based on the traditional Battleship game. Requires two players. You must wait until the end of the game before you can quit back to the Finder. Includes nice graphics and sound effects. By Chad Faragher.

Eucre.2.2.SHK:

In Euchre v2.2, you and your computer partner play against two computer opponents. Your partner has been programmed to play very intelligently. However, so have your opponents. This software is Shareware, \$10 fee. By Bill Hamshire.

Euchre is a card game in which the team that calls trump must get three out of five tricks. Therefore, to start each hand, all four players start with five cards. Your partner is the player opposite you making the players to the left and right your opponents. This game is played with only the cards numbered 9 up through Ace, leaving four cards for the blind. The blind is the group of cards left out of each hand. In Euchre, when trump is decided, the jack of that suit is the highest trump, commonly called the right bower. The iack of the same color suit is the second highest. This is the left bower. The rest of the trump and the other three suits are ranked ace high. The dealer turns up the top card of the blind. The suit of that card is the first one up for bidding.

Play begins with the player to the left of the dealer leading. Each player must, in turn, play one card from their hand. If they have cards of the suit that was lead, they must play one of them, this is called following suit. Otherwise, the player can play any card in his hand. The trick is won by the player who played the highest trump card, or, if none where played, the highest card in the suit that was lead. This player collects the four cards and turns them face down in front of him. He then continues play by leading the next trick.

F1.Racer.SHK:

A graphic's based Formula I race-game written by Joel A. Quejahda. In this game, you will be racing against the clock. You must travel a set minimum distance within a set time before you can move on to the next leg of the race. You will have to avoid hitting the other race cars on the track.

You start the race with five cars at your disposal and a full tank of gas. Depending on how fast you are running, you will soon run out of gas. Every now and then, a "Gas Pump" will appear on the road and you will be able to stop and fill up. You get an extra car for each leg that you finish. Requires at least 512k RAM. This software is Shareware. \$15 fee.

Monte.Carlo.SHK:

Monte Carlo-style Solitaire card game. The Latest and Greatest card game from Todd Wood. It's also winnable! The object of Monte Carlo is to gid rid of all the cards. When the game starts 20 cards are layed down in a 5x4 grid on the table. You remove adjacent cards of the same type. Then you click the DEAL button and the cards will snake-up and new ones will be pulled out of the deck. You continue this, until you can no longer remove any cards or you win the game. Instructions are provided. By Todd J Wood.

Orbizone.SHK:

By the authors of Xenocide. Orbizone is similar to the classic game Asteroids. You pilot a spaceship as it hurtles through space while blasting asteriod like objects before they crash into your spaceship. Requires a joystick. You can create and use your own asteriod like shapes in the game. Includes a "template" that you will draw your custom shapes onto. Use Paintworks Gold to create your own shapes and put them into the template. You can have up to 10 levels in your custom game. Orbizone was designed specifically for use with stereo output. Written by Brian Greenstone. Artwork by Dave Triplett. This game is Shareware, \$5 fee. (C) 1989 Pangea Software.

Romulans.SHK:

Fight an invisible ship ala Star Trek. Remember the classic (weren't they all!) episode of Star Trek where the Enterprise was fighting an invisible Romulan warship and they only way that they could kill it was by plotting the vectors. Well, this is an SHR GS recreation of that fight and it is hard! But fun! Included is an icon to place in your Icons folder of the system disk. The game was developed under system disk 4.0 and it seems to work fine on 5.0 as well. Live long and prosper! By Kevin Bradley.

Senseless.2.SHK:

Senseless Violence 2 (c)1990 Pangea Software. By the authors of Xenocide. Senseless Violence 2: You Use, You Die, is a game which is meant as a teaching tool about some of today's most pressing problems: Smoking, Drug use, and Racism. The game requires a joystick, and at least System Disk 5.0.

In the game, you have to guide yourself thru a wormhole and avoid objects which represent smoking, drugs, and racism. When you exit one wormhole, you will be thrown into another even harder one. You start the game with only 200 lasers, so use them sparingly. Each time you hit an object in the wormhole, it will affect one of your 3 shield status meters. When a meter runs out then the game is over.

The music in this game was designed specifically for stereo use. Written by Brian Greenstone, music and advice by Gene Koh. This game is shareware, \$5 fee.

Solitaire2.SHK:

This is the new shareware version of Solitaire, a SHR game from Applelink. Nice graphics, hard to beat.

TetroTrix.SHK:

Tetrotrix version 1.1 by Pierre Abel. This is a "Tetris" clone. Groups of blocks fall from the top of the screen. You must move and rotate the blocks into a position where they will match the blocks at the bottom of the screen. High scores are saved to disk. This is Shareware, \$15 fee. By Pierre Abel.

Yahtzee.SHK:

This is the familiar dice game for the Apple IIgs. The game itself is easy to use and play, and the instructions are included within it. Requires System Disk 3.2 or latter. Includes a Yahtzee Finder icon file. By David W. Buell.

(See Disketeria form on base of page 78.)

Apple II Disk Library Order Form

5-1/4" DISKS:	EAMN-18 #5	MISC-04	Graphics	4.0.2 - \$1.50
	EAMN-19 #5	MISC-05	NWPS-22	(#2)DOS 3.3 System
System Software	EAMN-20 #5 EAMN-21 #5	MISC-06 MISC-07	Graphics	Master - \$1.50
APSD-01 #1	EAMN-22 #5	MISC-07 MISC-08	NWPS-23 Graphics	(#3) Apple Disk Catalog (A) (DOS
APSD-02 #2	EAMN-23 #5	MISC-09	NWPS-24	3.3) - 3 disk set -
Apple Disk Catalog	EAMN-24 #5	MISC-10	Graphics	\$3.00
(DOS 3.3)	T3 1	MISC-11	NWPS-25	(#4)Apple Disk
3 disk set #3	Education 20 disk set =\$30.00	MISC-12 MISC-13	Graphics NWPS-26	Catalog (A) (ProDos)
Amela Diala Catalan	EDUC-01	MISC-13 MISC-14	Graphics	- 4 disk set - \$4.00 (#5)Requires
Apple Disk Catalog (PRODOS)	EDUC-02	MISC-15	NWPS-27	EAMN-03
4 disk set #4	EDUC-03	MISC-16	Graphics	
	EDUC-04 EDUC-05	MISC-17 MISC-18	NWPS-28 Graphics	3-1/2" DISKS:
Appleworks	EDUC-06	MISC-19	NWPS-29	J-1/2 DISKS.
APWK-01 APWK-02	EDUC-07	MISC-20	Borders	System Disk
AI WIL-02	EDUC-08	MISC-21	NWPS-30	2APS-01 #6
Communications	EDUC-09 EDUC-10	MISC-22 MISC-23	Borders	A1 . TO! . I
10 disk set =\$15.00	EDUC-10 EDUC-11	MISC-23 MISC-24	NWPS-31 Fonts	Apple Disk Catalog
COMM-01 COMM-02	EDUC-12	MISC-25	101103	2ADC-01A #7
COMM-02	EDUC-13		Pascal	2ADC-02A #7
COMM-04	EDUC-14	New Print Shop	8 disk set \$12.00	
COMM-05	EDUC-15 EDUC-16	31 disk set =\$46.50 NWPS-01	PASC-01 PASC-02	Appleworks 2AWK-01
COMM-06	EDUC-17	Graphics	PASC-02 PASC-03	2AWN-01
COMM-07 COMM-08	EDUC-18	NWPS-02	PASC-04	Communications
COMM-09	EDUC-19	Graphics	PASC-05	2COM-01
COMM-10A	EDUC-20	NWPS-03 Graphics	PASC-06 PASC-07	2COM-02 2COM-03
OD M	Forth	NWPS-04	PASC-07 PASC-08	2COM-05
CP/M 11 disk set =\$16.50	FRTH-01	Graphics		Education
CP/M-01	FRTH-02	NWPS-05	Pilot	2EDU-01
CP/M-02	FRTH-03	Graphics NWPS-06	PILT-01	Membership
CP/M-03 CP/M-04	Games	Graphics	Utilities	Directory
CP/M-04 CP/M-05	13 disk set =\$19.50	NWPS-07	24 disk set =	2MRĎ-01
CP/M-06	GAME-01	Graphics NWPS-08	\$36.00	T7421242
CP/M-07	GAME-02 GAME-03	Graphics	UTIL-01 UTIL-02	Utilities 2UTL-01
CP/M-08 CP/M-09	GAME-04	NWPS-09	UTIL-03	
CP/M-09 CP/M-10	GAME-05	O 1:	01111-00	2UTL-02A
		Graphics	UTIL-04	2UTL-02A
CP/M-11	GAME-06	NWPS-10	UTIL-04 UTIL-05	
CP/M-11	GAME-06 GAME-07	NWPS-10 Graphics	UTIL-04 UTIL-05 UTIL-06	(#6) - System Disk -
CP/M-11 Eamon Adventures	GAME-06	NWPS-10 Graphics NWPS-11 Graphics	UTIL-04 UTIL-05 UTIL-06 UTIL-07	(#6) - System Disk - V. 4.0.2 - \$3.00
CP/M-11 Eamon Adventures 24 disk set =\$36.00	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10	NWPS-10 Graphics NWPS-11 Graphics NWPS-12	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set -
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11	NWPS-10 Graphics NWPS-11 Graphics NWPS-12 Graphics	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12	NWPS-10 Graphics NWPS-11 Graphics NWPS-12 Graphics NWPS-13	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10 UTIL-11	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11	NWPS-10 Graphics NWPS-11 Graphics NWPS-12 Graphics	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set -
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master EAMN-04 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12 GAME-13 Logo	NWPS-10 Graphics NWPS-11 Graphics NWPS-12 Graphics NWPS-13 Graphics NWPS-14 Graphics	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10 UTIL-11 UTIL-12 UTIL-13 UTIL-14	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Share- ware. Please send a
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master EAMN-04 #5 EAMN-05 #5 EAMN-06 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12 GAME-13 Logo LOGO-01	NWPS-10 Graphics NWPS-11 Graphics NWPS-12 Graphics NWPS-13 Graphics NWPS-14 Graphics NWPS-14 Graphics NWPS-15	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10 UTIL-11 UTIL-12 UTIL-13 UTIL-14 UTIL-15	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Share- ware. Please send a remittance to the
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master EAMN-04 #5 EAMN-05 #5 EAMN-06 #5 EAMN-07 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12 GAME-13 Logo	NWPS-10 Graphics NWPS-11 Graphics NWPS-12 Graphics NWPS-13 Graphics NWPS-14 Graphics NWPS-15 Graphics	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-09 UTIL-10 UTIL-11 UTIL-12 UTIL-13 UTIL-14 UTIL-15 UTIL-16	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Shareware. Please send a remittance to the author of the program
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master EAMN-04 #5 EAMN-05 #5 EAMN-06 #5 EAMN-07 #5 EAMN-08 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12 GAME-13 Logo LOGO-01 LOGO-02 Membership	NWPS-10 GraphicsNWPS-11 GraphicsNWPS-12 GraphicsNWPS-13 GraphicsNWPS-14 GraphicsNWPS-15 GraphicsNWPS-15 GraphicsNWPS-16 Graphics	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10 UTIL-11 UTIL-12 UTIL-13 UTIL-14 UTIL-15	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Share- ware. Please send a remittance to the
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master EAMN-04 #5 EAMN-05 #5 EAMN-06 #5 EAMN-07 #5 EAMN-08 #5 EAMN-09 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12 GAME-13 Logo LOGO-01 LOGO-02 Membership Directory	NWPS-10 GraphicsNWPS-11 GraphicsNWPS-12 GraphicsNWPS-13 GraphicsNWPS-14 GraphicsNWPS-15 GraphicsNWPS-16 GraphicsNWPS-16 GraphicsNWPS-17	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-09 UTIL-10 UTIL-11 UTIL-12 UTIL-13 UTIL-14 UTIL-15 UTIL-16 UTIL-17 UTIL-17 UTIL-18 UTIL-19	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Shareware. Please send a remittance to the author of the program
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master EAMN-04 #5 EAMN-05 #5 EAMN-06 #5 EAMN-07 #5 EAMN-08 #5 EAMN-09 #5 EAMN-10 #5 EAMN-10 #5 EAMN-11 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12 GAME-13 Logo LOGO-01 LOGO-02 Membership	NWPS-10 GraphicsNWPS-11 GraphicsNWPS-12 GraphicsNWPS-13 GraphicsNWPS-14 GraphicsNWPS-15 GraphicsNWPS-15 GraphicsNWPS-16 GraphicsNWPS-17 Graphics	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10 UTIL-11 UTIL-12 UTIL-13 UTIL-14 UTIL-15 UTIL-16 UTIL-17 UTIL-17 UTIL-18 UTIL-19 UTIL-19	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Shareware. Please send a remittance to the author of the program
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master EAMN-04 #5 EAMN-05 #5 EAMN-06 #5 EAMN-07 #5 EAMN-08 #5 EAMN-09 #5 EAMN-10 #5 EAMN-11 #5 EAMN-11 #5 EAMN-12 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12 GAME-13 Logo LOGO-01 LOGO-02 Membership Directory	NWPS-10 GraphicsNWPS-11 GraphicsNWPS-12 GraphicsNWPS-13 GraphicsNWPS-14 GraphicsNWPS-15 GraphicsNWPS-16 GraphicsNWPS-16 GraphicsNWPS-17	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10 UTIL-11 UTIL-12 UTIL-13 UTIL-14 UTIL-15 UTIL-16 UTIL-17 UTIL-17 UTIL-18 UTIL-19 UTIL-20 UTIL-20	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Shareware. Please send a remittance to the author of the program
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master EAMN-04 #5 EAMN-06 #5 EAMN-06 #5 EAMN-07 #5 EAMN-08 #5 EAMN-09 #5 EAMN-10 #5 EAMN-11 #5 EAMN-11 #5 EAMN-12 #5 EAMN-13 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12 GAME-13 Logo LOGO-01 LOGO-02 Membership Directory MEMD-01 Miscellaneous 25 disk set =	NWPS-10 GraphicsNWPS-11 GraphicsNWPS-12 GraphicsNWPS-13 GraphicsNWPS-14 GraphicsNWPS-15 GraphicsNWPS-16 GraphicsNWPS-17 GraphicsNWPS-17 GraphicsNWPS-18 GraphicsNWPS-18 GraphicsNWPS-19	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10 UTIL-11 UTIL-12 UTIL-13 UTIL-14 UTIL-15 UTIL-16 UTIL-16 UTIL-17 UTIL-18 UTIL-19 UTIL-20 UTIL-21 UTIL-22 UTIL-23	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Shareware. Please send a remittance to the author of the program
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master EAMN-04 #5 EAMN-05 #5 EAMN-06 #5 EAMN-07 #5 EAMN-08 #5 EAMN-09 #5 EAMN-10 #5 EAMN-11 #5 EAMN-12 #5 EAMN-13 #5 EAMN-13 #5 EAMN-14 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12 GAME-13 Logo LOGO-01 LOGO-02 Membership Directory MEMD-01 Miscellaneous 25 disk set = \$37.50	NWPS-10 Graphics NWPS-11 Graphics NWPS-12 Graphics NWPS-13 Graphics NWPS-14 Graphics NWPS-15 Graphics NWPS-16 Graphics NWPS-17 Graphics NWPS-17 Graphics NWPS-18 Graphics NWPS-18 Graphics NWPS-19 Graphics	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10 UTIL-11 UTIL-12 UTIL-13 UTIL-14 UTIL-15 UTIL-16 UTIL-16 UTIL-17 UTIL-18 UTIL-19 UTIL-20 UTIL-21	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Shareware. Please send a remittance to the author of the program
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master EAMN-04 #5 EAMN-05 #5 EAMN-07 #5 EAMN-07 #5 EAMN-09 #5 EAMN-10 #5 EAMN-10 #5 EAMN-11 #5 EAMN-12 #5 EAMN-12 #5 EAMN-13 #5 EAMN-14 #5 EAMN-15 #5 EAMN-15 #5 EAMN-16 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12 GAME-13 Logo LOGO-01 LOGO-02 Membership Directory MEMD-01 Miscellaneous 25 disk set = \$37.50 MISC-01	NWPS-10 GraphicsNWPS-11 GraphicsNWPS-12 GraphicsNWPS-13 GraphicsNWPS-14 GraphicsNWPS-15 GraphicsNWPS-16 GraphicsNWPS-17 GraphicsNWPS-17 GraphicsNWPS-18 GraphicsNWPS-19 GraphicsNWPS-19 GraphicsNWPS-20	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10 UTIL-11 UTIL-12 UTIL-13 UTIL-14 UTIL-15 UTIL-16 UTIL-16 UTIL-17 UTIL-18 UTIL-19 UTIL-20 UTIL-21 UTIL-22 UTIL-23	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Shareware. Please send a remittance to the author of the program
CP/M-11 Eamon Adventures 24 disk set =\$36.00 EAMN-01 EAMN-02 #5 EAMN-03 Eamon Master EAMN-04 #5 EAMN-05 #5 EAMN-07 #5 EAMN-07 #5 EAMN-09 #5 EAMN-10 #5 EAMN-11 #5 EAMN-12 #5 EAMN-12 #5 EAMN-13 #5 EAMN-14 #5 EAMN-14 #5 EAMN-15 #5	GAME-06 GAME-07 GAME-08 GAME-09 GAME-10 GAME-11 GAME-12 GAME-13 Logo LOGO-01 LOGO-02 Membership Directory MEMD-01 Miscellaneous 25 disk set = \$37.50	NWPS-10 Graphics NWPS-11 Graphics NWPS-12 Graphics NWPS-13 Graphics NWPS-14 Graphics NWPS-15 Graphics NWPS-16 Graphics NWPS-17 Graphics NWPS-17 Graphics NWPS-18 Graphics NWPS-18 Graphics NWPS-19 Graphics	UTIL-04 UTIL-05 UTIL-06 UTIL-07 UTIL-08 UTIL-09 UTIL-10 UTIL-11 UTIL-12 UTIL-13 UTIL-14 UTIL-15 UTIL-16 UTIL-16 UTIL-17 UTIL-18 UTIL-19 UTIL-20 UTIL-21 UTIL-22 UTIL-23	(#6) - System Disk - V. 4.0.2 - \$3.00 (#7) - Apple Disk Catalog - 2 Disk set - \$4.00 Note: Some disks may contain Shareware. Please send a remittance to the author of the program

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	GSDM-26	GSFT-13	GSGM-15	GSGX-14
3-1/2 DISKS:				
THE THE RESERVE AND THE	GSDM-27	GSFT-14	GSGM-16	GSGX-15
	GSDM-28	GSFT-15	GSGM-17A	GSGX-16
System Software		CCET 16		
GSAS-01 (*1)	GSDM-29	GSFT-16	GSGM-18A	GSGX-17
	GSDM-30	GSFT-17	GSGM-19A	GSGX-18
GSAS-02 (*2)	GSDM-31	— GSFT-18	GSGM-20	GSGX-19
GSAS-03 (*3)				
	GSDM-32	GSFT-19	GSGM-21	GSGX-20
GSAS-04 (*4)	GSDM-33	GSFT-20	GSGM-22	GSGX-21B
		GOT 1-20		
O	GSDM-34	GSFT-21	GSGM-23A	GSGX-22A
Communications		GSFT-22	GSGM-24B	GSGX-23
6 disk set = \$18	D- 1	CCE/T 22		
GSCM-01D	Developer	GSFT-23	GSGM-25B	GSGX-24
	18 disk set = \$54	GSFT-24	GSGM-26A	GSGX-25
GSCM-02C		GSFT-25		GSGX-26
GSCM-03B	GSDV-01		GSGM-27	GSGA-20
	GSDV-02	GSFT-26	GSGM-28	GSGX-27
GSCM-04B	GSDV-03	GSFT-27	GSGM-29	GSGX-28
GSCM-05A		GDI 1-21		
	GSDV-04		GSGM-30	GSGX-29
GSCM-06	GSDV-05	Fonts - TrueType	GSGM-31	GSGX-30
DAs Chara EFrets	GSDV-06	30 disk set = \$90	GSGM-32	GSGX-31A
DAs, CDevs, FExts,	GSDV-07	GSTT-01	GSGM-33	GSGX-32A
Dvrs, and Inits	GSDV-08			
16 disk set = \$48		GSTT-02	GSGM-34	GSGX-33
	GSDV-09	GSTT-03	GSGM-35A	GSGX-34
GSDA-01B	GSDV-10	GSTT-04	GSGM-36	GSGX-35
GSDA-02C				
	GSDV-11	GSTT-05	GSGM-37A	GSGX-36
GSDA-03D	GSDV-12	GSTT-06	GSGM-38	GSGX-37
GSDA-04C				
	GSDV-13	GSTT-07	GSGM-39	GSGX-38
GSDA-05B	GSDV-14	GSTT-08	GSGM-40	GSGX-39
GSDA-06B				
GSDA-07B	GSDV-15	GSTT-09	GSGM-41	GSGX-40
	GSDV-16	GSTT-10	GSGM-42A	GSGX-41
GSDA-08B	GSDV-17	GSTT-11	GSGM-43	GSGX-42
GSDA-09A		GS11-11		
GDDA-10A	GSDV-18	GSTT-12	GSGM-44	GSGX-43
GSDA-10A		GSTT-13	GSGM-45	GSGX-44
GSDA-11A	D: 1 G 4 1			
	Disk Catalog	GSTT-14	GSGM-46	GSGX-45
GSDA-12A	3 disk set = \$6	GSTT-15	GSGM-47	GSGX-46
GSDA-13A				
	GSDC-01I	GSTT-16	GSGM-48	GSGX-47
GSDA-14A	GSDC-02I	GSTT-17	GSGM-49	GSGX-48
GSDA-15B				
GSDA-16A	GSDC-03I	GSTT-18	GSGM-50	GSGX-49
GDDA-10A		GSTT-19	CCCM E1	CCCV FA
			G2GM-91	GSGA-00
	Education		GSGM-51	GSGX-50
	Education	GSTT-20	GSGM-52	GSGX-51
Domes	Education 10 disk set = \$30		GSGM-52	GSGX-51
Demos	10 disk set = \$30	GSTT-20 GSTT-21	GSGM-52 GSGM-53	GSGX-51 GSGX-52
	10 disk set = \$30 7 disk set = \$21	GSTT-20 GSTT-21 GSTT-22	GSGM-52 GSGM-53 GSGM-54	GSGX-51 GSGX-52 GSGX-53
34 disk set = \$34	10 disk set = \$30 7 disk set = \$21	GSTT-20 GSTT-21 GSTT-22 GSTT-23	GSGM-52 GSGM-53	GSGX-51 GSGX-52
34 disk set = \$34 or \$1 per disk	10 disk set = \$30 7 disk set = \$21	GSTT-20 GSTT-21 GSTT-22 GSTT-23	GSGM-52 GSGM-53 GSGM-54 GSGM-55	GSGX-51 GSGX-52 GSGX-53 GSGX-54
34 disk set = \$34	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5)	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55
34 disk set = \$34 or \$1 per disk GSDM-01	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5)	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5)	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5)	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5)	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5)	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5)	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-28	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-60	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5)	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-28	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-60 GSGM-60	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06	10 disk set = \$30	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-28	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-60 GSGM-60 GSGM-61 GSGM-62	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5)	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-28	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-60 GSGM-60 GSGM-61 GSGM-62	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-08	10 disk set = \$30	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-27 GSTT-28 GSTT-29 GSTT-30	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-60 GSGM-60	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-61
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-08	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-62
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-08 GSDM-09	10 disk set = \$30	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games G3 disk set =	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-60 GSGM-60 GSGM-61 GSGM-62	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-61
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games G3 disk set =	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 Graphics	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-62
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-27 GSTT-29 GSTT-30 Games 63 disk set =	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 GSGM-63 GSGM-63	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-59 GSGX-60 GSGX-61 GSGX-61 GSGX-62 GSGX-63 GSGX-64
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10 GSDM-11	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 Graphics 64 disk set =	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-59 GSGX-60 GSGX-61 GSGX-61 GSGX-62 GSGX-63 GSGX-64 GSGX-64 GSGX-64
34 disk set = \$34 or \$1 per disk	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-27 GSTT-29 GSTT-30 Games 63 disk set =	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 Graphics 64 disk set =	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-59 GSGX-60 GSGX-61 GSGX-61 GSGX-62 GSGX-63 GSGX-64 GSGX-64 GSGX-64
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A	10 disk set = \$30	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games63 disk set = \$189 GSGM-01B GSGM-02B	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-60 GSGM-61 GSGM-61 GSGM-63 GSGM-63 GSGM-63 GSGM-63 GSGM-63 GSGM-63 GSGM-63	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games63 disk set = \$189GSGM-01BGSGM-02BGSGM-03	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 GRAPhics 64 disk set = \$192 GSGX-01 GSGX-02	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-05 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14	10 disk set = \$30	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games63 disk set = \$189GSGM-01B _GSGM-02B _GSGM-03 _GSGM-04	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-60 GSGM-61 GSGM-62 GSGM-63 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-05 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15	10 disk set = \$30	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games63 disk set = \$189GSGM-01B _GSGM-02B _GSGM-03 _GSGM-04	GSGM-52 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-60 GSGM-61 GSGM-62 GSGM-63 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-05 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 GFaphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-05 GSDM-06 GSDM-07 GSDM-08 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-12 GSDM-14 GSDM-15 GSDM-16	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-06A	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 GSGM-63 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-16 GSDM-16 GSDM-17A	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-27 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 GSGM-63 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-16 GSDM-16 GSDM-17A GSDM-18	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-06A	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 GSGM-63 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-06	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-05
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-16 GSDM-16 GSDM-17A GSDM-18	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06	GSTT-20 GSTT-21 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-08	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 GSGM-63 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-06 GSGX-06 GSGX-07A	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-15 GSDM-16 GSDM-17A GSDM-18 GSDM-19	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-04A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-06A	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 GSGM-63 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-06	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-04 GSHC-05 GSHC-06
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-15 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-20A	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-07A (*5) GSED-07A (*5) GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06 GSFT-06 GSFT-07	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-08 GSGM-09A	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 GSGM-63 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-05 GSGX-06 GSGX-07A GSGX-08A	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-04 GSHC-05 GSHC-06
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-15 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-20A	10 disk set = \$30 7 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-08A GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06 GSFT-07 GSFT-08	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-26 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-07A GSGM-09A GSGM-09A	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-61 GSGM-62 GSGM-63 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-06 GSGX-06 GSGX-07A GSGX-08A GSGX-09B	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-05 GSHC-06 HyperStudio
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-12 GSDM-14 GSDM-15 GSDM-15 GSDM-15 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-19 GSDM-20A GSDM-21	10 disk set = \$307 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06 GSFT-07 GSFT-08 GSFT-08 GSFT-09	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-08 GSGM-08 GSGM-09A GSGM-10 GSGM-10	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-05 GSGX-06 GSGX-07A GSGX-07A GSGX-09B GSGX-10A	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-04 GSHC-05 GSHC-06 HyperStudio Demo Ver. (1-10)
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-15 GSDM-16 GSDM-17A GSDM-18 GSDM-18 GSDM-19 GSDM-20A GSDM-21 GSDM-21	10 disk set = \$307 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06 GSFT-07 GSFT-08 GSFT-08 GSFT-09	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-08 GSGM-08 GSGM-09A GSGM-10 GSGM-10	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-62 GSGM-63 Graphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-05 GSGX-06 GSGX-07A GSGX-07A GSGX-09B GSGX-10A	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-58 GSGX-59 GSGX-60 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard 6 disk set = \$18 GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-04 GSHC-05 GSHC-06 HyperStudio Demo Ver. (1-10)
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-14 GSDM-15 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-19 GSDM-20A GSDM-21 GSDM-22 GSDM-23	10 disk set = \$307 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06 GSFT-07 GSFT-08 GSFT-09 GSFT-10	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-08 GSGM-08 GSGM-09A GSGM-10 GSGM-11 GSGM-12A	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-63 GRaphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-05 GSGX-07A GSGX-08A GSGX-09B GSGX-10A GSGX-11	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-56 GSGX-57 GSGX-59 GSGX-60 GSGX-61 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-04 GSHC-05 GSHC-06 HyperStudio Demo Ver. (1-10) = \$10
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-14 GSDM-15 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-19 GSDM-20A GSDM-21 GSDM-22 GSDM-23	10 disk set = \$307 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06 GSFT-06 GSFT-07 GSFT-08 GSFT-09 GSFT-10 GSFT-10 GSFT-11	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-05 GSGM-07A GSGM-08 GSGM-08 GSGM-09A GSGM-10 GSGM-11 GSGM-12A GSGM-13	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-63 GRaphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-05 GSGX-05 GSGX-07A GSGX-08A GSGX-09B GSGX-11 GSGX-12	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-57 GSGX-59 GSGX-60 GSGX-61 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard GSGX-64 HyperCard GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-05 GSHC-06 HyperStudio Demo Ver. (1-10) = \$10 GSHS-01
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-15 GSDM-16 GSDM-16 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-20A GSDM-21 GSDM-21 GSDM-22 GSDM-23 GSDM-23	10 disk set = \$307 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06 GSFT-07 GSFT-08 GSFT-09 GSFT-10	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-05 GSGM-06A GSGM-07A GSGM-08 GSGM-08 GSGM-09A GSGM-10 GSGM-11 GSGM-12A	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-63 GRaphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-05 GSGX-07A GSGX-08A GSGX-09B GSGX-10A GSGX-11	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-56 GSGX-57 GSGX-59 GSGX-60 GSGX-61 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-04 GSHC-05 GSHC-06 HyperStudio Demo Ver. (1-10) = \$10
34 disk set = \$34 or \$1 per disk GSDM-01 GSDM-02 GSDM-03 GSDM-04 GSDM-05 GSDM-06 GSDM-07 GSDM-09 GSDM-10 GSDM-11 GSDM-12 GSDM-13A GSDM-14 GSDM-15 GSDM-14 GSDM-15 GSDM-16 GSDM-17A GSDM-18 GSDM-19 GSDM-19 GSDM-20A GSDM-21 GSDM-22 GSDM-23	10 disk set = \$307 disk set = \$21 (*5) GSED-01A (*5) GSED-02A (*5) GSED-03A (*5) GSED-05A (*5) GSED-06A (*5) GSED-06A (*5) GSED-07A (*5) GSED-09 GSED-10 Fonts - BitMapped 27 disk set = \$81 GSFT-01 GSFT-02 GSFT-03 GSFT-04 GSFT-05 GSFT-06 GSFT-06 GSFT-07 GSFT-08 GSFT-09 GSFT-10 GSFT-10 GSFT-11	GSTT-20 GSTT-21 GSTT-22 GSTT-23 GSTT-24 GSTT-25 GSTT-25 GSTT-26 GSTT-27 GSTT-28 GSTT-29 GSTT-30 Games 63 disk set = \$189 GSGM-01B GSGM-02B GSGM-03 GSGM-04 GSGM-05 GSGM-05 GSGM-05 GSGM-05 GSGM-07A GSGM-08 GSGM-08 GSGM-09A GSGM-10 GSGM-11 GSGM-12A GSGM-13	GSGM-52 GSGM-53 GSGM-53 GSGM-54 GSGM-55 GSGM-56 GSGM-57 GSGM-58 GSGM-59A GSGM-60 GSGM-61 GSGM-63 GRaphics 64 disk set = \$192 GSGX-01 GSGX-02 GSGX-03 GSGX-04 GSGX-05 GSGX-05 GSGX-05 GSGX-05 GSGX-07A GSGX-08A GSGX-09B GSGX-11 GSGX-12	GSGX-51 GSGX-52 GSGX-53 GSGX-54 GSGX-55 GSGX-56 GSGX-57 GSGX-57 GSGX-59 GSGX-60 GSGX-61 GSGX-61 GSGX-62 GSGX-63 GSGX-64 HyperCard GSGX-64 HyperCard GSHC-01 GSHC-02 GSHC-03 GSHC-04 GSHC-05 GSHC-06 HyperStudio Demo Ver. (1-10) = \$10 GSHS-01

Apple IIGS Disk Library Order Form

GSHS-03	GSHS-66	GSMU-30A	GSSN-37	Best of Games
GSHS-04	GSHS-67	GSMU-31A	GSSN-38	5 disk set =
GSHS-05	GSHS-68	GSMU-32A	GSSN-39	\$12.50
GSHS-06			05511-00	Ψ12.00
	GSHS-69	GSMU-33A		
GSHS-07	GSHS-70	GSMU-34A	SOUNDS - CDEV	Best of Graphics
GSHS-08				
	GSHS-71	GSMU-35A	rSOUNDS	$_{}$ 2 disk set = \$5.00
GSHS-09	GSHS-72	GSMU-36A	20 Disk Set = \$60	
				TD
GSHS-10	GSHS-73	GSMU-37A	GSSN-17A	Best of Icons
	GSHS-74	GSMU-38A	GSSN-18	(Finder)
CC 4:-14				
66 disk set	GSHS-75	GSMU-39A	GSSN-19	$_{}$ 1 disk set = 2.50
(11-76) = \$198	GSHS-76	GSMU-40A	GSSN-20	
				Dead CMC
GSHS-11		GSMU-41A	GSSN-21	Best of Music
GSHS-12	Icons	GSMU-42	GSSN-22	4 disk set =
				410 00
GSHS-13	12 disk set = \$36	GSMU-43A	GSSN-23	\$10.00
GSHS-14	GSIC-01B	GSMU-44A	GSSN-24	
				D / CC 1
GSHS-15	GSIC-02B	GSMU-45	GSSN-25	Best of Sounds
GSHS-16	GSIC-03B	GSMU-46	GSSN-26	$_{}$ 2 disk set = \$5.00
				2 disk set = \psi.00
GSHS-17	GSIC-04B	GSMU-47	GSSN-27	
GSHS-18	GSIC-05B	GSMU-48	GSSN-28	Best of True Type
GSHS-19	GSIC-06B	GSMU-49	GSSN-29	Fonts
GSHS-20	GSIC-07B	GSMU-50	GSSN-30	5 disk set =
GSHS-21A	GSIC-08A	GSMU-51	GSSN-31	\$12.50
GSHS-22	GSIC-09A	GSMU-52A	GSSN-32	
GSHS-23	GSIC-10A	GSMU-53A	GSSN-33	Best of Utilities
GSHS-24	GSIC-11A	GSMU-54A	GSSN-34	2 disk set = \$5.00
				2 disk set = \$0.00
GSHS-25	GSIC-12A	GSMU-55A	GSSN-35	
GSHS-26		GSMU-56A	GSSN-40	The Best of the Apple
			00011-40	
GSHS-27	Membership	GSMU-57A		IIGs may be purchased
GSHS-28	Directory	GSMU-58A	Utilities	as a 25 disk set or as
GSHS-29	GSMD-01	GSMU-59	15 disk set = \$45	individual sets as listed
GSHS-30		GSMU-60	GSUT-01C	above.
				above.
GSHS-31	Miscellaneous	GSMU-61	GSUT-02	
GSHS-32	GSMS-01A	GSMU-62	GSUT-03B	(*1) System 5.0.4 - 2
	GDMD-01A			
GSHS-33		GSMU-63A	GSUT-04A	Disk Set = \$6.00
GSHS-34	Music	GSMU-64	GSUT-05C	
				(*2) Hyper Mover v1.1
GSHS-35	75 disk set =	GSMU-65	GSUT-06A	-2 Disk Set = \$6.00
	\$225			
GSHS-36		GSMU-66	GSUT-07B	(*3) GS Bug & Debug
GSHS-37	GSMU-01B	GSMU-67	GSUT-08D	Tools $v1.6 = 3.00
	GSMU-02		GSUT-09A	
GSHS-38		GSMU-68		(*4) System 6.0.1 - 6
GSHS-39	GSMU-03	GSMU-69	GSUT-10A	Disk Set = \$18.00
GSHS-40	GSMU-04	GSMU-70	GSUT-11B	(*5) Astronomer - 7
GSHS-41	GSMU-05	GSMU-71	GSUT-12	disk set (GSED-01 to
			GSUT-13A	
GSHS-42	GSMU-06	GSMU-72		GSED-07) \$21.00
GSHS-43	GSMU-07	GSMU-73	GSUT-14	
				Notes Come diales
GSHS-44	GSMU-08	GSMU-74	GSUT-15B	Note: Some disks
GSHS-45	GSMU-09	GSMU-75		may contain Share-
GSHS-46	CCMII 10		Best of The Apple	ware. Please send the
	GSMU-10		Desi of the Apple	
GSHS-47	GSMU-11	Sounds	IIGS	requested remittance
GSHS-48	GSMU-12	20 disk set = \$60	25 disk set =	to the author if you use
GSHS-49	GSMU-13B	GSSN-01A	\$56.25	the program. Most of
GSHS-50	GSMU-14	GSSN-02A	(save \$6.25 - normally	the programs on these
GSHS-51	GSMU-15	GSSN-03	\$62.50)	library disks may
			¥ - = ,	
GSHS-52	GSMU-16A	GSSN-04	-	require a IIGS with a
GSHS-53	GSMU-17	GSSN-05	Best of	minimum of 1.25 megs
		GSSN-06	Communications	
GSHS-54		G0914-00		of memory.
GSHS-55	GSMU-18A			
GSHS-56		GSSN-07	1 disk set = \$2.50	
	GSMU-19A	GSSN-07	1 disk set = $$2.50$	
	GSMU-19A GSMU-20A	GSSN-07 GSSN-08		
	GSMU-19A GSMU-20A	GSSN-07 GSSN-08		
GSHS-57	GSMU-19A GSMU-20A GSMU-21A	GSSN-07 GSSN-08 GSSN-09	Best of DA's, Cdevs,	
GSHS-57 GSHS-58	GSMU-19A GSMU-20A GSMU-21A GSMU-22	GSSN-07 GSSN-08 GSSN-09 GSSN-10	Best of DA's, Cdevs, FExts,	
GSHS-57 GSHS-58	GSMU-19A GSMU-20A GSMU-21A	GSSN-07 GSSN-08 GSSN-09 GSSN-10	Best of DA's, Cdevs, FExts,	
GSHS-57 GSHS-58 GSHS-59	GSMU-19A GSMU-20A GSMU-21A GSMU-22 GSMU-23A	GSSN-07 GSSN-08 GSSN-09 GSSN-10 GSSN-11	Best of DA's, Cdevs, FExts, Dvrs, & Inits	
GSHS-57 GSHS-58 GSHS-59 GSHS-60	GSMU-19A GSMU-20A GSMU-21A GSMU-22 GSMU-23A GSMU-24A	GSSN-07 GSSN-08 GSSN-09 GSSN-10 GSSN-11 GSSN-12	Best of DA's, Cdevs, FExts,	
GSHS-57 GSHS-58 GSHS-59 GSHS-60	GSMU-19A GSMU-20A GSMU-21A GSMU-22 GSMU-23A GSMU-24A	GSSN-07 GSSN-08 GSSN-09 GSSN-10 GSSN-11	Best of DA's, Cdevs, FExts, Dvrs, & Inits	
GSHS-57 GSHS-58 GSHS-59 GSHS-60 GSHS-61	GSMU-19A GSMU-20A GSMU-21A GSMU-22 GSMU-23A GSMU-24A GSMU-25A	GSSN-07 GSSN-08 GSSN-09 GSSN-10 GSSN-11 GSSN-12 GSSN-13	Best of DA's, Cdevs, FExts, Dvrs, & Inits 1 disk set = \$2.50	
GSHS-57 GSHS-58 GSHS-59 GSHS-60 GSHS-61 GSHS-62	GSMU-19A GSMU-20A GSMU-21A GSMU-23A GSMU-24A GSMU-25A GSMU-26A	GSSN-07 GSSN-08 GSSN-09 GSSN-10 GSSN-11 GSSN-12 GSSN-13 GSSN-14	Best of DA's, Cdevs, FExts, Dvrs, & Inits 1 disk set = \$2.50 Best of Bit-Mapped	
GSHS-57 GSHS-58 GSHS-59 GSHS-60 GSHS-61 GSHS-62	GSMU-19A GSMU-20A GSMU-21A GSMU-23A GSMU-24A GSMU-25A GSMU-26A	GSSN-07 GSSN-08 GSSN-09 GSSN-10 GSSN-11 GSSN-12 GSSN-13 GSSN-14	Best of DA's, Cdevs, FExts, Dvrs, & Inits 1 disk set = \$2.50	
GSHS-57 GSHS-58 GSHS-59 GSHS-60 GSHS-61 GSHS-62 GSHS-63	GSMU-19A GSMU-20A GSMU-21A GSMU-23A GSMU-24A GSMU-25A GSMU-26A GSMU-27A	GSSN-07 GSSN-08 GSSN-09 GSSN-10 GSSN-11 GSSN-12 GSSN-13 GSSN-14 GSSN-15	Best of DA's, Cdevs, FExts, Dvrs, & Inits 1 disk set = \$2.50 Best of Bit-Mapped Fonts	
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—	3ACT-02 3ACT-03	3GRX-04		3INF-18	=	3PCL-11	211771 10
_	3AC1-03	3GRX-05		3INF-19	_	3PCL-12	3UTL-19
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	3AWZ-03	3GRX-10		3INF-25	_	3PCL-17	3UTL-24
	3AWZ-04	3GRX-11		3INF-26	_	3PCL-18	3UTL-25A
	3AWZ-05	3GRX-12		3INF-27	_	3PCL-19	3UTL-26
	3AWZ-06	3GRX-13		_ 3INF-28	_	3PCL-20	3UTL-27
	3AWZ-07	3GRX-14	·	3INF-29	_	_	3UTL-28
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	3AWZ-12	3GRX-19		_ 3INF-34		3REP-03	3UTL-33
	3AWZ-13	3GRX-20)	3INF-35	_	3REP-04	3UTL-34
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Dial-	Catalog (ASCII				_		
TEX		3GRX-36		_ 3MSC-07		3TEL-06	
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	3GAM-03	3INF-09		3PCL-02	_	3UTL-09	Please remit to the author
_	3GAM-04	3INF-10		3PCL-03		3UTL-10	of the program the
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					_		use that program.
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